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Corporation (FDIC) to Congressional Committees,

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Legal Division FOIA/PA Group 550 17th Street, NW Washington, D.C. 20429 Fax: 703-562-2797

Online Electronic FOIA Request

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June 11, 2013

FDIC FOIA Log Number 13-0450

This will respond to your email correspondence dated April 20, 2013, submitted pursuant to the provisions of the Freedom of Information Act, 5 U.S.C. § 552 ("FOIA") requesting "a copy of each written response or letter from the Federal Deposit Insurance Corporation (FDIC) to a Congressional Committee (not a congressional office) (or Committee Chair) in calendar years 2012 and 2013 to date. By this, I mean one-time type responses to Committee inquiries. You may exclude from the scope of this request regular periodic reports. You may exclude from the scope of this request constituent responses to a congressional office."

Enclosed please find copies of the records located by the FDIC (consisting of a total of 419 pages) which are responsive to your request. However, certain information in these records has been redacted pursuant to the following FOIA Exemption:

Exemption 6 of the FOIA protects information about individuals in "personnel and medical files and similar files" when the disclosure of such information "would constitute a clearly unwarranted invasion of personal privacy." 5 U.S.C § 552 (b)(6).

Should you consider the redaction of information in the records provided to you to be a denial of your request, you may appeal the denial to the FDIC's General Counsel within 30 business days following receipt of this letter. If you decide to appeal, please submit your appeal in writing to the Legal Division, FOIA/Privacy Act Group, at the above address. Please refer to the FDIC log number and include any additional information that you would like the General Counsel to consider.

This completes the processing of your request.	Fees, if any, will be addressed under separate
correspondence.	

Sincerely,

/Signed/

Gina Williams, Sr. FOIA Specialist FOIA/Privacy Act Group

Enclosure(s)



OFFICE OF THE CHAIRMAN

February 7, 2012

Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter concerning the staffing of the Consumer Financial Protection Bureau (CFPB). The Federal Deposit Insurance Corporation transferred 41 employees to the CFPB in accordance with the transfer provisions of the Dodd-Frank Act. Of those transferring, 20 were permanent FDIC employees (mostly within the compliance and consumer protection supervision function) and 21 were non-permanent FDIC employees (mostly employees with customer skills in our resolutions and receivership management function that were sought by the CFPB to perform its new call center responsibilities). Consequently, none of the transferred employees exclusively performed work which transferred to the CFPB. The FDIC and the CFPB used a voluntary process to identify employees for transfer, so that individual employees would not be subject to involuntary transfer.

The work transferred to the CFPB consisted primarily of supervisory responsibility for 17 specific consumer protection laws and regulations for institutions with over \$10 billion in assets and their affiliates. Supervision with regard to all other laws and regulations remains with the FDIC. As of November 30, 2011, the FDIC supervised 4,615 financial institutions. Of these, the CFPB assumed partial supervisory responsibility for 41 institutions (23 institutions with over \$10 billion in assets and 18 other institutions that were affiliated with these larger institutions). The FDIC estimates, based on the actual hours devoted to these 41 institutions in 2010 and 2011, that we utilized approximately 10-15 full time equivalents (FTEs) annually to supervise these institutions (the actual workload has varied in the past from year-to-year). In addition, we estimate that up to five FTEs are currently devoted to call center and complaint processing activities for which the CFPB is assuming responsibility on a phased schedule. In summary, workload that transferred to the CFPB has been fully reflected in the FDIC's updated staffing authorizations.

The FDIC no longer has authorized positions to perform any of the transferred work; thus the FTEs noted above are no longer included in the budget. In the compliance and consumer protection supervision function, the FDIC utilizes an independently tested staffing model that establishes annual workforce requirements based on updated benchmarks and workload projections. The transferred institutions were not included in that workload for 2012. With respect to additional reductions in FTEs, in the complaint

processing/call center function, the FDIC has intentionally filled many positions on a non-permanent basis and will gradually eliminate those positions as the volume of calls declines. In the resolutions and receivership function (from which half of the transferred staff were drawn), the FDIC Board approved a 2012 budget on December 7, 2011, that eliminated 565 previously authorized positions, approximately 6.1 percent of its authorized workforce, due to declining workload.

Thank you for your letter. If you or your colleagues have additional comments or questions regarding this matter, please feel free to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

	Sincerely,
(b)(6)	
	Martin J. Gruenberg Acting Chairman

Office of Legislative Affairs

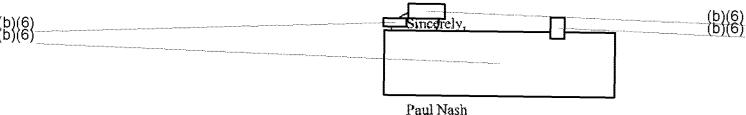
January 9, 2012

Honorable Torn Harkin Chairman Committee on Health Education, Labor, and Pensions United States Senate Washington, D.C. 20510

Dear Senator Harkin:

Thank you for forwarding the American Bankers Association (ABA) white paper titled, The Impact of the Federal Banking Agencies' Treatment of Downgraded Debt Securities under the Regulatory Capital Rules (White Paper). The Federal Deposit Insurance Corporation carefully reviewed the White Paper upon its release in June 2009. However, given continued concerns by the banking community regarding this critical matter, we appreciate the opportunity to communicate our response again, recognizing that not all stakeholders are familiar with the FDIC's position and ongoing interagency initiatives. The enclosed discussion of the White Paper was prepared by the FDIC's Division of Risk Management Supervision.

Thank you again for sharing the ABA White Paper. If you have further questions, the Office of Legislative Affairs can be reached at (202) 898-7055.



Deputy to the Chairman for External Affairs

Enclosure

Response to an Inquiry by The Honorable Tom Harkin Chairman, Committee on Health Education, Labor and Pensions United States Senate

The following information is provided by the Federal Deposit Insurance Corporation's Division of Risk Management Supervision

The White Paper suggests that existing capital and asset classification rules do not consider the underlying economic fundamentals and performance of the downgraded debt securities and "...may cause serious unnecessary capital impairment to many banks" and recommends that the "...application of these rules should be reexamined and updated by the regulators on an expedited basis." Specifically, the White Paper discusses two areas where problems arise, capital and asset classification, and provides analysis in support of such a reexamination.

The White Paper notes that the current regulatory capital rules can cause an investment downgraded by the ratings agencies to below investment grade to incur a significantly higher capital charge. The White Paper argues the downgrade of debt securities have been based primarily on market liquidity factors of the instruments and not the actual underlying performance and does not consider subordinate positions available to absorb losses. In addition, the authors indicate the reliance on ratings downgrades as a basis for capital charges is inconsistent with interagency pronouncements to limit the use of credit ratings for the purchasing and valuing of securities.

Although the FDIC acknowledges the limitations of the use of external ratings, we believe that, in general practice, downgrades implemented for securities are based on weak collateral performance and future prospects. Ongoing downgrades in the securities market since 2009 have been driven largely by rating agencies' methodological adjustments and increased estimates of potential credit losses, particularly on structured credit products, resulting in increased capital requirements. The agencies are reviewing measures to temper procyclicality and continue to review the capital treatment of securitization exposures to ensure capital requirements are commensurate with the inherent risk of the assets in question.

The White Paper also addresses the current application by the banking agencies of the *Uniform Agreement on the Classification of Assets and Appraisal of Securities* (Uniform Agreement). The White Paper argues that only the portion of the security that reflects potential loss, not the entire face amount of a debt security with some degree of impairment, should be classified as this reflects the investment's underlying economic fundamentals. Further, the authors claim that bankers have reported to the ABA that examiners continue to rely almost exclusively on credit ratings and have required classification of the entire security as soon as the securities are downgraded.

Regarding the adverse classifications of distressed debt securities, the FDIC applies the Uniform Agreement, as noted by the authors, which uses external credit ratings as a general proxy for adverse classification definitions. The recent Financial Accounting Standards Board accounting rule adjustments for impairment calculations also referenced in the White Paper do not change the analysis performed to assign asset classifications. In practice, examiners continue to review

the reasonableness of impairment calculations, which are reflected as "Loss" if taken in the current period. "Substandard" assets by definition contain well-defined weaknesses and pose risk of loss if not addressed. Many downgraded asset-backed securities since 2009 clearly exhibit credit risk and deteriorating collateral performance, and supervisors would be remiss to disregard such asset quality concerns.

The FDIC encourages its examiners to review the facts and circumstances of each situation and avoid over-reliance on external credit ratings. The Uniform Agreement affords flexibility to pass a sub-investment grade debt security or classify an investment grade debt security, as appropriate. In either case, examiners review pertinent information, such as trustee reports, credit enhancements, valuation, and other factors. To facilitate this review, bank management should provide examiners with well-documented and reasonable supporting analysis. Examiners also may consider whether the investment was purchased at a discount to par. However, the fact that a security was purchased at a discount does not remove potential credit risks. Bank management is expected to maintain a robust credit risk management process commensurate with the complexity and risk profile of the institution's assets.

Bifurcating classification based on performing and nonperforming collateral is not appropriate for structured credit products. In structured credit products, the investor has a claim on cash flows from the underlying loans, and payments are distributed to investors according to governing securitization documents. Pool collateral performance affects bond classes differently. The cash flow waterfall and deal-specific payment rules outlined in the governing documents can create varying degrees of risk, and therefore the suggested approach for classifications is not appropriate.

The FDIC understands that the numerous downgrades in ratings of securitization exposures since the financial crisis have focused renewed attention on associated capital treatment. We also are aware that regulatory capital requirements for banking organizations that hold these securities have increased significantly as have classified asset levels. The FDIC, in conjunction with the federal banking agencies, is taking steps to ensure capital levels remain commensurate to risk. In addition, the federal banking agencies are continuing to examine alternative standards of creditworthiness that may be used in place of credit ratings in the risk-based capital guidelines. Any decision to amend our risk-based capital standards would be made only after public notice and comment.

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OFFICE OF THE CHAIRMAN

February 7, 2012

Honorable Randy Neugebauer Chairman Subcommittee on Oversight and Investigations Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter concerning the staffing of the Consumer Financial Protection Bureau (CFPB). The Federal Deposit Insurance Corporation transferred 41 employees to the CFPB in accordance with the transfer provisions of the Dodd-Frank Act. Of those transferring, 20 were permanent FDIC employees (mostly within the compliance and consumer protection supervision function) and 21 were non-permanent FDIC employees (mostly employees with customer skills in our resolutions and receivership management function that were sought by the CFPB to perform its new call center responsibilities). Consequently, none of the transferred employees exclusively performed work which transferred to the CFPB. The FDIC and the CFPB used a voluntary process to identify employees for transfer, so that individual employees would not be subject to involuntary transfer.

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processing/call center function, the FDIC has intentionally filled many positions on a non-permanent basis and will gradually eliminate those positions as the volume of calls declines. In the resolutions and receivership function (from which half of the transferred staff were drawn), the FDIC Board approved a 2012 budget on December 7, 2011, that eliminated 565 previously authorized positions, approximately 6.1 percent of its authorized workforce, due to declining workload.

Thank you for your letter. If you or your colleagues have additional comments or questions regarding this matter, please feel free to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

Sincerely,	
	(b)(6)
	I I/b//e)
Martin J. Gruenberg Acting Chairman	(m)(o)

Response to questions from the Honorable Richard Shelby by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Q1: Chairman Gruenberg, in your testimony you discuss the FDIC's implementation of Title II of the Dodd-Frank Act and how the FDIC is preparing to resolve, if necessary, systemically significant institutions with its new orderly liquidation authority.

Had MF Global been deemed systemically significant before its collapse, would the FDIC have been able to resolve MF Global under Title II?

A1: Yes, the FDIC could have resolved MF Global had it been necessary.

The FDIC has the legal authority, technical expertise, and operational capability to resolve a systemically significant financial institution with its new orderly liquidation authority. Since the Dodd-Frank Act was enacted on July 21, 2010, the FDIC has established a new Office of Complex Financial Institutions. This new office is monitoring risk, conducting resolution planning, and coordinating with regulators overseas. We also have completed a series of rulemakings that implement our orderly liquidation authority under Title II of the Dodd-Frank Act and have finalized the joint rulemaking with the Federal Reserve Board to implement the resolution requirements ("living wills").

- Q2: The agencies have submitted a proposed Volcker rule with over 1,300 questions, making it more of a concept release than a proposed rule. Additionally, the CFTC has not yet proposed its version of the Volcker Rule and might offer a competing version.
 - Given the complexity of the issues involved and that the CFTC has not signed on, do you anticipate extending the comment period?
 - Do you anticipate doing a re-proposal?

A2: On January 3, 2012, the agencies announced a 30-day extension of the comment period to February 13, 2012. On January 11, 2012, the CFTC approved its notice of proposed rulemaking to implement the Volcker Rule, with substantially identical proposed rule text as in the interagency notice of proposed rulemaking. The comment period extension was intended to facilitate public comment on the provisions of the rule and the questions posed by the agencies, as well as coordination of the rulemaking among the responsible agencies. The agencies will carefully consider the comments received on the proposed Volcker Rule in the development of the final rule and, as part of this review, will consider whether a re-proposal is necessary.

Q3: The agencies missed the October 18th statutory deadline for adopting a final Volcker rule, and despite agency delays, the rule is still scheduled to go into effect in July 2012. The Dodd-Frank Act had contemplated at least a nine month timeframe of advance preparation for compliance.

- * Do you believe there will be sufficient time for banking entities to adjust to all of the changes imposed by the rule?
- Would it make sense to phase in the implementation of the rule, so as to identify potential market disruptions caused by any single element of the rule?
- There is ample precedent for a phase-in, such as implementation of Regulation NMS. Do you believe the Volcker Rule calls for a similar phasedin approach?

A3: The FDIC and the other agencies recognize the complexities associated with Section 619 of the Dodd-Frank Act and the care and attention required for implementing and complying with the new rules. Perhaps because of these complexities, the statute specifically provides affected companies with a minimum of two years to come into compliance with Section 619, which can be extended by rule or order by the Federal Reserve Board. Further, it is our understanding that many of the institutions affected by these proposed rules have begun preparing for their promulgation. However, although alternative approaches are not explicitly under consideration, the agencies continuously gauge the reasonableness of the implementation of rules and their impact on stakeholders.

Response to questions from the Honorable Mike Crapo by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Q1: Last week the House Financial Services Committee passed unanimously a bill that exempts end-users from margin requirements. Proposed margin rules ignore the clear intent of Congress that margin should not be imposed on end-user transactions.

Do you all agree that end-user hedging does not meaningfully contribute to systemic risk, that the economy benefits from their risk management activity and that they should be exempt from margin requirements, and are you working together to provide consistent rules to provide end-users with a clear exemption from margin requirements?

A1: Nonfinancial end users appear to pose minimal risks to the safety and soundness of swap dealers and to U.S. financial stability when they hedge commercial risks with derivatives and the related unsecured exposure remains below an appropriate credit exposure threshold. Accordingly, the proposed rule does not specify a minimum margin requirement for transactions with nonfinancial end users. Rather, the proposed rule, consistent with long-standing supervisory guidance, would permit a swap dealer to adopt, where appropriate, its own thresholds below which the swap dealer is not required to collect margin from counterparties that are nonfinancial end users. In addition, low-risk financial end users, including most community banks, would not be required to post collateral for initial margin unless their activity exceeds either substantial thresholds or the risk limits set by the swap dealer with which they are doing business. Such thresholds are usually explicitly set forth in a credit support agreement or other agreement and are approved and monitored by the swap dealer as part of its own credit approval process.

As noted in the proposal, this approach is consistent with current market practices with respect to nonfinancial end users and low risk financial end users, in which swap dealers view the question of whether, and to what extent, to require margin from their counterparties as a part of the prudent credit decision process and consistent with safe and sound banking practices. Accordingly, the prudential regulators would expect that the direct costs and benefits of hedging with non-cleared derivatives by nonfinancial end users and low risk financial end users, including with respect to opportunity costs and earnings volatility, would remain unchanged relative to current market practices under the terms of the proposed rule.

In issuing the proposal, the prudential regulators requested comment on a variety of issues related to the effect of the proposed margin requirements on nonfinancial end users, including whether alternative approaches—such as an exemption similar to the mandatory clearing exemption—are preferable. We have received a variety of comments from members of the public, including commercial firms that use swaps to hedge their

risk. The prudential regulators will carefully consider all comments as we evaluate the proposal in light of comments received and formulate a final rule.

Response to questions from the Honorable Pat Toomey by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Q1: As written, the proposed interagency rule to implement the so-called "Volcker Rule" would impose new and very substantial and costly compliance burdens on many banks that do not have a standalone proprietary trading desk or substantial fund investments, and never have. Specifically, the proposed rule would require these institutions to establish, at a minimum, policies and procedures designed to prevent the occurrence of activities in which the institution is not engaged — in other words, the regulatory equivalent of proving a negative. It sounds to me like that could be a very costly undertaking for an institution that was never the intended target of the Volcker Rule. But more importantly, this makes even less sense given the economic challenges we face and the need to direct resources toward capital planning and lending.

Can you comment on why this is necessary? Is there a less onerous way to implement the permitted activities?

A1: We agree that banking organizations that are not engaged in activities or investments prohibited by the Volcker Rule should not face an onerous compliance burden. In fact, the proposed regulations specifically provide that such a banking organization will have been deemed to satisfy compliance requirements if its existing compliance policies and procedures include provisions designed to prevent the institution from becoming engaged in statutorily prohibited activities or making statutorily restricted investments. Further, for those banks that do engage in trading activities covered by the statute, the regulations provide an asset size threshold for the reporting and recordkeeping requirements, which provide smaller institutions with significantly less burdensome requirements. We recognize the importance of this issue and will carefully consider comments concerning implementation burden.



Office of Legislative Affairs

April 5, 2012

Honorable Lynn A. Westmoreland House of Representatives Washington, D.C. 20515

Dear Congressman Westmoreland:

Thank you for the opportunity to respond to your questions submitted subsequent to testimony by Sandra Thompson, the Federal Deposit Insurance Corporation's Director of Risk Management Supervision, at the hearing on "H.R. 3461: the Financial Institutions Examination Fairness and Reform Act" before the House Subcommittee on Financial Institutions and Consumer Credit on February 1, 2012.

Enclosed are our responses. A copy was provided to Committee staff for the hearing record. If you have further questions, the Office of Legislative Affairs can be reached at (202) 898-7055.

(b)(6)	Sincerely.
	(b)(6)
	Paul Nash (b)(6)
	Deputy to the Chairman for External Affairs

Enclosure

Response to questions from the Honorable Lynn Westmoreland By the Federal Deposit Insurance Corporation

- Q1. How many examiners have been disciplined since 2008? How many were disciplined for not fully utilizing standard agency guidance for examination procedures?
- A1: The FDIC makes great efforts to ensure that our examiners understand and abide by applicable policies and procedures for examinations of financial institutions. Examiners train for three years or more to become commissioned examiners and cannot lead an examination until they are commissioned. As a result, we have very few instances of examiners being disciplined for performance or behavior related to their examination work at a financial institution. Since 2008 the FDIC has disciplined four examiners for inappropriate behavior during an examination and there were no instances of an examiner being disciplined for not utilizing standard agency guidance for examination procedures.
- Q2: How many examiners have had employment terminated since 2008 as a result of poor performance?
- A2: Nineteen examiners have been terminated due to poor performance since 2008, the majority of which were related to their inability to meet the benchmarks and testing requirements to reach commissioned status.

March 30, 2012

The Honorable Richard Shelby Ranking Member Committee on Banking, Housing, and Urban Affairs United States Senate Washington, DC 20510

Dear Senator Shelby:

Thank you for your recent letter requesting information regarding the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Act). Congress passed the Act in response to the worst financial crisis this country has experienced since the Great Depression. We are firmly committed to implementing those reforms in a careful, responsible, and effective manner.

Over the past two years, we and our respective agencies have been working diligently to implement the Act. Collectively and individually, we have sought input and feedback from the general public, private industry, public interest groups, and a broad range of stakeholders. We have also held numerous meetings with our international and state counterparts. In response to these efforts, members of the Financial Stability Oversight Council (Council) and other agencies have received many thousands of comments on our regulatory proposals. We and our respective agencies have carefully reviewed - and are continuing to review - these comments in the course of rulemakings and studies.

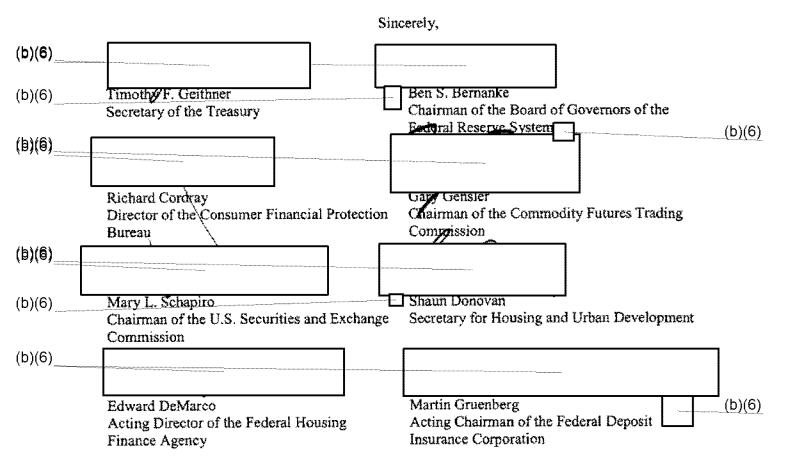
We agree with you that Council member and interagency coordination and cooperation is critical to this effort. We are committed to implementing the Act through close coordination and consultation between and among Council members and our respective agencies and staffs. The members of the Council and other agencies such as the Department of Housing and Urban Development and the Federal Trade Commission are consulting extensively with each other both on a bilateral basis and through the Council itself. There has been an unprecedented level of interagency cooperation, which has helped us to implement reforms in a careful and effective manner. The interagency consultation process has included staff discussions during the initial policy development stage as well as during the rulemaking process itself. We have shared proposed and final rule text prior to issuance as well as draft studies. The level of consultation and coordination has gone well beyond the formal consultation requirements of the Act. Consultation is taking place at multiple staff and senior policy official levels with the intention of improving the consistency of regulation across the financial industry and of reducing the

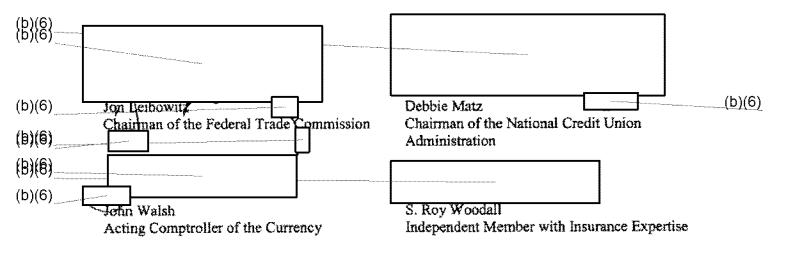
¹ The Federal Trade Commission has very little rulemaking responsibility under the Act. The Federal Trade Commission and the Consumer Financial Protection Bureau are coordinating and fully cooperating on responsibilities either preserved or created in the Act. The two agencies entered into a Memorandum of Understanding, as required by the Act, on January 20, 2012 setting forth, among other things, how the agencies will coordinate and consult on law enforcement, rulemaking, and other activities.

potential for overlapping or inconsistent regulatory requirements. These consultations help highlight the interaction among different rules under development by agencies, as well as the interplay between proposed policy alternatives and existing regulations.

As you know, the various rulemakings required by the Act raise a number of important and complex issues. Moreover, the work on many of the implementing rules is not yet complete. We are working diligently to address these issues and to improve the various proposed implementing rules in light of the comments we have received and are receiving from the public. As you note in your letter, the Act – like all pieces of legislation – is not perfect. While some provisions could be clarified or improved, we have identified none that would impact the core areas of reform that are essential to strengthening the global financial system. Accordingly, we have thus far been able to work to appropriately implement the Act without legislative adjustments. Once the rulemaking process has concluded and we have had an opportunity to work through the implementation issues, we will be in a better position to address whether to recommend changes that might make the core statutory framework more effective.

Thank you for your interest in this important issue. We look forward to working with you in the future.







Office of Legislative Affairs

April 5, 2012

Honorable Carolyn McCarthy House of Representatives Washington, D.C. 20515

Dear Congresswoman McCarthy:

Thank you for the opportunity to respond to your question submitted subsequent to testimony by Sandra Thompson, the Federal Deposit Insurance Corporation's Director of Risk Management Supervision, at the hearing on "H.R. 3461: the Financial Institutions Examination Fairness and Reform Act" before the House Subcommittee on Financial Institutions and Consumer Credit on February 1, 2012.

Enclosed are our responses. A copy was provided to Committee staff for the hearing record. If you have further questions, the Office of Legislative Affairs can be reached at (202) 898-7055.

(b)(6)	Sincerely,
(b)(6)	
	Paul Nash Deputy to the Chairman for External Affairs

Enclosure

Response to questions from the Honorable Carolyn McCarthy By the Federal Deposit Insurance Corporation

Q1. The legislation requires regulatory agencies to develop and apply uniform definitions and reporting requirements for non-performing loans. Ensuring that standards work for both small and large financial institutions, while also giving the agencies flexibility to continue to address unique situations of smaller institutions is vital.

Do you feel uniform standards for non-performing loans are achievable, or are there alternative ways to provide for consistency of the loan classification process?

A1: All insured banks must currently apply a uniform definition of nonaccrual loans¹ contained in the FFIEC's Consolidated Reports of Condition and Income when they report quarterly financial information to the Federal Banking Agencies (Agencies). The instructions indicate – in part - that:

Banks shall not accrue interest, amortize deferred net loan fees or costs, or accrete discount on any asset (1) which is maintained on a cash basis because of deterioration in the financial condition of the borrower, (2) for which payment in full of principal or interest is not expected, or (3) upon which principal or interest has been in default for a period of 90 days or more unless the asset is both well secured and in the process of collection.

In addition, the instructions provide additional details on related topics such as exceptions to the general rule, criteria of when a loan can be restored to accrual status, etc. While the definition does require the use of some judgment, we should note that most banks – both large and small – have been able to appropriately apply this definition for many years and across economic cycles.

Similarly, the federal banking agencies follow uniform definitions related to the classification of problem assets. In this case, the *Uniform Agreement on the Classification of Assets and Appraisal of Securities Held by Banks and Thrifts*. Loan classification standards are consistently applied at FDIC examinations, and we ensure our conclusions are balanced and equitable through discussions with bank management and a rigorous secondary review of examiners' findings. In most cases, our experience shows that our loan classifications validate the banks' own internal credit risk ratings.

We believe that the Call Report definition for nonaccrual loans, and the Uniform Agreement on the Classification of Assets and Appraisal of Securities Held by Banks and Thrifts, provide significant consistency in the loan classification process. We are concerned that the modifications proposed to these supervisory tenets could result in regulatory reporting that is less stringent than generally accepted accounting principles. This may impede the effective identification of credit deficiencies and proper accrual of interest income and, ultimately, the issuance of corrective action by the banking supervisors.

¹ The proposed legislation requires that the Federal financial institutions regulatory agencies shall develop and apply identical definitions and reporting requirements for non-accrual loans.



OFFICE OF THE CHAIRMAN

April 30, 2012

Honorable Tim Johnson Chairman United States Scnate Committee on Banking, Housing, and Urban Affairs Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for the opportunity to testify before the Committee at the March 22, 2012 hearing International Harmonization of Wall Street Reform: Orderly Liquidation, Derivatives, and the Volcker Rule.

Enclosed are my responses to the follow up questions from Senator Toomey to complete the hearing record. If you have further questions or comments, please do not hesitate to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

	Sincerely,
(b)(6)	
	Martin J. Gruenberg
	Acting Chairman

Response to Questions from the Honorable Pat Toomey by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Q1. The proposed Volcker Rule applies to all companies that own an insured depository, and all subsidiaries and affiliates. In addition to traditional banks and bank holding companies, the rule seems to fully cover commercial companies that own a thrift or an industrial loan company, as well as all of the companies in which these covered entities may have a significant investment that makes the recipient of the investment an "affiliate." (Under the Bank Holding Company Act, investments as low as 5% can trigger affiliate status.) The so-called goal of the Volcker rule was designed to limit risks at insured depositories so that banks wouldn't be using government-insured deposit funds to "gamble" through proprietary trading or fund investing. But it seems that in reality, the rule will cover all sorts of industrial and commercial companies just because they are in some way "affiliated" with a depository. Similarly, the rule would cover a company that makes a large investment in another company that controls a depository, dissuading these types of strategic investments for fear of the investor becoming "infected" with the Volcker Rule.

Does it make any sense to apply the full restrictions and regulatory requirements to non-financial companies?

What can your agencies do in the regulations, particularly regarding your standards for determining what is an "affiliated" company, to make sure that the Volcker Rule does not burden non-financial companies in a way that was completely unintended by Congress?

A1. The definition of "banking entity" in the proposed rules implementing the Volcker Rule¹ as issued by the federal banking agencies and the Securities Exchange Commission (collectively, the Agencies) is substantively similar to the definition of that term in section 13(h)(1) of the Bank Holding Company Act (BHCA) as added in the Volcker Rule. The definition covers: (1) any insured depository institution; (2) any company that controls an insured depository institution or is treated as a bank holding company for purposes of section 8 of the International Banking Act of 1978²; and (3) any affiliate or subsidiary of any such entity.³

In the preamble of the notice of proposed rulemaking implementing the Volcker Rule (NPR), the Agencies provided a clarification of the definition of "banking entity" with

¹ See 76 Fed. Reg. 68846 (November 7, 2011). For the separate notice of proposed rulemaking of the Commodity Futures Trading Commission, see 77 Fed. Reg. 8332 (February 14, 2012).

² 12 U.S.C. 3106

³ 12 U.S.C. 1851(h)(1).

respect to affiliates or subsidiaries of insured depository institutions and bank holding companies. This clarification provided that the definition of "affiliate" and "subsidiary" under the BHCA is broad. The clarification also provided a limited exception that clarified how the term "banking entity" would not apply to certain covered funds under the Volcker Rule. However, neither the Volcker Rule nor the proposed rules provide for an exception to exclude affiliates or subsidiaries of insured depository institutions or bank holding companies that are non-financial, commercial companies.

To address issues involving the definition of "banking entity" in the proposed rules, the Agencies provided the following questions that generally cover your questions regarding that definition:

Question 5. Is the proposed rule's definition of banking entity effective? What alternative definitions might be more effective in light of the language and purpose of the statute?

Question 6. Are there any entities that should not be included within the definition of banking entity since their inclusion would not be consistent with the language or purpose of the statute or could otherwise produce unintended results? Should a registered investment company be expressly excluded from the definition of banking entity? Why or why not?⁵

The Agencies, including the FDIC, will seriously consider the various specific comments that have been received in response to the NPR in the development of the final rule.

^{*} See 76 Fed. Reg. 68855 - 68856

⁵ See 76 Fed. Reg. 68856 (November 7, 2011).



OFFICE OF THE CHAIRMAN

April 27, 2012

Honorable Edward J. Markey Ranking Minority Member Committee on Natural Resources House of Representatives Washington, D.C. 20515

Dear Congressman Markey:

Thank you for your letter concerning the recent Gulf of Maine cod stock assessment that could significantly reduce the annual catch limit and severely affect the New England fishing industry. In anticipation of the hardships this may cause small New England fishing businesses, you request that the U.S. Department of Commerce's Economic Development Administration (EDA) and National Fisheries Management Service (NMFS), the Small Business Administration (SBA), and the Federal Deposit Insurance Corporation work together to explore ways to connect lenders and their products with the fishing industry in this area.

The FDIC encourages banks to work with troubled borrowers to develop prudent loan workout strategies that assist these borrowers and, at the same time, minimize the risk of loss to the bank. The FDIC is prepared to assist the EDA, the NMFS, and the SBA in efforts to sustain fishermen and the coastal fishing communities in New England through these difficult times. We understand the severity of the situation and agree that effective cooperative solutions are important and necessary. We currently are working with these agencies assisting in the development and evaluation of alternative financial products and services to address the financial needs of these communities.

Thank you again for sharing your views. If you have other questions, please feel free to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

	Sincerely,
(b)(6)	
	Martin J. Gruenberg Acting Chairman



OFFICE OF THE CHAIRMAN

May 22, 2012

Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter requesting information on Federal Deposit Insurance Corporation conference activity covering the period July 1, 2010 through May 3, 2012. The dialogue with your staff has been helpful in clarifying certain portions of your request, and we believe our response reflects the complete package of information requested.

If you have further questions, please do not hesitate to contact me at (202) 898-3888 or Alice Goodman, Acting Director, Office of Legislative Affairs, at (202) 898-8730.

Martin J. Gruenberg
Acting Chairman

Enclosure



OFFICE OF THE CHAIRMAN

May 22, 2012

Honorable Randy Neugebauer Chairman Subcommittee on Oversight and Investigations Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter requesting information on Federal Deposit Insurance Corporation conference activity covering the period July 1, 2010 through May 3, 2012. The dialogue with your staff has been helpful in clarifying certain portions of your request, and we believe our response reflects the complete package of information requested.

If you have further questions, please do not hesitate to contact me at (202) 898-3888 or Alice Goodman, Acting Director, Office of Legislative Affairs, at (202) 898-8730.

	Sincerely,
b)(6)	
	Martin J. Gruenberg Acting Chairman

Enclosure

FEDERAL DEPOSIT INSURANCE CORPORATION'S RESPONSE TO COMMITTEE ON FINANCIAL SERVICES INQUIRY ON CONFERENCES



1. FDIC internal written policies for planning and conducting conferences.

Circular 1010.2, "Conference, Meeting, and Symposium Planning Policies, Procedures, and Approval Requirements for Using FDIC Funds for These Activities," effective March 22, 2012 is enclosed.



FEDERAL DEPOSIT INSURANCE CORPORATION

DIRECTIVE SYSTEM

TYPE AND NUMBER
Circular 1010.2
CONTACT TELEPHONE NUMBER
Elaine M. Stankiewicz 202-898-6672
DATE
March 22, 2012

DATE OF CANCELLATION (Bulletins Only)

All Division and Office Directors

FROM: Steven O. App

Deputy to the Chairman and Chief Financial Officer

SUBJECT: Conference, Meeting, and Symposium Planning Policies,

Procedures, and Approval Requirements for Using FDIC

Funds for These Activities

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1. Purpose

TO:

The purpose of this circular is to establish policies, procedures, and approval requirements for planning and conducting conferences, meetings, symposiums, or similar events (herein referred to collectively as "conferences"), and to establish methods to both minimize total cost to the FDIC and optimize the business benefit to participants. This circular also combines and includes revised policy guidance on the use of FDIC funds to purchase food and beverages.

2. Revision/Cancellation

a. FDIC Circular 1010.2, Conference, Meeting and Symposium Planning Policy and Procedures, dated October 31, 2007, is hereby revised and superseded.

b. FDIC Circular 2410.9, Policies Governing the Purchase of Food and Alcoholic Beverages Using Corporate Funds; and the Consumption of Alcoholic Beverages in FDIC Buildings, dated December 22, 2003, is hereby cancelled.

3. Scope

The provisions of this circular apply to all FDIC employees nationwide, and apply to all conferences regardless of the level of approval required.

4. Exceptions

All exception requests to the provisions of this circular require written justification and must receive approval by the Chairman or his designee prior to the conference, including exceptions to conferences approved by division and office directors under delegated authority thresholds outlined in Section 7, Approval Requirements.

5. Background

The FDIC holds conferences for business, training or strategic planning purposes. The FDIC also permits the expenditure of funds for food and beverages at these events, under certain limited circumstances. This circular has been prepared to consolidate the applicable policy guidance into a single authoritative source.

6. Policy

FDIC policy requires that divisions and offices adhere to the provisions of this circular when planning to hold, conduct, or sponsor a conference.

Conferences are for business, training, or strategic planning purposes and shall have a direct correlation to an employee's job. All conferences for FDIC employees and/or joint FDIC conferences with other agencies shall have limited, business-based agendas. Conference plans are subject to change or cancellation at any time, as dictated by changes in the FDIC's business priorities or workload.

Conferences are intended for FDIC employees and other eligible conference participants (as defined in Section 19 of this Circular) and all conference expense reimbursements will be limited to these participants.

7. Approval Requirements

- a. Approval requirements. All conference requests, with estimated total costs greater than or equal to \$25,000 must be initially submitted to and reviewed by the Chief Financial Officer (CFO) before being presented to the Chairman or his designee for approval. Such requests must be presented for approval no less than 30 days in advance of the conference and within sufficient time to avoid/mitigate any possible cancellation fees.
- b. Total costs must be shown on the Conference Request form (FDIC 2600/22) to include all travel, lodging, facilities, meals (food and beverages), speakers, mementos, executive dinners/receptions, conference planning expenses, expenses of non-FDIC participants, portions of expenses (by different FDIC divisions), expenses for which the FDIC is all/partially reimbursed, and/or any other expenses related to that particular conference (herein referred to as "total cost"). All conference requests must contain complete information on the total cost breakdown, location, agenda, and number of attendees.
- c. Division and office directors (or their designees) are delegated the responsibility to approve conference proposals submitted on the same Conference Request form (FDIC 2600/22), only when

Approval Requirements (cont'd)

the estimated conference expenses are less than \$25,000. All such conference requests approved under delegated authority must also contain complete information on the total cost breakdown, location, agenda, and number of attendees, and must comply with all aspects of this circular.

- d. Division and office directors may delegate to other senior management officials the authority to approve conferences with estimated expenses of \$500 or less. Conferences at or below this threshold must comply with all aspects of this circular; however, Conference Request forms (FDIC 2600/22) are not required for such events.
- e. Those division and officer directors who are responsible for Corporate Employee Program (CEP) and/or other recruiting events, Corporate University-sponsored training, or other FDIC official information technology systems-related training, must follow these guidelines for their events. If events such as these have estimated expenses greater than or equal to \$25,000 or may exceed the conference duration limits defined in this circular, they will not have to be presented to the Chairman or his designee for approval.

Copies of Conference Request forms approved by division and office directors (for conferences with expenses greater than \$500, but less than \$25,000) must be provided to the CFO for post-approval review processes. On a quarterly basis, no later than one month after each quarter-end, division and office directors must submit to the CFO's Office a summary of all conferences approved under delegated authority, including the number of attendees, actual total costs, venue, and indication that the conference was in compliance with this circular.

Reviews of conference request forms will be performed to ensure compliance with the policies contained in this circular. Failure to abide by the policies contained in this circular may result in sanctions against the approving official, including the elimination of the delegated authority to approve future conferences.

8. Conference Requests

Employees serving as conference organizers shall submit a justification memo and agenda along with <u>form FDIC 2600/22</u>, <u>Conference Request</u> to provide documented total cost estimates to approving officials for all conferences.

The memo accompanying the Conference Request form, and submitted to the approving official, must have the signature(s) of the sponsoring division or office director(s).

Conference Requests (cont'd)

Division of Administration (DOA) Acquisition Services Branch (ASB) staff shall be included in the pre-planning stages of all conferences when estimated expenses are greater than or equal to \$25,000. ASB staff shall provide conference organizers guidance on the solicitation process, execution of contracts, and the appropriate use of the procurement card (P-card) for the conference. When ASB staff is involved in planning for a particular conference, the documentation accompanying the Conference Request form must also include the signature of the Deputy Director of ASB. Conference organizers and ASB staff may not commit to using any facilities or services until the conference request has been approved according to the requirements outlined in Section 7 of this circular.

Conference Request forms must include the total cost for the conference regardless of the source of funding (i.e., division and office budgets, DOA budget, P-card, etc.).

9. Conference Cost Controls and Other Requirements

Total conference costs shall be minimized through a combination of the following factors:

- a. Adhere to a 125 percent limit of the U.S. General Services Administration (GSA) per-diem rates for lodging and meals & incidental expenses for all conferences.
- b. Limit conferences to no more than three days, excluding travel, based on business needs. For instance, conferences may begin or end mid-day to accommodate travel requirements, as long as the conferences run no more than 3 days during the consecutive time between the travel.
- c. Utilize FDIC facilities (such as the Seidman Center or regional office facilities), other Federal Government buildings, and/or public facilities whenever possible and to minimize costs. In the event that FDIC or other government/public facilities are not available, any regional-based conferences should be held in close proximity to the regional offices, or in another centralized location for conference attendees.
- d. Contact the Special Services Unit (SSU) in DOA at the outset of conference planning for all off-site events where total costs are estimated to be \$25,000 or greater. DOA will coordinate market research and provide acquisition support for site selection.
- e. FDIC funds are not permitted to be used to purchase alcohol.
- f. Entertainment expenses are not allowed with FDIC funds.

Conference Cost Controls and Other Requirements (cont'd)

- g. Use technology (video conferencing, teleconferencing, web conferencing, etc.), whenever possible to reduce travel and lodging costs.
- h. Limit meals, receptions, outside speakers, and mementos to meet business needs.

10. Best Value Verification

For all conferences not taking place at an FDIC facility, division and office conference organizers are responsible for working with ASB to obtain and present the three best proposals (at a minimum).

ASB shall verify, prior to forwarding the proposal to the approving official for consideration, that the three proposals are a valid representation of the conference market and that the recommended proposal represents the best value to the FDIC. Upon approval, ASB shall work with the conference organizer to coordinate responsibility for final negotiations and contract execution.

11. Division and Office Director Responsibility

Division and office directors are responsible for the effective implementation of this Policy. After a conference has been approved, division and office directors should monitor expenses during the planning process and notify the CFO if there are potential cost changes, conflicts with workload, or public perception issues.

Between the time a conference has been approved and the actual time of the conference, division and office directors are responsible for submitting an interim memo/form to the CFO updating the conference estimates whenever there are material changes. Whenever possible, such updates/changes should be submitted to the CFO 30 days prior to the conference. Any material changes to the original conference request must be approved in accordance with the Approval Requirements defined in Section 7 of this circular.

12. Reserving FDIC Facilities

FDIC facilities must always be given first consideration when planning conferences. Unless an exception is approved, an FDIC conference will be held at the Seidman Center or at another FDIC facility, if the number of conference participants can be accommodated (seated) in one of those facilities. The Seidman Center Auditorium can seat up to 500 conference participants, depending upon the configuration used.

Reserving FDIC Facilities (cont'd)

DOA and the Division of Finance (DOF) will jointly administer an annual conference planning process to schedule conferences. This planning will ordinarily be conducted in conjunction with the FDIC's annual planning and budget process. DOA will manage its scheduling for the Seidman Center to ensure that major division and office conferences are given appropriate priority in the use of that facility. FDIC divisions and offices shall be flexible in the timing of such conferences in order to facilitate DOA scheduling of that facility.

If it is determined that the FDIC facilities do not represent a feasible option, based on availability, capacity, or minimal cost, a written explanation must be completed and included in the conference request memo, alternative dates shall be examined, and cost comparisons shall be completed on the Conference Request form (FDIC 2600/22).

For all conferences planned at off-site facilities, no binding commitment shall be made to an off-site facility for conference services prior to securing approval as defined in Section 7 of this circular.

13. Off-site Conference Considerations

When planning a conference that will not make use of FDIC facilities, preference should then be given to utilizing other Federal Government buildings and/or public facilities before considering other facilities. The following factors must be taken into consideration when selecting sites and contracting with off-site locations:

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a. Total Costs and Accessibility. Conferences shall be held in locations that minimize total costs and time required outside the office for attendees. The required total cost comparisons shall be comprehensive and include all costs that will vary based on which site is chosen, including facility costs, travel, per diem, etc.

Conferences shall ordinarily be conducted in close proximity to the geographic location from which the largest concentration of attendees will be drawn to minimize cost.

- b. **Public Perception**. Conference organizers shall carefully consider geographic locations, as well as specific site and conference facilities, in order to ensure the selection will not adversely affect the reputation of the FDIC.
- c. **Security and Safety**. The facility chosen must be safe and maintain on-site security personnel. Additionally, it must comply with the Americans with Disabilities Act and applicable

Off-site Conference Considerations (cont'd) DOA, Security and Emergency Preparedness Section (SEPS) must conduct a security assessment of any conference facility where over 100 FDIC employees will attend or in situations where increased security may be necessary. Notification to SEPS shall occur as soon as the facility has been verified by ASB as the best value (see Section 10, Best Value Verification, above).

- d. Adequacy of Rooms and Conference Facilities. The facilities must maintain functionality consistent with the purpose and requirements of the conference. Considerations for conference needs include the availability of necessary audio/visual equipment, registration space, and a sufficient number of adequate meeting rooms.
- e. Budget and Reporting. Divisions and offices utilizing specific accounting codes associated with a conference must ensure that approving supervisors verify that FDIC conference attendees use the appropriate codes to be charged in the Corporate Human Resources Information System Time and Attendance system (CHRIS T&A) and the automated travel system to ensure that the FDIC maintains complete and accurate cost information.
- f. Use of FDIC Resources. In an effort to contain costs associated with the conference, divisions and offices must use FDIC resources whenever possible. FDIC's printing, graphics, audiovisual, computer and telephone support units shall be involved in the conference implementation process to avoid the reliance on non-FDIC personnel to deliver these services at a premium rate.

Divisions and offices planning an FDIC-sponsored conference may elect to use professional conference planning services provided by the FDIC contracted travel agency. However, conference planners must work with the SSU whenever the circumstances dictate according to this circular.

14. Lodging and Meal & Incidental Expenses Rates

Conference organizers must adhere to limits on per diem rates of 125% of the GSA lodging and meal & incidental expenses rates for all conferences. The appropriate per diem reductions for meals shall be clarified in advance, and the attendees shall be provided with clear instructions on allowable per diem amounts for each day of the conference or event. Consideration must also be given to the variable nature of GSA lodging and meal & incidental expenses rates, based on geographic location and season.

Lodging and Meal & Incidental Expenses Rates (cont'd)

- a. **Lodging**. Conference organizers must assess the availability of and utilize lodging facilities at or in close proximity to where the conference is being held, that are within 125% of the altowable GSA per diem rates for lodging at that location (inclusive of taxes). Lodging facilities that offer either a Government rate and/or a negotiated rate within these limits must be utilized.
- b. **Meals**. Conference organizers must assess the availability of service at the selected location to stay within 125% of the allowable GSA per diem rates, for all food provided (breakfast, lunch, dinner, breaks, receptions, etc.). The cost of individual meals that the FDIC provides at a conference must also stay within 125% of the GSA meals and incidental expenses breakdown amounts (for breakfast, lunch, or dinner). If there are sufficient, reasonably priced options within close proximity to the site (food courts, etc.), conference organizers may want to provide a limited number of meals and allow the participants to purchase certain meals on their own. Conference organizers should consider special menu needs of participants and provide a variety of menu items to address those requirements. The GSA meals & incidental expenses per diem rates do include taxes and gratuities (service charges).

15. Alcohol

The use of FDIC funds to purchase alcoholic beverages is prohibited.

16. Entertainment

The use of FDIC funds to pay for entertainment expenses (e.g., musicians, performing artists, entertainers, etc.) is prohibited.

17. Outside Speakers

Outside Speakers. Conference planners should ensure that any proposed speakers are subject matter experts that can address topics relevant to FDIC duties and responsibilities, and that speaker expenses are limited to reimbursement for travel, lodging, meals, and limited/reasonable honoraria, speaker fees, or mementos.

18. Conference Mementos

Generally, conference mementos should not be provided. If provided, mementos shall be useful and appropriate for the work environment, and be professional in content and theme. The cost of such mementos shall not exceed \$10 per attendee. These charges must be clearly identified on form FDIC 2600/22.

Conference Participants

It may be appropriate to include certain individuals in addition to the defined FDIC participation group, in some activities of the conference.

- a. Other FDIC Employees. It may be appropriate to invite representatives from other divisions and offices to attend, participate in, or facilitate learning sessions for the defined FDIC group. Such FDIC employees involved in the conference should be included in the total conference costs and subject to all the provisions in this circular.
- b. Other Agency Employees/Outside Participants. It may be appropriate to also invite other Federal or State agency representatives and/or other outside participants to an FDIC-sponsored conference. Such participants shall be included in the total conference costs, with appropriate sharing and/or reimbursement of selected costs for attending the conference.

20. Closeout and Follow-up

- a. Form FDIC 2600/23, Conference Closeout This form is provided as an aid to evaluate actual conference costs.
- b. <u>Form FDIC 2600/24</u>, <u>Conference Evaluation</u> This form is provided as a guide for evaluating the quality and effectiveness of conferences. Feedback from participants may also be obtained using alternative forms.
- c. Post-conference closeouts and evaluations are required for conferences approved by the Chairman or his designee. Data shall be compiled and analyzed by the sponsoring division or office and summarized in a memo to the CFO within 60 calendar days after conference completion. The memo shall be accompanied by a copy of form FDIC 2600/23, a comparison of actual and estimated costs, a summary of feedback from participants, and any recommendations associated with the conference. Total conference-related costs (as defined in section 7b of this Circular) must be included on the Conference Closeout form.
- d. Reviews of conference closeout reports will be performed to ensure compliance with the policies contained in this circular. The reviews can extend to the automated travel and Chris T&A systems to ensure that employees properly coded their travel youchers and timesheets while on conference travel.
- e. Failure to abide by the policies contained in this circular may result in sanctions against the approving official, including the elimination of the delegated authority to approve future conferences.

21. Documentation and Record Keeping Requirements

Documentation requirements are identified at each stage of the process to include:

- a. Approval. For all approved conferences, documentation of approval, conference request memo, agenda, and estimated costs (on form FDIC 2600/22) shall be maintained by the sponsoring Division or Office and the CFO for three years.
- b. **Best Value Verification.** For conferences not held at an FDIC facility, the approved proposal including form FDIC 2600/22 must be maintained by the divisions and offices for three years.
- c. Contract Documentation. Any contractual agreements or insurance arrangements required by an operator or owner of a lodging and/or meeting facility related to the conference must be submitted to ASB for review at least 30 days in advance of the date that these documents must be signed by an appropriate official of the FDIC. Contracting and procurement delegations shall be followed in executing these documents. ASB shall promptly review the documents to ensure consistency with FDIC policies.
- d. **Follow-up**. Form FDIC 2600/23 must be completed for all events approved by the Chairman or his designee. This review shall include actual numbers of attendees, all related costs, and feedback from attendees. Documentation to support all expenditures is required and must be maintained by the Divisions and Offices for three years.

Note: Records shall be retained in accordance with the provisions in FDIC Circular 1210.1, FDIC Records Retention and Disposition Schedule.

22. Forms

All forms referenced in this circular are located on the FDICnet under Standardized Forms.

23. Questions

Questions or comments may be directed to the Office of the CFO.

24. Effective Date

The provisions outlined in this directive are effective immediately.

Note: For those conferences that were previously approved, division and office directors shall review their plans to ensure that the conference complies with this circular to every extent possible.

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- 2. A list of all conferences held by/on behalf of FDIC since July 1, 2010. For each conference, provide the following information:
 - a. The date, site, and topic;
 - b. The number of participants;
 - c. The complete and total budget, including, but not limited to, the cost of food, beverage, themed breaks, favors, programs, event space, rentals, lodging, hotel service fees, and transportation;
 - d. The complete and total budget for any event planning services utilized;
 - e. All documentation related to the solicitation of bid;
 - f. An itemized list of indirect costs charged to FDIC by any event planning services;
 - g. The complete and total budget for any cooperative agreement recipients;
 - h. An itemized list of indirect costs charged to FDIC by any cooperative agreement recipients;
 - i. The complete and total budget for any pre-conference planning travel; and
 - j. Documentation of any senior level approval for conference spending that exceeded the per diem rate for the chosen locality.

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Enclosed is a listing of 35 conferences held by/on behalf of the FDIC from July 1, 2010 to May 3, 2012. Of these 35 conferences, 29 took place at the FDIC's own facility, the Seidman Center in Arlington, Virginia.

d. -- f.

The FDIC does not generally contract with external event planning servicers. During this reporting period, the FDIC utilized event planning services one time, as noted on the enclosed listing.

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The FDIC does not participate with any cooperative agreement recipients.

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For the six conferences that took place at locations away from the FDIC's Seidman Center, pre-conference planning travel budgets are shown on the enclosed listing.

2. Continued

The FDIC's revised conference circular now limits expenses to a uniform 125% of GSA per diem rates for both lodging and meals, and any exceptions must now also be approved by the Chairman's Office. This per diem rate was recommended by our OIG in their report on conference-related expenses and activities.

Prior FDIC conference guidance allowed a combined per diem rate of 150% for all lodging, meal, and incidental expenses for events with 100 or fewer attendees, at locations with direct facility costs below \$5,000, and approval at the Division or Office Director level. Conferences that did not meet these criteria required a competitive bidding process with a minimum of three sites. These bids were required to be independently reviewed by the Acquisition Services Branch of the Division of Administration for a "Best Value" determination, before being routed for approval through the respective Division/Office Director, and then to the Chief Operating Officer (COO), and after the COO's departure from the FDIC in May 2009, the Chief Financial Officer (CFO) for final approval.

For the 35 conferences held since July 2010, the six that were not held at FDIC facilities required this competitive, "Best Value" analysis. Of those six conferences, four had per diem expenditures that exceeded 150%. Enclosed are the approval memorandums, consistent with FDIC policies at that time, for those four conferences.

List of All Conferences Held By/On Behalf of FDIC Since July 1, 2010

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		ato	Site	Topic	Participants		Budget	,	Travel
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	" "		FDIC Seidman Center,						
	10/4/2010	10/7/2010	Arlington, VA	Community Reinvestment Act Forum	120	\$	17,354	\$_	
Ì			FDIC Seidman Center,						
2	10/5/2010	10/6/2010		Employee Relations Conference	80	\$	4,616	\$	- (
			FDIC Seidman Center,	Division of Finance Accounting &					
	10/12/2010	10/12/2010	Arlington, VA	Auditing Conference	175	\$	6,712	\$	-
				Division of Supervision and				h-44-1-1-1-1	
	ļ		FDIC Seidman Center,	Compliance National Assistant					
	10/13/2012	10/15/2010	Arlington, VA	Regional Directors Conference	72	\$	11,429	\$	# 1
ı		······································	FDIC Seidman Center,	Mortgages and the Future of					
	10/25/2010	10/26/2010		Housing Finance Symposium	305	S	37,035	\$. 1
H				Division of Insurance Research Bank		<u> </u>			
	10/28/2010	10/29/2010		Research Conference	100	\$	8,000	*	
ř	10,50,50,10	TOTAGELY	FDIC Seidman Center.		140	#	6,000	*	
	11/8/2010	11/8/2010			150	\$	9,316	÷	7
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8	1/13/2011	1/13/2011	Arlington, VA	Business Lending	350	\$	2,939	\$	
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×			FDIC Seidman Center,	Division of Resolutions and					Î
₹.	2/23/2011	2/24/2011	Arlington, VA	Receiverships All Managers Meeting	266	\$	290,627	\$	
				Division of Insurance Research					
			FDIC Seidman Center.	Symposium on Rising Farmland	Ī		•		ı
Ĭ	3/10/2011	3/11/2011	Arlington, VA	Values	200	\$	1,778	\$	* 1
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			Marriott Hotel,	Interagency Accounting Conference					1
飁	3/15/2011	3/17/2011	Anaheim, CA	(FDIC, OCC, OTS, FRB, NCUA)	174	5	273,871	\$	11,432
ij			FDIC Seidman Center.	Division of Insurance Research		<u> </u>			
į	3/25/2011	3/28/2011		Annual Derivatives Conference	80	\$	6,628	*	
ij.	A. T. C. T. T. T.	WANAVII	FDIC Seidman Center	Legal Division Litigation and	1	<u>ا</u> تت.			
á	3/28/2011	3/30/2011		Resolutions Branch Conference	250	ę	27,198	æ	_
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Ŋ.	4/5/2011	4/7/2011	Arlington, VA	Management	70	*	9,486	•	
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				3rd Annual Global Financial Services			2	_	
ij.	5/9/2011	5/9/2011		Risk Management Conference	210	3	17,362	*	
ø			Hilton Hotel, San	Financial Crimes Conference (Joint	_				
1	5/16/2011	5/19/2011	Diego, CA	with Department of Justice)	348	\$	644,053	\$	16,354
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	5/19/2011	5/20/2011		Best Practices Conference	110	\$	7,516	\$	*
I			Sheraton Hotel, New	National Minority Depository]	1			
Ö	6/14/2011	6/16/2011		Institutions Conference	275	\$	200,097	\$	1,595
				Division of Risk Management			······································		
Ĭ	,			Supervision and the Division of					1
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				Depositor and Consumer Protection	1			į.	
			Marriott Hotel Coolee	Depositor and Consumer Protection New York Regional Training	7				
	\$/1/ 7 644		Marriott Hotel Copley Place Boston MA	New York Regional Training	######################################	•	1 255 000	¢	1 ፈርስ
	8/1/2011	B/5/2011	Place, Boston, MA	New York Regional Training Conference	598	\$	1,255,999	\$	1,400
			Place, Boston, MA FDIC Seidman Center,	New York Regional Training Conference Division of Information Technology			`		1,400
	8/1/2011 8/16/2011	8/5/2011 8/16/2011	Place, Boston, MA FDIC Seidman Center, Arilington, VA	New York Regional Training Conference Division of Information Technology IT Symposium	598 400		1,255,999 2,426	s s	1,400
	8/16/2011	8/16/2011	Place, Boston, MA FDIC Seidman Center, Arlington, VA FDIC Seidman Center,	New York Regional Training Conference Division of Information Technology IT Symposium	400	\$	2,426	\$	1,400
			Place, Boston, MA FDIC Seidman Center, Arlington, VA FDIC Seidman Center, Arlington, VA	New York Regional Training Conference Division of Information Technology IT Symposium Consumer Reserarch Symposium	400 100	\$	`		1,400
	8/16/2011	8/16/2011	Place, Boston, MA FDIC Seidman Center, Arlington, VA FDIC Seidman Center, Arlington, VA FDIC Seidman Center, Arlington, VA	New York Regional Training Conference Division of Information Technology IT Symposium	400 100	\$	2,426	\$	

List of All Conferences Held By/On Behalf of FDIC Since July 1, 2010

	······································					ŧ	Pro-
				# of	Total		ference
Date		Site	Topic	Participants	Budget	1	ravel
			Division of Risk Management				
			Supervision and the Division of				
	•		Depositor and Consumer Protection				
		Gaylord Hotel,	Chicago Regional Training				
9/19/2011	9/23/2011	Nashville, TN	Conference ¹	642	\$ 1,260,089	\$	43,527
		FDIC Seidman Center,	Division of Finance Accounting &	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
10/18/2011	/2011 10/18/2011 Arlington, VA Auditing Conference		224	\$ 21,389	\$	-	
		FDIC Seidman Center.	PRMIA 3rd Annual Policy and Risk				
11/7/2011	11/7/2011	Arlington, VA	Symposium	210	\$ 4,000	\$	
		FDIC Seidman Center,	Division of Risk Management			T	***************************************
11/7/2011	11/10/2011	Arlington, VA	Supervision Threatscape 2011	100	\$ 6,500	\$	**
			Association of Supervisors of Banks				4. 4
		InterContinental Hotel,	of the Americas Annual Assembly			•	
11/14/2011	11/18/2011	San Francisco, CA	and Conference	120	\$ 162,746	\$	16,30
		FDIC Seidman Center,	Division of Administration Ali-				
11/29/2011	12/1/2011	Arlington, VA	Employee Conference	350	\$ 187,847	\$	*
Kingga ay		16 , 7, 2, 12, 12, 13, 13, 13, 13, 13, 13, 13, 13, 13, 13					
		FDIC Seidman Center,	Interagency U.S.Crisis Management				
1/18/2012	1/20/2012	Arlington, VA	Group Conference	115	\$ 19,094	\$	
		FDiC Seldman Center,					
2/15/2012	2/16/2012		Legal Division Managers Conference	100	\$ 24,086	\$	×
***************************************		FDIC Seidman Center,	Future of Community Banking			1	·······························
2/18/2012	2/16/2012	Arlington, VA	Conference	300	\$ 22,421	\$	~
		FDIC Seidman Center,	Division of Information Technology			1	,_,,,
3/8/2012	3/8/2012	Arlington, VA	All-Hands Conference	225	\$ 1,069	\$	
		FDIC Seidman Center,	Annual Derivatives Secruties and				
3/30/2012	3/31/2012		Risk Management Conference	100	\$ 11,534	5	
		FDIC Seidman Center,					***************************************
4/11/2012	4/11/2012	Arlington, VA	FDIC Bi-Annual Privacy Symposium	375	\$ 11.283	\$	
		FDIC Seidman Center,				-	
5/1/2012	5/3/2012	Arlington, VA	IAD: Legal Frameworks Seminar	60	\$ 16,220	\$	*

¹ The FDIC does not generally contract with external event planning servicers. For this reporting period, the FDIC only contracted once with an event planning service, at the Division of Risk Management Supervision and the Division of Depositor and Consumer Protection Chicago Regional Training Conference. The FDIC hired Destinations Nashville, Inc. to arrange for a dinner at the conference and paid them \$17,733 for their services.



Chicago Regional Office

August 11, 2010

	TO:	Sandra L. Thompson Director
(b)(6)		
	THROUGH:	Afformas E. Peddicord
(b)(6)	L_	Deputy Director
	FROM:	M. Anthony Lowe
	•	Regional Director
	SUBJECT:	Request for Approval – Chicago Region
•		2011 DSC Chicago Regional Office Training Conference

Summary: We recommend Chicago Region's 2011 Training Conference be held at the Gaylord Opryland Hotel, Nashville, Tennessee – September 19-23, 2011.

Site Section Process

A search began in January 2010 aided by the FDIC Special Services Unit. We significantly relied on information gathered during our search for a 2009 conference site that was subsequently cancelled. The following criteria were used as part of the site selection process to identify facilities that:

- Have a minimum of 600 sleeping rooms (must have 2,500 sleep nights available with the majority of the attendees staying four nights)
- Offer government per diem rate for sleeping rooms
- Have a general session meeting room of 9.000 square feet to accommodate 600 seated classroom style
- Provide 16 break-out rooms to accommodate between 45 and 60 seated classroom style
- Have a banquet room to accommodate a minimum of 660 people
- Have availability between June 2011 and August 2011
- Have proven track records of above average maintenance and cleanliness of the facility
- Are within 30 miles of a major airport
- Are within walking distance of a variety of restaurants, shopping and entertainment
- Maintain a public image that is consistent with the public image of the FDIC, and are not overly resort or gambling oriented

 Were not facilities that hosted the last five Chicago Regional Training Conferences

Our initial search focused primarily on potential conference sites within regional boundaries. We extended the search to include states contiguous to the Chicago regional borders, including Minnesota, Tennessee, Pennsylvania and Missouri. The ten-state search yielded three sites of particular interest that met the aforementioned criteria. These three facilities submitted competitive bids that met the warranted contracting requirements. These bids allowed us to horizontally compare costs outside of the Per Diem (for example, Audic-Visual, Meeting Room Rental, Shipping and Receiving Charges, Food & Beverage) as well as concessions offered by each facility. We also conducted site visits of the final three conference sites.

Recommended Site – Gaylord Opryland Hotel, 2802 Opryland Drive, Nashville Tennessee. Conference Dates – September 19-23, 2011

The Gaylord Opryland Hotel is located approximately 11 miles northeast of downtown Nashville and 10 miles from the Nashville International Airport. This facility has 2,881 sleeping rooms and has offered the prevailing government rate, which is currently \$119.00 per night. The hotel is offering a number of concessions for our event to include one complimentary room for every 40 paid room nights, discounted round trip airport shuttle transportation for our participants, 25% off self parking rates, 15% discount on 2010 banquet menu pricing if the total is above \$300,000, 30% discount on 2010 audio visual pricing, complimentary receiving/storing of boxes shipped to the hotel for our event, and no charge to re-key specific meeting space for security purposes. In addition, FDIC employees would be tax exempt from all occupancy, sales and city taxes.

The Gaylord has accommodated many large, and high-profile, celebrity events in the past and should fully satisfy our needs in a professional manner. The general session meeting space is of ample size, and located adjacent to a large ballroom that will be utilized for lunch. Although the size and number of breakout meeting rooms are sufficient, they are not all centrally located. To alleviate this concern, we will use ample signage, strategically positioned staff, and floor plan maps to ensure that attendees can easily locate the break-out sessions.

The Gaylord is overall best suited to meet our security needs and offers the most amenities to enhance the training conference experience. Although it is the second highest cost of our three options, the concessions and accommodations offered clearly make this facility the overall best value. The hotel provides its own in-house, low cost shuttle service to and from the Nashville Airport, to all of the historical attractions, and to downtown Nashville. In addition, the conference facility is within walking distance to family friendly activities in the sprawling Opryland Complex, such as a shopping mail, I-MAX Theater, and a number of restaurants.

The hotel is currently closed and undergoing a large-scale re-construction due to a devastating flood that occurred in the Nashville metropolitan area in May 2010. The reconstruction of the hotel will be completed in November 2010, and the Gaylord will operate effectively as an all new conference facility at the time of our conference in 2011. In addition, the nearby mall is closed as are the Gaylord's golf course and clubhouse that would have facilitated a private executive dinner. All of these facilities are either on or ahead of schedule for a re-opening December 2010 or earlier.

The region's conference planning committee will address the challenges resulting from the flood through close coordination with the Gaylord's event coordination staff. We will also rely on "hard hat" tours of the facility and graphic and engineering depictions of the space, while placing initial planning emphasis on offsite reception and dinner event planning and coordination. We will also expend efforts between the contract signing date and the November 2010 completion of the re-construction, with planning for breakout session topics, establishing web-based survey and sign-up links, and developing strategies to communicate plans for the conference to our staff. With these strategic adjustments, we anticipate no material impact on the success of our conference as a result of the 2010 flood.

This facility is considered the most suitable for the conference, and is our first choice for the following reasons:

- Nashville International Airport has flights available to over 89 markets, with non-stop service to 42 cities including Cleveland, Chicago, Cincinnati, Columbus, Detroit, Milwaukee, and Washington DC. Nashville is also located within a five-hour drive of 35% of the region's personnel attending the conference.
- The hotel provides an in-house low cost full shuttle service between the airport
 and conference site. The Gaylord owns a fleet of chartered buses to
 accommodate the number of conference attendees that are expected to fly to the
 conference. This shuttle service will eliminate the need for a separate contract
 with an outside vendor.
- The parent company, Gaylord Entertainment, has separate affiliated facilities for a reception or dinner away from hotel grounds, while offering the convenience of a single bill and purchase order (Grand Ol' Opry, as well as Gaylord-owned facilities in downtown Nashville).
- The hotel offers complimentary and professional car service (2011 Chevy Suburban) pick-up and delivery to and from airport for Executives and VIPs, as well as a private check-in arrangement. For the Chairman and Division Director, no front desk check-in will be required, and pre-arrival coordination with special assistants, to plan for any personal needs or accommodations, will be facilitated by the hotel.

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The Gaylord is best equipped for expedited large group check-in procedures, with 30 check-in locations. Additional staff will be on-duty for our check-in and check-out convenience. The Gaylord's check-in capabilities would significantly reduce waiting times and provide the best opportunity for an on-time conference start Monday afternoon that includes all attendees.

Estimated cost of our regional training conference at this site is \$2,061.40 per full-week equivalent (FEW) attendee, or \$412.28 per FWE attendee per day. However, costs could change should the per diem rate change in 2011.

Comparison Site 2 – Minneapolis Hilton Hotel, Minneapolis, Minnesota. Conference Dates – August 15 – August 19, 2011 (Second Choice)

The Hilton Minneapolis is in downtown Minneapolis and 13 miles north of the Minneapolis/St. Paul International Airport. This facility has 821 sleeping rooms and has offered the prevailing government rate, which is \$137.00 per night. The selection of this site would virtually assure that the FDIC would have the hotel staff's undivided attention, as we would reserve 80% of the sleep rooms and almost all of the meeting space. The hotel is offering a number of concessions for our event, to include one complimentary room for every 40 paid room nights, the lowest food and beverage costs when compared to the other sites, 10% discount on the 2010 banquet menu pricing, 35% discount on 2010 audio visual pricing, complimentary receiving/storing of boxes shipped to the hotel for the event, and no charge to re-key specific meeting space for security purposes. In addition, the FDIC would be tax exempt from all occupancy, sales and city taxes as a result of direct billing.

The Hilton Minneapolis hotel offers over 77,000 square feet of flexible meeting and banquet space, featuring the 24,780 square foot Minneapolis Baltroom. Accompanied by 35 additional meeting rooms, the hotel offers flexibility for events ranging in size from 10 to 2,800 people. The FDIC would be occupying all of the meeting space on the third floor of the hotel, as well as two baltrooms located on the second floor.

This facility could meet our needs; however, it was not selected and is our second choice for the following reasons:

- This venue, including travel and transportation costs, would be the most costly to the Corporation by almost \$40,000. Travel expenses to Minneapolis are \$53,000 higher than the second most expensive site. These higher travel costs also represent generally more travel time and inconvenience for the conference attendees.
- Minneapolis is located within a five-hour drive for only 25% of the FDIC personnel attending the conference. Minneapolis/St. Paul International Airport (MSP) handles over 1,100 daily flights and its nine (9) major airlines and seven

(7) regional carriers offer daily non-stop service to 119 U.S. cities including Cleveland, Chicago, Cincinnati, Columbus, Detroit, Kansas City, Milwaukee and Washington DC. Not all major airports that would be used to fly to Minneapolis for the conference offer non-stop flights.

- The transportation to and from the airport was the most expensive of the three facilities and would require expensive individual taxi rides, or the chartering of buses.
- The lobby size and limited number of check-in stations (six stations) would make the large group check-in process, during the concentrated arrival times, inefficient and relatively chaotic. This issue could impact a timely start time for the Monday afternoon conference session.
- Minneapolis offered a limited selection of offsite venues for a dinner and/or reception.

The Hilton Minneapolis only has the week of August 15th dates available for 2011, which conflicts with the planned Regional Training Conference for the New York Region that is also scheduled for August 2011.

Estimated cost of this conference site is \$2,120.51 per FWE attendee, or \$424.10 per FWE attendee per day. However, costs could change should the government hotel and per diem rates change in 2011.

Comparison Site 3 – Renaissance St. Louis Grand & Suites Hotel, 800 Washington Avenue, St. Louis, Missouri. Conference Dates – June 13 – 17, 2011 (Third Choice)

The Renaissance is located in downtown St. Louis, Missouri, approximately 15 miles from the St. Louis Lambert International Airport (STL). This historic hotel re-opened in 2003 after undergoing a complete renovation and is considered a 4-Star facility. The hotel is offering approximately 40,000 square feet of meeting room space that is available on two floors including a 20,000 square foot ballroom. There are a total of 1,083 guest rooms in the hotel, of which we would be offered 609 rooms during the peak nights of the event at the prevailing government rate (currently \$118.00 per night inclusive of 7.25% occupancy tax (non-exempt)). The hotel is offering complimentary self parking for all attendees during the event, and valet parking is \$27 per night. The hotel is offering one complimentary room for every 40 paid sleeping room nights. The hotel is offering 20% discount on 2010 food and beverage menu pricing and a 20% discount on 2010 audio visual pricing.

It is noted that STL offers several non-stop flights daily from most cities within the Region and Washington, DC. Also, St. Louis is located within a five-hour drive of 55%

of the region's personnel attending the conference. However, the Renaissance is our third choice and was not selected for the following reasons:

- The hotel meeting space is in a separate building from the sleeping room facility.
 Individuals would access the meeting space by walking through a tunnel in the
 basement or outside. The outside doors to the meeting space are unlocked
 while the conference is in session and open to the public. This set-up creates a
 concern for excessive foot traffic unrelated to our conference activities and would
 create a security concern.
- Offsite venues for a reception or formal dinner were the most limited in St. Louis, within a reasonable distance from the hotel, for the size of our conference.
- The completion of the revitalization of downtown St. Louis by the proposed 2011 regional conference dates appears unlikely. In 2008, the state and local governments embarked on a major City of St. Louis revitalization program. These municipalities had planned for over \$4 billion in developmental projects in the city's downtown district funded by federal and state grants as well as private funds. The revitalization was scheduled for completion by July 2009. However, the revitalization is significantly behind schedule, and several projects that would add to our conference experience remain either incomplete or unfunded. The delays have been impacted by the significant economic distress that the local government and metropolitan area has recently faced. The revitalization projects would have provided additional restaurants, downtown entertainment, and security.
- There are several vacant buildings in the immediate vicinity of the Renaissance Hotel.
- The hotel sales staff working with the FDIC has changed three times, which may
 be reflective of personnel turnover and may impact the desired level of customer
 service needed during the contracting, planning, and execution of the
 conference.

Estimated cost of our regional training conference at this site was the lowest of all three conference sites at \$1,837.84 per FWE attendee, or \$367.57 per FWE attendee per day. However, costs could change should the per diem rate change in 2011.

Conference Organizer

In accordance with FDIC Circular 1010.2, Conference, Meeting and Symposium Planning Policy and Procedures, Assistant Regional Director Kirk L. Holt has been named as the Conference Organizer. He will serve as advisor to the Conference Planning Committee that has yet to be named.

Memo To: Director Thompson

Re: Request for Approval - 2011 Regional Conference

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Summary

APPROVED:

	Gaylord Opryland Nashville, TN	Hilton Minneapolis Minneapolis, MN	Renaissance St. Louis Grand – St. Louis, MO
Lodging	\$316,875.00	\$365,040.00	\$314,340.00
Meals	\$448,024.10	\$389,126.60	\$365,389.40
Per Diem	\$94,923.00	\$100,893.00	\$88,356.00
Transportatio n	\$287,300.85	\$334,545.48	\$245,534.40
Other	\$110,329.00	\$103,906.63	\$107,463.56
Total	\$1,257,451.95	\$1,293,511.71	\$1,121,083.36

Based on the information presented above, we request permission to enter into an agreement with the Gaylord Opryland Hotel for the 2011 DSC Chicago Regional Training Conference.

The request for approval and supporting documents have been reviewed by ASB; therefore, this matter is ready for your consideration.

(b)(6) 8/17/2010 (b)(6) STEVEN O. APP Date

Deputy to the Chairman and Chief Financial Officer



Division of Administration

August 10, 2010

BEST VALUE DETERMINATION

2011 CHICAGO REGIONAL OFFICE TRAINING CONFERENCE

After reviewing the proposals submitted by three major hotels in St. Louis, Missouri; Nashville, Tennessee; and Minneapolis, Minnesota, to provide lodging, catering, audio/visual and business center services, and conference space for the 2011 Chicago Regional Office Training Conference, it is determined that the Gaylord Opryland Hotel, Nashville, Tennessee, offers the best value. The estimated total cost to hold the Conference at this hotel is \$1,257,452.00, including estimated travel and training costs. The estimated total costs to hold the Conference at the Hilton Minneapolis or the St. Louis Renaissance Grand Hotel and Suites are \$1,293,512.00 or \$1,121,083.00, respectively. While Nashville is not the least costly overall, it provides the best value and an added value to the 2011 conference experience based on the availability of meeting space, high quality offsite venues for a reception and a dinner, and anticipated exceptional customer service.

(b)(6)	 		

Ronnie Vinson
Contracting Officer
Corporate Contracting Section
Acquisition Services Branch



SUBJECT:

Division of Administration

	TO:	Kirk L. Holt Assistant Regional Director, Chicago Regional Office
b)(6)		Division of Supervision and Consumer Protection (b)(6)
	FROM:	
		Division of Administration
	DATE:	August 2, 2010

This is to advise you that the Seidman Center cannot accommodate the 2011 DSC Chicago Regional Office Training Conference, which is being planned for 600 attendees. The largest meeting room at the Seidman Center can seat up to 220 persons, classroom style. Most break-out rooms are limited to seating 20-25 people. There is no space at the Seidman Center that can accommodate such a large group.

2011 DSC Chicago Regional Office Training Conference

Should you have any questions or require any additional information, please contact me at x22232.

(b)(6)



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Division of Supervision and Consumer Protection

June 15, 2010

TO:

Steven O. App

Deputy to the Chairman and Chief Pinancial Officer

(b)(6)

FROM:

Sandra L. Thompson, Director

Division of Supervision and Consumer Protection

SUBJECT:

2011 New York Regional Training Conference

In accordance with the October 31, 2007 Conference, Meeting and Symposium Planning Policy Circular 1012.2, approval is requested for the 2011 New York Regional Training Conference to be held August 1-5, 2011. The purpose of the conference is to provide a forum to educate and update the staff on new regulations, policies, and procedures.

Proposed Site: Boston Marriott Copley Place, Boston, Massachusetts

Based on the Circular 1012.2 several hotels were contacted and considered. Based on cost comparisons, availability and accommodations, three hotels were considered as the best potential sites. The focus was placed on cities that could provide the best value to the Corporation. Included are cost comparisons made for two other locations; however, one site was eliminated due to meeting room space locations and high travel costs. The costs for the second site are very close to the Region's first choice; however, they have attended past conferences in this city several times. DOA's Acquisition Services Branch has given concurrence that the Boston Marriott Copley represents the best value for the FDIC.

Although New York City is the Regional Office city, the estimated cost of holding a Conference in New York City is prohibitive and therefore it was removed from consideration.

Based on our review of the information contained in the proposal, the reporting requirements appear to have been satisfied, and I request your approval to move forward with this conference.

Attachments

	Concur:	
(b)(6)		2/14/
(b)(6)	Steven O. App	/2010 Date
	Deputy to the Chairman and Chief Financial Officer	



Division of Administration

June 15, 2010

BEST VALUE DETERMINATION

2011 NEW YORK REGIONAL DSC EXAMINER TRAINING CONFERENCE

After reviewing the proposals submitted by three major hotels in Boston, Massachusetts, Baltimore, Maryland and Philadelphia, Pennsylvania, to provide training, lodging, catering, audio/visual and business center services, and conference space for the 2011 New York Regional DSC Examiner Training Conference, it is determined that the Boston Marriott Copley Place, Massachusetts offers the best value. The estimated total cost to hold the Conference at the Boston Marriott Copley Place is \$1,329,584, including estimated travel expenses. The estimated total costs to hold the conference at the Baltimore Marriott Waterfront, Maryland or the Philadelphia Marriott Downtown, Pennsylvania are \$1,371,776 or \$1,442,302, respectively. The venue that offers the lowest total cost is the Boston Marriott Copley Place. While the Baltimore Marriott Waterfront is a close second, the New York group has attended past conferences in this city three times, and Boston would be considered a new venue for them. The Philadelphia Marriott Downtown is substantially higher by \$112,718 primarily due to the high cost of travel.

(b)(6)

Ronnie L. Vinson
Contracting Officer
Acquisition Services Branch



Division of Supervision and Consumer Protection

June 15, 2010

MEMORANDUM TO:

Sandra L. Thompson

Director

THROUGH:

Thomas E. Peddicord

Deputy Director

(b)(6)

FROM

Doreen R. Eberley

Regional Director

SUBJECT:

Request for Approval-2011 DSC

New York Regional Training Conference

Overview:

In April 2010 we began to conduct research, obtain information, and perform a cost comparison of potential 2011 DSC New York Regional Training Conference (Conference) host sites in New York City and alternative locations within the New York Region. There are no FDIC-owned facilities large enough to accommodate the Conference.

Utilizing the October, 2007 Conference Training Event Policy and Procedures memorandum as our guide, we focused on locating a Conference site which offers the best value for FDIC. Based upon the parameters provided, we explored options during the month of August 2011 time period. We requested information regarding the availability of space for our training conference from seven different hotels in Boston, Baltimore, New York City, and Philadelphia and all hotels provided proposal information. We conducted site visits to four. We eliminated two sites due to the high cost.

Although New York City is the Regional Office city, which is also the geographic location having the largest concentration of attendees, the estimated cost of holding a Conference in New York City is prohibitive and therefore was removed from consideration.

Evaluation Process: Following is a narrative summation of the cost comparison of the three best proposals, with details contained in the attached comprehensive cost analysis forms.

Summary of Potential Sites:

Boston Marriott Copley Place, Boston, MA

This property, with 1,147 guest rooms, is located in Copley Place Mall, in the Back Bay area of Boston, Massachusetts. The hotel is approximately 3 miles, or 15 minutes, from Boston Logan Airport, and has direct access to the Back Bay subway station, connecting to Amtrak and the airport. The hotel also has convenient access to the Massachusetts Turnpike (I-90) and the Southeast Expressway (1-93). The hotel was built in 1984, and has undergone several renovations, the most recent being completed in 2009 upgrading the meeting space which included adding 4 breakout rooms. The hotel is offering the current discounted rate of \$185.00 for the preferred week of August 1, 2011. This is \$20 less than the current government rate of \$205. The hotel has 74,000 square feet of meeting space and can accommodate our entire group for both sleeping and meeting room space. Audio-visual equipment and support is available onsite. There is ample registration space, a large ballroom for general session meetings and meals. and a sufficient number of breakout meeting rooms. The general session and breakout meeting room space and meals would be on two floors, the 3th and 4th floors, with easy access between floors via escalators, elevators and stairs. Further, this hotel has agreed to waive daily fees for breakout session meeting rooms as well as giving a 2% rebate to the Master Account. The overall cost of holding the conference at the Boston Marriott Copley Place represents the best value to the FDIC; refer to attached Projected Expenses-Recommended Site.

Baltimore Marriott Waterfront, Baltimore, MD

This property, with 728 guest rooms, is located on the waterfront of the inner harbor of Baltimore, approximately 11 miles from Baltimore Washington Airport. The hotel is offering a discounted rate of \$151 which is \$10 off the government rate for the week of August 21, 2011 (not our preferred date). The hotel has over 77,000 square feet of meeting space and can accommodate our entire group for both sleeping and meeting room space. Audio-Visual equipment and support is available en-site. There is ample registration space, a large ballroom for general session meetings and meals, and a sufficient number of breakout meeting rooms. This location would be our second choice. The costs are very close to Boston's, however, the New York group has attended past conferences in this city three times and Boston would be a new venue; refer to attached Projected Expenses-Recommended Site I.

Philadelphia Marriott Downtown, Philadelphia, PA

This property, with 1,408 guest rooms, is located in downtown Philadelphia, Pennsylvania, and is connected to the Pennsylvania Convention Center. The hotel is approximately 3 miles from Philadelphia International Airport, and one mile from the 30th Street Amtrak Station. The hotel was built in 1995 and is undergoing several renovations with a March 2011 expected completion date. The hotel is offering the current government rate of \$153.00 for the week of August 15,

2011 (not our first choice). The hotel has 92,000 square feet of meeting space and can accommodate our entire group for both sleeping and meeting room space. Audio-visual equipment and support is available on-site. There is ample registration space, and a large ballroom and exhibition hall/meeting room space, for general session meetings and meals. There appears to be a marginally sufficient number of breakout meeting rooms. The general session and breakout meeting room space and meals would be on multiple floors. The overall cost of holding the conference at this hotel would be higher, primarily due to the travel, than the overall cost of holding the Conference at the Boston Marriott Copley Place; refer to attached Projected Expenses-Comparison Site II.

Recommendation:

We recommend that the 2011 New York Regional Training Conference be held at the Boston Marriott Copley Place, Boston, MA. As the attached comparative schedules indicate, the Boston Marriott Copley Place provides the best value to the FDIC. Ronnie L. Vinson, Contracting Officer, Acquisition Services Branch, DOA Contracting, has verified that the recommended proposal represents the best value for the FDIC. The recommended site meets all of the basic criteria of competitive room rates, availability, sufficient number of meeting and sleeping rooms, and convenient and accessible transportation.

Security Assessment:

In accordance with current guidelines, once the Conference proposal has been approved, a security assessment will be conducted to verify full compliance with the FDIC's security and safety standards; a preliminary security assessment indicated there are no major security issues or concerns with the hotel.

Conference Organizer:

In accordance with current guidelines, a conference organizer will be selected through a regional expression of interest to serve as the primary point of contact and assist with the planning and closeout of the Conference. He/she will work under the supervision of Assistant Regional Director Mary Barry, together with Regional Administrative Specialist Margaret Zemotel and a planning committee comprised of Regional Office, Area Office and field office staff, with support from other divisions and offices including DOA and DIT.



		(b)(6)
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Division of Supervision and Consumer Protection

October 15, 2010

	IU:	Mr. Steven O. App
b)(6)		Deputy to the Chairman and Chief Financial Officer (b)(6)
•	THROUGH:	Sandra L. Thompson Director, Division of Supervision and Consumer Protection
b)(6)	FROM:	Robert F. Storch Chief Accountant

SUBJECT: 2011 Interagency Accounting Conference

Your concurrence is requested for the Division of Supervision and Consumer Protection to participate with the other four federal financial institution regulatory agencies (FRB, OCC, OTS, and NCUA) in holding the annual Interagency Accounting Conference on March 15 - 17, 2011, in Anaheim, California, at the Anaheim Marriott Hotel. The Interagency Accounting Conference was held in the Washington, D.C., area during the 1990s and in 2000. Beginning with 2001, the agencies agreed to hold the Conference outside of the Washington area when it would be more cost effective.

This Interagency Conference is an annual two and one-half day training conference primarily for FDIC, OCC, OTS, FRB, and NCUA examination staff with a special interest in financial institutions accounting and auditing issues. It also serves as a means of providing continuing professional education (CPE) credit required for the FDIC's and other agencies' staff with Certified Public Accountant (CPA) certificates or licenses. In addition, several participants from foreign bank supervisory authorities on the Basel Committee are expected to attend. The Conference's first two days consist of interagency general sessions on current accounting and auditing developments, with the remaining time devoted to individual agency training and/or meetings. The Conference directly contributes to DSC's ongoing efforts to maintain the knowledge and skills of the Division's accounting specialists, provide CPE credit to the Division's employees with professional certifications, and foster interaction and communication with supervisors from other Basel Committee countries. Virtually all of DSC's conference participants are CPAs and/or are designated accounting subject matter experts in regional or field offices.

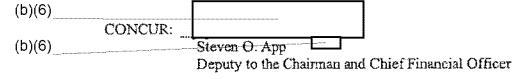
Approximately 395 participants from all five agencies and foreign supervisory authorities are expected to attend the 2011 Conference. Including external speakers, a total of approximately 410 is expected to attend. As a result, the Conference cannot be held at the Seidman Center. A statement by DOA that the Seidman Center cannot accommodate the Conference is attached.

¹ FDIC participation in the Conference is expected to be limited to 147 persons, consisting of 140 DSC professional staff and 7 DIR professional staff. Up to 9 additional FDIC support/IT staff will be present. This level of FDIC participation is consistent with the 2008 Interagency Accounting Conference. 2009 and 2010 participation by DSC staff was reduced by DSC senior management as a result of examination bours constraints; however, DSC is planning to resume its previous level of participation in 2011. Other agency participation in 2011 is estimated at 65 - 70 for the FRB, 90 - 100 for the OCC, 40 for the OTS, and 20 for the NCUA. In addition, 5 - 10 participants are expected from foreign bank supervisors.

At the request of DOA, a hotel-search firm contacted approximately 45 hotels in various cities around the United States and requested proposals covering five weeks in March and April 2011. In addition, DOA contacted four other hotels directly. All but nine of the hotels contacted either refused to honor rates within 125% of government maximum lodging rates, were not available during the potential conference dates, did not meet the agencies' space requirements, or did not respond to the search firm's inquiries. DOA reviewed the initial proposal information submitted by all nine hotels and recommended that site visits be conducted at six. Others were ruled out because the meeting space offered in their initial proposals was not adequate. Site visits were conducted at the six hotels recommended by DOA. Only three appeared to effectively meet the agencies' needs. Of the remaining hotels, two were in poor physical condition, and the other did not have sufficient meeting space available to meet the agencies' needs.

The three that were determined to meet the agencies' needs have been included in the cost comparison on the Conference Request Form (Form 2600/22). From these three hotels, the interagency planning committee elected to hold the Conference at the Anaheim Marriott Hotel in Anaheim, California, which is the lowest cost alternative for the FDIC. It accommodates the agencies' space needs, would honor the government maximum lodging rates, agreed to provide a 30% discount on audio/visual equipment rental charges and a 25% discount on IT related charges, offered a \$20,000 credit toward the reception and a \$5,000 credit toward the total master bill, offered complimentary shipping and receiving, and will provide one complimentary room night for every forty paid room nights.

The FDIC's DOA handles the logistical arrangements for the Conference on behalf of all five agencies; therefore, the FDIC will be billed for all hotel costs (hotel rooms, facilities, audio/visual, IT, catering, and business center) associated with the Conference. Total hotel costs for all five agencies are estimated to be no more than \$375,000. The other agencies will be responsible for reimbursing the FDIC for their pro-rata share of catering, room, audio/visual, IT and business center costs based on their actual number of participants. The other agencies will also be responsible for reimbursing the FDIC for any hotel-related costs associated with their agency-only activities held during the Conference. As with past Conferences, the other agencies would not agree to provide full breakfast for the participants; therefore, only continental breakfast with no hot food items will be provided. As a result, there will be no per diem deduction for breakfast for FDIC participants. The FDIC's share of hotel-related costs is not expected to exceed 40% of the total hotel-related costs and will most likely range between \$135,000 to \$145,000. As indicated on the attached Conference Request Form, the FDIC's total estimated cost for the 2011 Conference, including travel-related costs, is estimated to be \$265,603.89, with an estimated cost per attendee of \$1,702.59.



Attachments: Conference Request Form (Form 2600/22)

DOA determination that the Seidman Center cannot accommodate the Conference

DOA Best Value Determination



Division of Administration

October 15, 2010

BEST VALUE DETERMINATION

2011 INTERAGENCY ACCOUNTING CONFERENCE

After reviewing the proposals submitted by three major hotels in Anaheim, California; Minneapolis, Minnesota; and Denver, Colorado, to provide lodging, catering, audio/visual, IT and business center services, and conference meeting space for the 2011 Interagency Accounting Conference, it is determined that the Anaheim Marriott Hotel, Anaheim, California, offers the best value. The estimated total cost to hold the Conference at the Anaheim Marriott Hotel is \$265,603.89. The estimated total cost to hold the Conference at the Hilton Minneapolis or the Sheraton Denver Downtown is \$303,386.50 or \$269,046.89, respectively. The Corporation would save approximately \$37,782.61, by using the Anaheim Marriott Hotel for the 2011 Conference.

(b)(6)	
	Ronnie L. Vinson
	Contracting Officer
	Acquisition Services Branch



Division of Administration

October 6, 2010

	TO:	Christine	M. Bouvier		
		Senior Po	olicy Analyst (Ban <mark>k</mark>	Accounting)	
•		Accounti	ng and Securities I	osure Section	(b)(6)
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	FROM:	d			
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		Corporat	e Services Branch		
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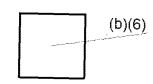
SUBJECT:

2011 Interagency Accounting Conference

This is to advise you that the Seidman Center cannot accommodate the 2011 Interagency Accounting Conference, which is being planned for 410 attendees. The Seidman Center's New Auditorium only accommodates a maximum of 240 attendees.

Should you have any questions or require any additional information, please contact me at extension X22232.





Division of Supervision and Consumer Protection

November 10, 2010

TO:

Steven O. App

Deputy to the Chairman and Chief Financial Officer

FROM:

(b)(6)

Sandra L. Thompson, Director

Division of Supervision and Consumer Protection

SUBJECT: 2011 National Minority Depository Institutions Conference

The Division of Supervision and Consumer Protection requests your approval for the 2011 National Minority Depository Institutions Conference to be held June 14-16, 2011. This conference highlights challenges facing minority-owned FDIC-insured institutions, identifies potential best practices for improving operations, and satisfies the FDIC's statutory mandate to promote and preserve the minority ownership of financial institutions. This is an interagency conference with representatives attending from the OCC, OTS, and the Federal Reserve as well as bankers from minority-owned institutions.

Originally, you approved the site selection of Houston, Texas for the 2011 Conference that would be held in May of 2011. Upon further discussion with the Interagency Planning Committee and the FDIC's desire to provide a forum for attendees to meet with more than 60 firms to discuss investment opportunities, the Committee decided to relocate the conference to New York City which will facilitate a greater participation of investors and bankers.

The Sheraton Hotel, New York is the best-value hotel and location, offering the FDIC several concessions on lodging rates, catering expenses, and audio-visual services. This midtown site offers competitively priced menus of excellent quality, and the hotel is eager to host this event. The projected conference cost is \$206,555, and Contracting Officer Ronnie Vinson of DOA's Acquisition Services Branch has concurred that the Sheraton Hotel, New York represents the best value for the FDIC (see attached copy of the Best Value Determination form). The costs associated with a New York conference exceed the previously approved amount of \$137,593 for the Houston location. We believe that accommodating the heightened investor interest will more than offset the cost difference and benefit the Corporation over the long term.

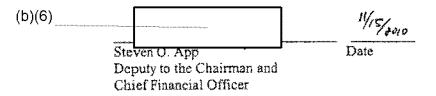
The L. William Seidman Center was considered, but neither the auditorium nor lodging facilities could accommodate the number of attendees. Attendees will pay for their lodging and miscellaneous expenses, and the FDIC will cover costs for catering, audio/visual services, and conference room meeting space.

Based on our review of the information contained in the Sheraton's proposal and in accordance with Circular 1010.2 "Conference, Meeting, and Symposium Planning Policy," your spproval is requested to move forward with this Conference. Please contact Assistant Director Nann Wright at 202 898-3791 with any questions.

Attachments:

Best Value Determination Conference Request form

Approved:





Division of Administration

November 2, 2010

BEST VALUE DETERMINATION

2011 National Minority Depository Institutions Conference

After reviewing the proposals submitted by two hotels to provide lodging, catering, audio/visual, business center services, and conference space for the 2011 National Minority Depository Institutions Conference, it is determined that the Sheraton Hotel, New York, NY, offers the best value. The estimated total cost to hold the Conference at this hotel is \$206,555 including estimated travel and training costs. The estimated total costs to hold the Conference at the next desirable site, The Waldorf Astoria, New York, NY are \$227,321. We solicited bids from 22 hotels in the New York City area and received only two acceptable bids for the requested dates agreed upon by the Interagency MDI Planning Committee.

(b)(6)		 ·		
	<u> </u>			

Rounie Vinson
Contracting Officer
Corporate Contracting Section
Acquisition Services Branch

3. FDIC's internal guidelines for soliciting bids for event planning services.

The FDIC has guidelines that cover the procurement of <u>all</u> contracting services, not just event planning services. Enclosed is a summary of the procurement process including the competitive bid process.

Conference Event Planning & the FDIC's Procurement Process

Procurements for all conference-related activities, including event planning, follow the FDIC's standard procurement process. Contracting policies ensure a competitive procurement process to provide the best value to the FDIC. There are two primary means for procurement:

- Awarding contracts through the Division of Administration's (DOA) Acquisition Services Branch (ASB), whereby FDIC contracting professionals in ASB issue formal solicitations and oversee the award and contract administration process, and
- 2) The use of a procurement card (P-card), which allows Program Office officials (those requiring contracting services) to make purchases for generally less than or equal to \$5,000 (this program is overseen by ASB).

The FDIC's acquisition policies were developed by ASB in cooperation with the Legal Division. These policies were designed to help the FDIC accomplish four main goals:

- 1) Establish reasonable competition as the preferred method of source selection
- 2) Enable innovative and creative tailoring of the procurement process to meet Program Office requirements
- Provide minority and women-owned businesses, as well as small disadvantaged businesses, with attainable and reasonable opportunities to participate as contractors and subcontractors, and
- 4) To provide the best value to the FDIC.

Contracting Competition

The FDIC utilizes competition in acquisitions to the maximum extent possible, competing contracts for goods and services valued over \$5,000. The FDIC solicits a minimum of three bids for each contract competition. The competition allows the FDIC to compare the value of technical and price proposals in order to select the proposal(s) which provide the best value to the FDIC. Any procurements greater than \$5,000 which are not competed must be justified by a Justification for Non-Competitive Procurement (JNCP). JNCPs are rare, and require the approval of both the Program Office and ASB. Contracts less than \$5,000 may be awarded without competition.

The contract award process is handled by a diverse acquisition team: ASB officials (a Contracting Officer and staff from the Policy and Systems Section), officials from the Program Office, the Legal Division's Contracting Law Unit, and, as appropriate, staff from the Office of Minority and Women Inclusion (OMWI). For each acquisition, the FDIC actively solicits Minority or Women-Owned Businesses (MWOBs). Contracting Officers have exclusive authority to enter into, modify, administer, and terminate contracts, and are responsible for ensuring that the terms and performance of the contract are being met. Program Offices provide Oversight Managers (OMs) and Technical Monitors (TMs) to oversee the performance of contractors, accept work products, and review invoices.

4. FDIC's internal guidelines for overseeing and approving indirect costs incurred by event planning services, including whether FDIC requires event planning services to solicit bids from external vendors for specialized support.

As indicated in previous questions, the FDIC does not generally utilize event planning services.

5. FDIC's internal guidelines for overseeing and approving indirect costs incurred by cooperative agreement recipients, including whether FDIC requires said recipients to solicit bids from external vendors for specialized support.

The FDIC does not participate with any cooperative agreement recipients.

 A list of all conferences, not sponsored by FDIC, attended by FDIC personnel, including name of conference/sponsor, number of personnel who attended and aggregate cost.

Between July 2010 and March 2012, FDIC employees attended 1,156 individual conferences that were *not* sponsored by the FDIC. These conferences were attended by 2,427 employees and cost (including tuition and travel) approximately \$3.5 million.

Enclosed is a report providing the details of those conferences; it is sorted in descending order by the number of FDIC personnel who attended each conference.

Employees attended the majority of these conferences using their professional learning accounts (PLA), a specified annual amount of money and/or hours that an employee manages — in partnership with his/her supervisor — for use toward learning goals. Each year, employees have the opportunity to develop a career development plan, which outlines professional development goals. Once approved by his/her supervisor, permanent employees can then use their PLA to train within their current occupation, as well as in other areas related to the FDIC mission, to develop skills and knowledge in areas of individual interest and of value to the FDIC.

Conferences Not Sponsored by the FDIC Attended by FDIC Personnel

	Number of FDIC	1
Conference Name/Sponsor	Attending	Aggregate
2011 Azucrican Institute of CPAs National Conference on Banks & Savings	£3	Cost \$93,789
American Institute of CPAs National Conference on Banks & Savings Institutions	62	\$93,858
2011 Community Resirvestment Act & Fair Lending Colleguium	53	\$85,128
2011 Association of Certified Anti-Money Laundering Specialists 10th Annual Anti-Money Laundering Conference	50	\$98,194
National Treasury Employers Union (NTEU) Conference	45	\$50,669
22nd Annual Association of Certified Fraud Examiners Fraud Conference and Exhibition	37	\$80,296
17th Amuel Ami-Money Laundering Conference	33	\$87,142
National Interspency Community Reinvestinent Confer	32	\$34,253
2012 RSA (RSA is the Security Division of EMC Corporation) Conference	31	\$76,938
2010 Community Repressment Act & Pair Lending Collegeium	28	\$61,153
2011 American Bankers Association Regulatory Compliance Conference	28	\$51,732
RSA (RSA is the Security Division of EMC Corporation) Conference 2011	26	\$59,792
16th Annual International Anti-Money Laundering Co		\$61,789
Blacks in Government 33rd Annual Training Conference		\$53,368
Fidiculary & Investment Risk Management Association National Risk Management Training Conference American Bankers Association National Compliance School	18 16	\$43,906 \$60,116
The 7 Habits of Highly Effective People		\$35.711
12011 North American Computer Audit, Control and Scentiv Conference	1 14	\$34,922
InfaSec World Conference & Expo 2911		\$30,269
2010 Nebraska Bankers Association Fall Agri-Business Conference		\$3,538
2011 American Bankers Association National Agricultural Bankers Conference		\$12,289
Homan Resources & Equal Employment Opperantity Federal Workplace Conference	1 12	\$21,459
Orack Open World 2011	1 11	\$40,879
Risk Management Association Annual Conference on Securities Lending	1 11	524,739
Association of Certified Anti-Money Laundening Specialists 9th Annual International Anti-Money Laundeni	I.I.	\$20,864
fith Anoual UnderBanked Financial Services Forum	11	\$13,383
International Association of Privacy Professionals Global Privacy Summit	1.1	\$12,020
2011 Association for Financial Professionals Annual Conference	10	\$13,825
2010 Lending Compliance Triage Conference	10	\$13,244
2011 Federal Reserve Community Affairs Research Conference	16	\$5,984
18th Annual Administrative Professionals Conference	3	\$29,403
Compliance Summit 11	9	\$10,621
2011 Techno Security Conference		\$18,282
The Risk Management Association Annual Risk Management Conference 2011		\$16,778
Chartered Financial Analyst Institute Conference on Fixed Income Management 2011 2010 American Bankers Association/Canadian Bankers Association North America Agricultural Conference	<u> </u>	\$12,838 \$8,537
Oracle Open World	7	\$25,089
Securitzation and Structured Finance		\$20,807
26th Annual Federal Dispute Resolution Conference	7	\$19,765
Office of Personnel Management 2011 Federal Benefits Conference	***************************************	\$19,049
19th Annual Administrative Professional Conference	7	\$15,645
2011 American Bankers Association Money Laundering Enforcement Conference	7	\$12,148
Amorican Bar Association Business Law Spring Conference	7	510,418
National Association for Business Economics 2011 Annual Conference	7	\$10,125
Loan Syndications and Trading Association 16th Annual Conference 2011	7	\$9,804
2011 African American Federal Executives Association Training Workshop	7	\$8,579
Compliance Summi	?	\$6,949
2011 Lending Triage Conference	<u>-</u>	\$4,528
Conference on Systemic Risk & Data Issues	<u> </u>	\$500
BrainStorm New York	<u> </u>	\$14,028
Penghbor Works Training Institute		\$9,597
Information Builders Summit 2011 Conference Principles of Fraud Examination		58,846
Successfully Menaging People	<u> </u>	\$8,103 \$6,709
17th Annual Thomson Reviets Loan Conference	€	35,E5)
Compliance with Federal Lending Regulations	6	\$4,319
US Department of Agriculture 2012 Agricultural Cartlook Forum		\$2,977
Bank Tax Jashnar Annual Conference	Š	\$16,301
American Hankers Association Graduate School of Compliance Risk Management	**	\$15,863
Information Systems Audit and Control Association Training Week: Fund of Information Technology Audit & Assur		\$14,416
2011 Tableau Customes Conference	\$	\$12,300
Federally Employed Women 2011	5	\$11,385
Association of Financial Professionals Armual Conference	2	\$9,594
Toastmaste:s 84th International Convention		\$9,473
Intermediate Landing, Operations, and Deposits Seminar	5	\$5,042
Stress Testing Forms for Community Banks	5	\$6,025

American Bankers Association Real fistate Lending Conference Recognizing Risk in Global Agriculture	5 5	\$5,740 \$5,065

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Conferences Not Sponsored by the FDIC Attended by FDIC Personnel

	Number of FDIC Personnel	Aggregate
Conference Name/Sponsor	Attending	Cost
89 Bank Secrety Act/Anti-Money Laundering Hands On Lab	\$	\$3,281
70 The 10th Amusi Strategic Issues Summit	5	\$2,702
71 Suring Symposium: The Future of Financial Services	\$	\$2,085
72 Leadership Through Challenging Economic Times 73 19th Annual Automated Teller Machine, Debn & Prepaid Forum	<u> </u>	\$733
74 JAmerican Bar Association 2013 Annual Meeting	*	\$13,679 \$12,344
75 [46th Annual Bank and Capital Markets Tax Institute	4	\$12.011
76 Information Security and Risk Management Conference	4	\$10,820
77 Directors & Officers Liability Conference	4	\$10,820
78 Independent Community Bankers of America National Convention and Techworld	4	\$10,157
79 Society for Human Resource Minispernent 2011 Annual Conference & Expo	4	\$10,099
Loan Syndications and Trading Association 15th Annual Conference	4	\$10,098
81 Federally Employed Women 2010 Desiyatives for Commercial Banks	4	\$9,761 \$9,549
63 Fidiciniary & Investment Risk Management Association 25th National Risk Management Conference	······································	\$9,529
84 Interpational Society of Certified Employee Benefits Specialists Employee Benefits Symposium		\$9,446
American Bankers Association Wealth Management & Trust Conference	4	\$8,293
86 Getting Results Widkon Anthony	4	\$6,832
87 Chartered Financial Analyst Institute: Fixed Income Conference 2010	4	\$5,890
86 2011 American Economics Association Annual Meeting	4	\$5,583
B9 American Securitization Forum 2012		\$3,571
90 9th Puerto Rican Symposium Anti Money Laundering/Bank Secrecy Act	4	\$3,487
91 Federal Information Security Management Act Requirement Special Seminar 92 International Association of Privacy Professionals Practical Privacy Series	4	\$1,350 \$1,125
93 Mistake Free Grammar & Prooficeding:	4	\$950
94 Organization Skills for the Overwhelmod	4	\$957
95 Advance Fair Lending Wiz for Examiners	4	3935
96 2010 Compliance Lending Update	4	\$735
P7 New England Economic Onlook Conference	4	\$732
98 Dealing with Difficult People	4	\$653
99 Conference of State Dank Supervisors	1 4	\$590
2011 Toastmasters District 46 Spring Conference		\$51 %
Yall Agri-Business Conferance Graduate School of Banking Graduate School of Graduate School	3	\$234 \$13,947
oxentate german ur pantenig 13 Counterparty Credit Risk & Credit Value Adjustment Workshop	<u></u>	\$11,985
24 American Bankers Association Stomer Graduate School of Banking	<u> </u>	\$11,940
95 Federal Personnel Management Institute 2011 Human Capital Management Conference	3	\$9,920
Office of Personnel Management Foll Festival of Training	3	\$9 ,297
77 Tone Management	<u> </u>	59,048
38 VMWorld (Virtual Machine World) 2011	£	58,831
29 Software Test Professionals Conference	3	\$8,821
10 PhotoPius International Conference 11 2010 Systems, Applications and Products Business Objects User Conference		\$8,017 \$7,676
12 Blacks in Government 32nd Annual Training Conference		\$6,938
13 2011 Out & Equal Workplace Surrant	3	\$6,656
14 Bank & Capital Markets Tax Institute	j	\$6,070
15 Public Speaking Mastery	3	\$ 6,045
18 National Conference of Bankruptcy Judges	<u> </u>	\$5,850
17 Fidiculary & Investment Risk Management Association Current Risk Issues		\$5,670
18 Blacks in Government National Training Conference		\$5,(2)
19 18th National Government Ethics Conference 20 Business Wining Workshop		\$4,533 \$3,773
24 Uniteduction to Stress Testing		\$3,712
22 Fraud Risk Management	······································	\$3,694
23 2010 National Association for Susiness Economics Annual Merring	3	\$3,57!
24 Auditing for Internal Faud	I I	\$3,432
25 Advanced Employment Law & Lisigation	3	\$3,114
28 Principles of Performance		\$2,500
27 US Department of Agriculture Agricultural Outlook Forum 2011	-	\$2,387
28 Financial Ingitugion Fraud 29 Practical Privacy Series		\$2,345 \$2,313
19 Practical Private Series 10 Human Capital Management Federal Recruitment & Talem Management Strategy	<u>-</u>	\$2,273
31 Microfusance USA Conference	3	\$2,137
32 Macroeconomic Advisors Quarterly Ontlook Meeting	3	\$1,759
33 Play to Communicate with Tact and Professionalism	3	\$1,560
34 Life Cycle of a Mortgage Loan Transaction Workshop		\$1,425
35 2012 National Association for Business Economics Economic Policy Conference		\$1,355
36 [35th Assural Sympostum on Labor & Employer Relation		\$1,285

	Number of FDIC Personnel	Aggrega
Conference Nume/Sponsor	Attending	Cost
Advanced Microsoft Excel Techniques	<u></u>	\$1,2
Presenting Data and Information	·····	\$1,1
2011 Web and New Media Conference	3	\$1,0
Camphisnee Update Mastering Home Mortgage Disclosure Att		\$1.0
Star 12 All Access Training Pass	3	\$1,0
American Bar Association Banking Law Fall Committee Meeting		\$7
How to Become a Better Communicator	3	57
The Administrative Assistants Conference	3	\$5 \$5
The Conference for Women	***************************************	\$3 \$4
Fan Lending-How to Assess Fair Lending Risk	3	54
Excelling as a Manager or Supervisor	3	54
New England Economic Forecast Fall 2011	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	\$3
Conflict Management Skills for Women		<u></u>
How to Be an Outstanding Communicator	1	\$3
Information Systems Audit and Control Association 2011 Chapter Annual Meeting		1 32 S1
Gel Monvased Business Semmas	3	\$
Data Management Association - National Capital Region Chapter Meeting	3	
рана марадентов архенатов гозновка сарна хедоо спарат матона Basel II and Credit Risk		512,4
Risk Management Association Risk Management School		\$9,5
EMC (Information Technology Company) World Conference 2512		\$7,7
Responding to Conflict		\$7.3
Leatership Excellence	1 2	\$7.4
Moody's Analytics Analyzing Soverlegn and Country Bank		\$7.3
Fiduciary & Investment Risk Management III	<u> </u>	\$6.9
Consumer Bankers Association Live Banking on the Future	<u> </u>	\$6,8
Banking Law Institute 2010		\$5,5
Park Valuation		\$3.5 \$5.9
Fundaroemals of Benk Valuation	1 2	\$33.3
Occupational Sufety & Health Administration Training Cump		\$5,6
Consumer Bankers Association 1.1VE 2011- Shaping the Finure of Retail Banking Perception v5 Training		\$5.3 \$5.3
		(
Information Technology Auditing and Controls		55.
Ist Annual Human Capitel Management Conference	2	\$5,0
Strata (Data Technology Company) Conference 2012	2	\$4.8
Office of Personnel Management 2011 Fall Festival of Training	<u>.</u>	54
American Har Association Banking Law Basies	2	\$4,0
45th Annuai Bank Tax Institure	2	\$4,4
Women's Leadership Strategies for Success	7	\$4,
Women's Leadership Strategies for Success	<u> </u>	\$4.
Managing Chaos: Tools to Set Priorities and Make Decisions	- 2	540
Grammat Reveiw for Workplace Correspondence	Z	54,
Management Skills for New Supervisors	3	\$4.
Governance Compliance and Operational Risk Conference		\$4,
2012 Wealth Management Conference	<u> </u>	\$3.9
Conference of State Bank Supervisors Legal Seminar		\$3,5
Emerging leasess Week	2	\$3.
Earthquakes Mean Business	2	\$3,
Northeast Statistical Analysis Systems (SAS) Users Group 2011	2	\$3,
2011 Southern Finance Association		\$ 3,
People 2010 Saba (Workforce Management Company) Giolusi Summit		\$3,
Intermediate Lending, Operations, Daposit Sention	2	\$3.0
Bank Eulerprise Risk Management		\$3,
American Bankers Association Money Laundering Enforcement Conference	<u> </u>	\$ 3,:
22nd Annual ACFE Fraud Conference and Exhibition		\$3.
Information Technology Audit & Controls	2	5 3.
Masters Deposit/Bank Secrety Act/Lending Compliance Sentiner	2	\$3,
United States Onthudsman Association Annual Conference	<u> </u>	\$3.
Pueno Rico Bar Association Continuing Legal Education Training	3	\$3.
International Facility Management Association World Workplace 2011 Confetence	2	\$ 3,
19th Annual Network & Distributed System Security		\$3,
Information Technology Security Conference	2	\$3,
Systemic Risk in the U.S. Municipal Bond Market		5 3,
Conference of State Bank Supervisors Technology Settinar	2	\$ 3,
How to Communicate with Diplomacy, Tact and Credib	2	\$3,
Trust Advisors Forum	7).£2
	<u></u>	\$3,6 \$3,6

	Number of FDIC Personnel	Aggrega
Conference Name/Sponsor	Attending	Cost
Delegation Boot Camp The Gratemar Course		\$2,7
LEGALTECH NEW YORK 2011		\$2,7 \$2,7
Caribbean Anti Morey Laundersing/Counter Terrorism Financing Financial Crime Conference	2	\$2,6
Collaborative Leadership Skills for Managers	2	\$2,5
Pederal Disputes Resolution Conference	1 2	1 5 2.3
Bank Industry Primer and Bank Models	2	\$2,5
Creat Lakes Benefits Conference	2	\$2,4
2011 ToweGroup Financial Services Conference	2	\$2,4
National Covernmental Accounting & Auditing Update	Į į	\$2,4
2012 American Economics Association	2	\$2,3
Business & Industry Conference	***************************************	\$2,3
Workshap on Community Hank Investments	2	\$2,3
Financial Markeis Association's 2016 Legal & Legislative Issues Conference	2	\$2,3
Small Business, Emrepreneurship and Economic Reco		\$ 2,0
Operations and Technology Rosadiable	2	\$7.0
Improving Real Time Decision Making	<u> </u>	\$2,0
Commercial and Industrial Lending Workshop	2	\$2,0
Web 2.0 Expo Conference 2012 Alhao Social Science Association Annual Meeting		\$1,9 \$1,9
2012 American Society for Industrial Security International 2011 Seminar & Exhibuts	2	\$1,5 \$1,8
American Society for Industrial Secienty memanons 2011 Schmar & Extends American Securitization Forum/6th Annual Mobile Banking Summit		\$1,8
Stress Testing Forum		\$1.8
INTERNAL CONTROLS IN COVY & BEYOND	2	\$1.7
Professer Souscales & Vendor Management Forum 2010	2	\$1.7
Conducting Effective Anti-Money Lauratering Investigations	1 2	\$1,7
Commercial Real Estate Lending Forum	2	\$1,7
Realth Date Instance Government Formu	2	\$1,7
Bank Investment, Funding and Economic Outlook Conference	1 2	51.7
Creical Thinkine	. 2	\$1,7
Community Bankers Compliance Program	2	51,6
Arb Annual Pinancial Literacy Leadership Conference	- 2	\$1.5
International Association of Privacy Professionals Privacy Academy	2	\$1,5
American Banker Regulatory Symposium	1	\$1,5
2012 Compliance Update School	2	\$1,3
American Economic Association Amnual Meeting		\$1.2
2010 Treasury and Capitul Markets Legal Conformer	2	51,2
Compliance with Federal Lending Regulations - Two	<u> </u>	\$1,2
The University of Michigan 59th Annual Economic Outlook Conference		\$1,2
Managing without Authority: The Use of Power and I	<u> </u>	\$1.2
Discomberg European Debt Crisis Briefing	·	SI,
2011 Funancial Institution Conference (outsigns Accounting & Auditing Conference	2	\$1.1
2012 Real Estate Landing Complision Sementi		\$1,
American Bankers Association Certified Regulatory Compliance Manage: Exam	2	\$1,
National Bar Association Convention		31,0
2010 Confirming Professional Education Expo	1 2	SS
Continuing Professional Education Expo Conference	2	35
The Science Behind Lie to Me	2	\$2
Intro to Monteigal Bond Credit Analysis	2	\$1
The Data Watermise Seminar 2010	2	Si
Discovering the Secrets of Microsoft Access	2	\$7
Investigating Fair Housing Complaints	2	\$7
Pomeyiyamia Bankers Association Wealth Management & Trust Conference	2	5
The Manager as Coach: Promoting High Performance	2	\$
Business Writing & Grammar Skills	· · · · · · · · · · · · · · · · · · ·	5
Star 12 Administrative Professionals Conference	2	5
Exploring Exposacion: A Conf on Community Development Finance	2	2.
Georgia Automated Clearing House Association Solutions 2011	2	. s.
Everything You Don't Know About & Discovery		<u> </u>
Administrative Assistants Conference	2	<u> </u>
2011 Technical Assistance Program Semmar		<u> </u>
Retirement Application Processing Symposium		\$6
Financial Institutions Conference	2	56
32nd Annual Wichita Atea Economic Outlook Conferen		\$5 \$5
Real Share Distressed Assets 2010		······································
Real Estate Settlement Procedures Act -Review and Update	2	\$5

	Number of FDIC Personnel	Aggrega
Conference Name/Spansor	Attending	Cest
Texas Bankers Assixiation Bankers Legal Conference	.,	\$5
2010 Compliance Fundamentals Loans	2	\$4
2010 Lending Compliance Update Hispanic Economic Experience		\$4
Microsoft Outlook Workshop		\$4 \$4
Time Saving Excel Titis	3	\$4 \$4
Managing Multiple Projects, Objectives and Deadlin		<u>54</u>
Communicating with Confidence for Women	2	\$3
Leadership, Development & Teambuilding	2	S 3
Information Systems Audit and Control Association Annual Macring	2	\$.3
Developing Emotional Intelligence	2	\$3
Compliance Yiai Teores	2	\$3
Conference for Women	2	52
Gesting the Most from Microsoft Excel		\$2
How to Build Strategic Thinking Skills		52
The Kansas City Conference for Women	12	\$2
2612 Consumer Assembly		\$2
Consumer in the Financial Services Revolution	2	<u>52</u>
Conflict and Confrontation		\$2
Event Planning		5.
Commercial Real Estate Forecast conference	<u> </u>	2)
Milwaukee TGIF - Individual Tax Update Cloud Computing - Critical Security & Control Issues	<u> </u>	\$
Managing Multiple Projects, Ceropeung Priorities		\$1 \$1
2011 Financial Services Conference	2	\$
2011 Financial Services Camerence 2011 Kansas Bankers Association Legal Update Semioar	2	3
2011 Kansas Bankers Association Legal Update Semioar Loss Share Transactions - Myths and Reality	· · · · · · · · · · · · · · · · · · ·	
Catest Options in Benefits	2	
Backropky Fraud	<u> </u>	
Chicago Association for Basiness Economics	1 2	
Communicating With Confidence	1 2	
Data Management Association Day Symposium	2	<u> </u>
Organizational Skills for the Overwhelmed	Ž	
Certificate of Training - Business Architecture	1	\$6,4
Debt Restructurings, Workouts, and Bankropicies	1	\$6,
45th Amual Bank Tax Institute	<u> </u>	\$5,0
Interior	1	55,0
National Institute for Trial Advocacy Building Trial Skills Traiting	1	\$5,
Management Seminar I		\$5,0
Annual Ethics & Compliance Conference 2011		\$4,
The Data Warehousing Institute Enterprise Data Strategy Conference	1	54
INTEROP IT CONFERENCE	i i	\$4.
System Administration Networking & Security Institute 2011		\$4,
Creating a High-Performance Organization	<u> </u>	\$4.0
Structured Credix Modeling		\$4,
Старя Менадетета	1	\$4,
The Daia Warehousing Justinue Conference Emerging Technologies	<u> </u>	54,
Writing Sentences and Paragraphs Effectively		\$4.
Succession Management Conference		\$4.
How to Communicate with Diplomacy, Tacl & Credibil	1	\$4.
Fiduciary and Investment Risk Management I		\$4,
Women's Leadership Strategies for Success	···	54. 54.
Splunk Users' Conference Black Hat Training and Briefings		34. 34.
Discretifier training and provings Communicating Up, Down and Across the Organization	1	\$3,
Communicating CP, Loowin and ACTOSS the Organization How to Communicate with Diplomacy. Tact	<u> </u>	\$3.
SNL, Financial - Real Estate Investment Trust Evaluation Seminar	<u> </u>	\$3.
SNC Primings - New Estate Investment 1 this Evaluation octimize Financial Managers School		\$ 3,
Certificate in Employee Relations Law		\$ 3,
Test Professional Conference & Expo	1	5 3,
USM Information on Demand Conference		\$3,
The Data Warehousing Institute World Conference Oriendo 2010		\$3,
Cisco Live 2011	······································	\$3.
American Bankers Association 2010 Annual Meeting and Continuing Legal Education Conference		51.
Audit Manager Tricks and Techniques		\$3,
Assertiveness Training for Women in Husiness	1	\$3,
Deposition Skills: Pacific	<u> </u>	\$ 3.
Olohel Aginvesfirg 2011		\$3.7

	Number of FUIC Personnei	Aggregai
Conference Name/Sponsor	Attending	Cost
Project World & World Congress for Business Analys		\$3,72
Advanced Swaps & Other Derivatives 2010	ì	\$1,70
12th Annual Risk Management Convention	I	\$3,69
2011 Independent Community Bankers of America National Convention	I	\$3,67
Counselor Training	I	\$3,66
American Institute of Certified Public Accountants Fair Value Measurment & Reporting Conference	<u> </u>	\$3,65
Analysi Training in Banking Sector		\$3,64
Strategic Planding	1	\$3,64
Closed Connects		\$3,63
Cyber Guardian 2011- Intrusion Detection In Depth		\$3,59
Information Systems Audit and Control Association Information Technology Governance Risk and Control Conference Certified Fraud Examiner Exam Review Cosuse	į	\$9,50
Certaned Progin Examples Exam Review Course Visual Studio Connections		\$3,5 \$3,5
Visitar Stunic Controlled and Technology Risk Management Framework for Fed Information Systems	1	\$3,41 \$3,41
23rd Annual Conf. Forum and Expr.		\$3,4
Strategies for distressed loan lenders and buyers		\$3,44
Oracle Development Tool User Group annual conference	····· 1	\$3,4
Advanced Compliance and Ethes Workshop	1 1	\$5,40
American Bankers Association Annual Convention	· · · · · · · · · · · · · · · · · · ·	\$3,4
Garrier Identity and Access Management Surman	<u> </u>	\$3,4
Data Analysis/inv on the Interest	1	\$3,3
Mobale Banking & Emergining Applications	1 1	\$3,3
Camtal Markets: Products and Risks	1	\$3,3
Fixed Income Portfolio Management	1	\$3,3
Fiduciary and [gvestment Risk Management II	1	\$3,3
Coaching and Team Building Skills for Managers		\$ 3,3
Coaching and Teambuilding Skitts for Managers		\$ 3,3
2011 Environmental Systems Research Instituto International Users Conference	. 1	\$3.3.
National Contract Management Association World Congress		\$3,3
Cloud Security Congress 2010	1	\$ 3,3
Inside Bank Accounting Practices		\$3,2
Moody's Risk Practitioner Conference 2011		\$3,2
Enderprise Data World 2011 Symposium		\$3.1
Enterpise Data Strategy Conference		\$3,1
Enterprise Data World Conference		\$3,1
Bank Credit Analysis	<u> </u>	\$3,1. \$3,1
Governance, Risk and Compliance 2011		53.1
Commercial Real Estate Institute Project Management for Administrative Professionals		\$3,0
Society for Human Resource Management 2010 Strategy Conference		\$3.0
Current (source in Financial Institutions Analysis		\$3.0
Rasics of Government Contacting	····	\$3,5
Oracle University - WebLogic Server 11g	1	\$3,0
VMworld (Votual World Machine) 2010		\$3,0
Devicam I	1	\$3,0
Learning Solutions Conference	I	\$3,0
Mobile & Sman Device Security	1	\$3.0
American Institute of Certified Public Accommants National Real Estate Conference	1 1	53,0
Techmentot Orlando	1	\$3,0
Disney Approach to Leadership Development	i	\$2,9
Disney's Approach to People Managemet	I	\$2.9
Toestmasters 79th International Conventum		\$2,9
Garinet Application Architecture, Dev		\$2,9
laternational Legal Technology Association	1	\$2,9
Mondy's Analytics Risk Practitioner Conference	<u> </u>	\$2,9
2011 Office of Personnel Management Federal Benefits Conference	1	\$2,9
Course Concepts Review		\$2,9
The Risk Management Association Lending Academy® 1		\$2,9
Transforming For Agale Application Delivery		\$2,8
Offshore Aleri Confesence		\$2,8 #5.4
American Bar Association Continuing Legal Education National Institute White Collar Crime		\$2.8
2011 General Audit Management Conference	<u> </u>	\$2,8
International Ombustsman Association Annual Conference	1	\$2,8 \$2,8
		3-2.5
Informediate Lending and Deposit Compliance		
Intrimediate Lending and Deposit Cumphante Employment Law Bricking		\$2,5
Informediate Lending and Deposit Compliance	~~~~~	\$2,8 \$2,8 \$2,8

	Number of FDIC	1
	Personnel	Aggrega
Conference Name/Sponsor	Aftending	Cost
NeighborWorks Training Institute Los Angeles 2012 26 Annual Fiduciary & Investment Risk Management Association Conference		\$2.7
Bankers' Association for Finance and Trade - International Financial Services Association Annual Meeting		\$2.7
Management Chaos	- 	\$2,7 \$2,7
Training 2017 Conference and Face	·····i	52,2
Financial Statement Workshop		\$2,7
System Administration Networking & Security Institute Cyber Desense Initiative 2011	i i	\$2,7
Investigating Conf. of Int. & Financial Inst Fraud]	\$2.7
National Bar Association Annual Convention		\$2,
Fundamentals of Strategic Planning		\$2,
Basic Mediation Skills	I	\$2,
Cloud Security Alliance Congress 2011		\$2,
American Institute of Certified Public Accountants National Forentic Accounting Conference		\$2,
Fundamentals of Derivatives		\$2,0
Your Future Let it Ring the Sound of Success		\$2,1
5th Annual Executive Forum On-Site Employee Health American Society for Training & Development International	****	<u>\$2</u> .
Out & Equal Workplace Summit		\$2,0 \$2,0
On a capa workpare summi Exercitive Compensation Conference		32, 52,
Microsoft Project Conference		\$2,
Federally Employed Women		\$2
Workers' Compensation in the Pederal Workplace	ł	\$2.
Leadership Fandazaentak		\$2.
International Society for Performance	I I	\$2,
Paraben's Forensic Innovations Conference		\$2,
Legal Elem of Fraud Exams/Cond Internal Inv		\$2.
General Audit Management Conference	1	\$2
Consumer Furancial Services Institute		\$2,
HEARING ADVOCACY		\$2,
Liquidity Risk Management in Bank		<u> </u>
Negotiation Strategies Project Management Professional Exam Prog Boot Camp	1	\$2, \$2,
Project Hamagement Professional Exam Pros sport camp E-Learning Instructional Design Certificate		\$2.
2011 Besides Surmer Conference on Consumer Financi		\$2,
Advanced Unerviewing Techniques Workshop		\$2.
The 2012 Mational Multistate Tax Symposyum		\$2,
Stabstical Analysis Systems Global Forum 2011	1	\$2,
Ethics in Alternative Dispute Resolution	<u> </u>	\$2,
Association of Financial Professionals Annual Conference	1	\$2,
Advanced Mediation and Advessey Skills Institute	, k	\$2,
Amencao Bankers Association Intermediale Compliance School		\$ 2,
Cesting Rid of the Fear and Horror of Public Speak	1	\$2,
Windy City Week Seminar		52,
National Asian Patific Bar Association Convention		\$2,
American Society for Industrial Security 2010 Conference	-	\$2,
2011 American Institute of Certified Public Accountants information Technology Conference		\$2,
Advanced Fraud Examination Techniquies Commercial Real Estate Defaults, Workputs, and Real Estate Owned		\$2,
Commercial Real Estate Detruits, Workholds, and Real Estate Owned Federal Retirement Seminar		\$2, \$2.
Pedicial Returnition Settimat Lavender Law Conference		\$2,
Building Thai Skills Southern		\$2,
Industry that they sociated in the second se		1 52.
Liquidity Risk and Asset Liability Managemen!	i	\$2,
International Ombadaman Association Annual Trapping Conference	i	\$2,
Olobal Association of Risk Professionals- Anneal Risk Mgf Convention	I	\$2,
23rd Annual Global Relo, Tax, Payroll & Legal Conf		\$2.
Developing a Compliance Program:		52,
15th Aprual Small Business Banking Conference		\$ 2,
19th Annual Regional Funzocial Institution Securit	<u></u>	\$2.
Intermediate Regulatory Compliance Conference		\$2,
Retail Risk Conference June 15-17	<u> </u>	52.
The European Conference on Banking and the Economy		\$2,
Governance, Risk, and Compliance Conference		\$2,
2011 GovEnergy Conference		\$2,
2010 Residential Professional Development Workshop		\$2, \$2,
EMC (Feshnology Company) World Conference 2011 National Municipal Bond Summit		+
Information Security & Risk Mat Conference	<u>.</u>	\$2, \$2,

	Number of FDIC	F
⁶	Personnel	Aggregat
Conference Name/Sponsor Information Security Management	Attending	Cost
Tuvestipating on the Internet Research Tools for		\$2,06 \$2,06
2011 Federal Tax Update		\$2.05
Alhance for Work Life Progress National WorkLife Summe	i	\$2.04
Community Bank Investment Workshop	1	\$2,04
Labor Law & Labor Arburation	}	\$2,50
Hispanic National But Association Convertion	1	52,01
Risk Management for Commercial Real Estate		\$2,01
US Ombudenna Assix Annual Conference	1	\$2,00
Certified Fraud ExaminerPrep Course	<u>_</u>	\$1,99
Emotional Intelligence for Personal Leadership		\$1,99
Black Enterprise Women of Power Summit		\$1,99
Intro Conflict Coarling Westshop	<u> </u>	\$1,98
2911 Nationwide Mortgage Licensing System User Conference & Training Real fistate Lending Compliance 2012		\$1,98
Fraud Auditing Bost Camp - OAF201		\$1.97
Eaw and The Bran: Advances in Neuroscience	<u> </u>	\$1,97 \$1.97
Advanced Landership Compagnication Strategies		\$1,96
2011 Society of American Indian Government Employees National Training Conference	, , , , , , , , , , , , , , , , , , , 	\$1,96
New Learning Technologies 2011	1	\$1,4
ALLIED SOCIAL SCIENCE ASSOCIATIONS Annual meeting		\$1,9
Uncovering Praud in Core Business Punctions	A CONTRACTOR OF THE PARTY OF TH	\$1,9:
From Crisis Management to Long-Term growth]	\$1,9
Statistical Analysis Systems (Hohal Forum 2012	1	\$1,94
2011 Security Officers Workshop	I	\$1,93
Network Security Essentisis		\$1,53
PMO Symposium 2010		\$1.90
Secure World Pius Writing and Implementing Effectiv		\$1,9
Garbert Data Conference 2011		\$1,9
Risk Mgt. Convention and Master Class B		\$1,9
Financial Markets Association Annual Conferee	<u> </u>	\$1.9
Basic Economic Development	<u> </u>	\$1.9
Project Managoment Professional Exam Power Prop	<u> </u>	\$1,8
Shared Assessment Summit 2011 Leading Virtual and Remote Testos		\$1,89 \$1,8
Strategic Planning Settings	1 1	\$1.81
2011 Spring Accounting & Auditing Conference	1	\$1,8
Credit Analysis	i	\$1,8
How to Use Candor and Constructive Confrontation	1	\$1,8
International Association of Privacy Professionals Privacy Academy	l l	\$1,8
Figh Emerging Markets Southar	į	8,12
2011 US Department of Agriculture Outlook Conference	1	\$1,8
Auditor-in-charge Tools and Techniques	i i	\$1,7
Data Governance and Information Quality Conference		\$1,7
National Asian Pacific American Bar Association		\$1,3
MIT Information Quality Industry Symposium		\$1,7
Turning Technologies User Conference		\$1,7
The Data Warshousing Institute World Conference		\$1,7
Valuing Public Service	1	\$1,7/
New Horizons for the Global Economic Landscape		\$1,7
Texas Association of Bank Counsel Legal Conference	the state of the s	\$1,7
Driving Toward Success Car Financing &Ownership		\$1.7
Fundamentals of Finance & Aceting for Nonfinancial	<u> </u>	\$1,7
Strategies for Improved Communication An Integrated Approach to Governance, Risk, & Comp		\$1,7 \$1,7
The 2012 National Interagency CBA Conference	1	\$1.6
Legal Aspects of Clearing	i	\$1,6
Computer Emerguise and Investigations Conference 2011	<u> </u>	\$1,6
Fundamentals of Cost Accounting	1	\$1,6
Improving your Project Management Stulis		\$1,6
Moving from an Operat. Mgg to a Strategic Thinker		\$1,6
Strategies for Developing Effective Presentation S	1	\$1,6
Succession Planning: Developing Leaders from With:		\$1,6
Your Project Management Skills: The Basics for Suc	-	\$1,6
National Community Investment Fund Annual Development Banking Conference		\$1,6
Managing Chacs - Tools to Sut Priorities and Make	i	\$1,50
International Banking Conference	į	\$1,39
Covenants and Documentation		\$1,55

	Number of FDIC	Ĭ
	Personnel	Aggregat
Conference Name/Sponsor User-Consered Analysis and Concopnual Design	Altending	Cost
2011 Exploring Imporation: A Conference on Communi	······	\$1,59
Commercial Real Estate Financing 2012: Getting Bac		\$1,3
Legiora 2011 User Conference & Training		\$1,58
Time Management Training		\$1,50
Object Management Group / Enterprise Data Management Council Joint Working Group		\$1.55
Proxessing Personnel Actions	1	\$1,34
Financial Management Assn. (FMA) 2010 Conference	ŧ į	\$1,5
Garmer Symposium	1	\$1,54
Total Rewards Conference 2011		\$1,50
Creativity and Innovation: Uniteeth Your Potential		\$1.53
Immersive Learning University (ILU) Conference	1	\$1,51
Governmental Accounting and Audring Conference	<u></u>	\$1,5
24th Annezi Consumer Compliance Seminat		\$1,3
Developing Executive Leadership		\$.50
The Voice of Leadership: How Leaders Inspire		\$1,5
INTERMEDIATE COMPLIANCE & OPERATIONAL TRAINING		\$1,50
Financial Statement Fraud		\$1.49
2011 Government. Risk, Compliance Conf EMERGING ISSUES IN INVESTMENTS AND DERIVATIVES		\$1,4
Prepaid Card Compliance		\$1,4 \$1,4
NORTH AMERICA CACS	1	\$1.4
Bank Structure Conference	·····	\$1,4
Louisiana Bankera Association Bank Counsel Annual Conference		\$1,4
How to prepare an (PC) 2011	i	\$1,4
2011 National Leadership Training Conference		\$1.4
Dodd-Frank Wall Street Reform & Constitute Protection	1	\$1.4
2011 Annual Development Banking Conference	l i	\$1,4
Legal Technology Leadership Summit	i i	\$1,4
Managing Chaes		51,4
Employee Retrement Income Security Act Basics - American Bar Association sponsored	1	51,4
12010 Louisians Bankers Association Bank Counsel Conference	ì	\$1,4
Both Annual Conference Registration & Housing	į į	\$1,4
How to Effectively Manage Multiple Locations	1	\$1,4
Annual Meeting of the Eastern Finance Association	1	\$1,4
American Institute of CPAs Natl Conf on Current Developments	l l	51.4
Physical Security: Introductory Applications and T		\$1,4
Time-Series Analysis and Forecasting	·	\$1,4
Nielskin Southan Group	I	\$1,3
Financial Analysis of Local Governments	1	51,3
Introduction to Supervision		\$1,3
2011 National Association for Business Economies Policy Conference		\$1,3
Diversity		\$1,3
Mastering SBA Credit Underwriting	1	\$1,3
Operation Dodd-Frank: Navigating Stormy Seas		1 31.3
Critical Thinking	<u> </u>	\$1,3 \$1,3
Fidelity & Surety Law Mid-Winter Proprate		\$1,3
Marking the Transition-Staff Member to Supervisor		\$1,3
Refocation Tax Seminar Auti Phisting Working Group eCrime Researchers Summit		\$1,3
DEMYSTITYING FINANCIAL SERVICES SEMANTICS		\$1,3
Balanging Aosierry and Growth		\$1,3
Counter Temposi Financing		\$1,3
Nati Risk Management Traising Conf		\$1,3
Eastern Finance Assn. 2011 Confinence	1	\$1,3
2011 Credit Markets Symposium		\$1,3
Federal Reserve Chinago Pavinoni Continence	3	\$1,3
Asia Symposium	1	\$1,3
Symposium on Asian Banking and Finance	I	\$1,3
American Economic Assa Annual Meeting 2012	1	\$1,2
12th Market Structure Conference	1	\$1,3
Neighbor Works Training Institute	i ì	\$1.7
Myen-Boggs Type Indicator (MBTI)		SU
Detroit 7th Appeni ABI Consumer Benkrupky Confern	1	\$ 3
Real Estate Settlement Procedures Act Auditing	<u> </u>	S1,2
Rusk Practispoer Conference	Ĭ	\$1,2
2011 Pennsylvanus Bar Association J'rust Conference	······································	\$1.2
to the state of th	<u> </u>	\$1,2

	Number of FDIC Personnel	Aggregate
Conference Name/Sponsor	Attending	Cost
Basic Financial Modeling	1	\$1.26¢
Essential Law Practice Management		\$1,263
36th Annual Jay I. Westbrook Bankrupusy Conference	<u> </u>	\$1,254
Current Developments in Employment Law Forcester's Infrastructure & Operations Forum 2011		\$1,249
Anoual Mid-Adantic Bankruptcy Workshop		\$1,24° \$1,24
Leading Strategic Initiatives (Prog Mang)		\$1,240 \$1,240
2610 Pati Tax School	i	\$1,238
Handling Mortgage Cases from A to 2	1	\$1,236
Communicate with Diplomacy, Tact and Credibility	1	\$1,230
Developing Effective Husiness Conversation Skills	1	\$1,230
How to Communicate with Diplomacy	1	\$1,236
Mangage Bankers Association National Morgage Servicing Conference		\$1,22
State Bar of Texas Annual Meeting	3	\$1,218
Securities Industry and Financial Markets Association 12th Annual Market Scricture Conference	1	\$1,211
Next Learn Immersion Loarning Conference & Symposium		\$1,21
Mid-Atlantic Anti Money Laundering Conference	<u> </u>	\$1,705
2012 Winter Symposium Discovery Strategy: Finding the Smoking Gun		\$1,207
Discovery Strategy: Finding the Smoking Gun Professional Conference on Industrial Hygiene		\$1,204 \$1,195
Frontesional Constitute on Industria 135 period. Sendinal Enternational Messaging Summit		\$1,193 \$1,193
Chizago Fedural Reserve Pryments Confisence		\$1,19
Risk Summit 2011		\$1,194
Gening the Most Out of Your Existence		\$1,192
Bank Sevicey Act School		\$1,183
Allied Social Sciences Association Annual Meeting	1	\$1,166
7th Annual Franci Surannet	1	51,165
Consumer Highes Uniquation Conference	1	\$1,16
Effective Executive Speaking	i i	\$1,161
Southern Regional Asset Boilding Coalition Conf		\$1,758
Assensus Fall Ferun	1	\$1,150
American Economics Association Annual Meeting		\$1,145
NEOCON 2011 Sista Conference Chicago 2011		\$1,48
Stata Constratos Ciscago 2011 Rural Community Economic Development Conference		\$1,136 \$1,134
Advanced Securities Law Institute 2010		\$1,134
Certified Anti-Money Laundering Specialist		\$1,132
Devicam 2010 conference	i i	\$1.12
Association of Certified Anti-Money Laundering Specialists	1	\$1,116
Crean Derivatives	1	\$1,10
16th Annual International Information Technology Management Conference	I I	\$1,100
Training Difficult Essues in Diversity		\$1,10
MOKAN Midwest Triss & Financial Services Conferenc	1	\$1,10
Trial Proposation From Start to Finish for Pacaleg	1	\$1,097
Nebraska Bankers Association 86th Annual Convention	Į.	\$1,09
Texas Hankers Association Autum Legal Conference	1	\$1,09
ArcSight Protect 11	·····	\$1,095
Continuity of Operations and Entergency Plantung Essential SharePoint for Protect Managers		\$1,595
rissemment Contract Law		\$1,095 \$1,095
CONCERNMENT CONSIST OF AN ACCOUNTS OF A CONTRACT OF A CONT		\$1,090
Financial Literacy Suspens		\$1,08
Hank Secrety Act Officer School		\$1,080
20) 1 Southeastern Accounting Show	i	\$1,076
Legal Technology Conference	1	\$1,06
2010 Legislative Conference	1	\$1.05
Regulatory Reform Summur - Of Impact	1	\$1,04
Expert Witness Seminar	1	\$1,63
Tearning Agreements Advanced Subcontracting Issues	Ĭ.	\$1,02
Texas Voas Conference	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$1,02
Mortgage Servicing Conference & Expo 2012	1	\$1,01
2010 American Institute of CPAs National Conference on Bank's & Saving	1	\$1,010
Electronis Discovery & Digital Evidence		\$90,42
FIS Ragulatory Advisory Services	1	\$1,000
Intermediate Deposit & Bahk Secrety Act Compliance, Lending Com		\$1,000
Masters Lending, Operations and Deposits Seminar		\$1,000
ROX Sumusit 2011 Public Speaking Seminar - Fearless Presentations		\$998 \$997

	Number of FDIC	Ĭ
	Personnel	Aggrega
Conference Name/Sponsor	Altending	Cest
Lonester Application Security Conference		54
2011 Ali Stat Conference 3rd Mobile Contactless Paytisen Innovations Summi		\$9
Consumer Bankers Association LIVE 2011. Shaping the Future of Retail Bankin		39 39
Consumer Bankers Conference		\$9
Mortgage Bankers Association Regulatory Compliance Conference 2011	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$5
20% Tax School		\$9
Overcoming Common Challenges in Discovery Practice		\$5
Accountant Lighting Lingation and Issues		S9
Oth Amual Workshop on Community Bank Investment	*	\$5
The Education Equation Policy Forum		59
Fostering Workplate Collaboration		1 39
2011 Financial Accounting Conference	······································	\$6
2019-2012 Arizona Economic Gudoci.	i	55
Commeticial & Industrial Lending Workshop in Best Practices		\$ 59
Unfair and deceptive acts and practices - Lending and Potential Dodd Frank Regulatory	1	\$6
ACFE - 21st Annual Fraud Conference		\$5
Financial Institutions Conference		55
Association of Records Managers and Administrators International 56th Conference & Expo	·····	5 Si
Electronic Payments Care of Knowledge Mid-America Payments Conference	······································	\$1
Universing in Emerging Markets		<u> </u>
New Hire Onboarding in the Federal Government Work		
Briefing and Presemation Skills		\$1
Critical Thinking and Problem Solving		5
Print and ePoblishing Conference	1	1 3
Fundamentals of Successful Project Management		<u> </u>
Intermediale IT Audit School	1	*
Equal Employment Opportunity LAW WEEK		\$ \$
Introduction to Digital Forensics		<u>\$</u>
Women and Power Alignme Conference		5
Insouring/Dasouring Fed Gov?		1 3
Interviewing Techniques for Auditors		
Risk Issues & Compliance Semmar		1 - 3
Tides to Real Estate In Ohio	pppppppppppppppppppppppppppppppppppppp	<u> </u>
Security & Risk Management Workshop		5
Inordaction to Crack APEX II	····	†
Legal Widing for Federal Sector Employment Linv	1	Í
Linesbanion & Reprot Virting		Š
Los Alamos National Labs Trace: FIRE	·····	1 - 3
201) Presidentis: Initiative Summit		5
Clend Computing Legal, Security and Auditing Issu	1	1 3
Pinancial list. Security & Risk Management		<u> </u>
Investigate conflicts of interest		5
Public Sector EEO and Employment Law Conference		\$
Security in the Age of Wikilasiks - Cybercture, Esp		<u> </u>
Sth Annual Underbanked Financial Services Forum		1 3
The Difference Between Good and Great Supervisors		2
The Directive rowers and order superiors		3
Copyrigational Savvy		1 3
Microsoft Excel 2007, Level One		3
Succession Planning & Knowledge Transfer Strategie		1 3
Corporation for Emerginse Development 2010 Assets Learning Conference		1 3
Regulatory Symposium		5
Internal Controls for Fraud Prevention (Colline)	······································	\$
Nebraska Hankers Association Technology Conference		1 3
Symposium for Distressed Municipalities	····	3
Symposium for Distrissed Maintipaintes [2011 Black Women's Conference	<u> </u>	\$
National Cumract Management Association Annual Government Contract Mgmt Conference	······································	1 3
National Custract Management Association Author Clovertonical Couract Might Conference Teamwork Skills for Non-Supervisors		- 3
1 Commons, Schie for Non-Supervisors 2011 Kentucky Affordable Housing Conference		\$
ICCS 2012 A White Hat Summit		
· · · · · · · · · · · · · · · · · · ·	<u> </u>	5
Critical (Analytical Thinking Skills for Off Perso		3
Leadership Training for Non-Supervisors	1	\$
Frank Examiner Certification	<u>İ</u>	
GratUp Accounting Conference		\$
Influencing Skills		5
Federal Sector Labor Relations and Labor Law Conf	1 1	5

	Number of FDIC	•
	Personnet	Aggregat
Conference Namo/Sponsor TR39/TG3 Audit Refresher Training	Aftending 1	Cost
Government Technology Council Meeting		\$7(\$69
Financial Statement Fraud		\$69
Fraud Provencion	i i	\$69
Leadership Skifts for Non-Supervisors	1	\$69
Leadership Skills for Non-Supervisors	<u> </u>	\$65
The New GPRA Modernization Act of 2010 Workshop	1	\$69
GPIRST Conference	1	\$69
Usik Annual International Information Technology Management Conference	J J	\$69
Chartered Financial Analysi Level III Exam	<u> </u>	\$61
Effective Actions Agains Gurramors		\$61
Florida International Bankers Association Auti Moneylaundering Conference		\$6
Mid-Atlantic Information Security Forum 2012	<u>i</u>	26.
Real Estate Lending Compliance Update		\$6
Rising Farmland Valuer Causes and Cautions Financial Markots Association Conference	***************************************	\$64
Financial Markets Association Conference FMA 2010 Treasury and Capital Markets Conference		56: \$6:
Advancing Government Accountability - Emerging Issues	<u> </u>	\$65
Remote Daposit Cachine Suppint 2011)	\$6.
Los Augeles County Economic Development Corporation 2011-2012 Economic Forecast	1	36.
10th Annual New Markets Tax Cirida Summit		ა ნ-
Microsoft Exect 2010	1	\$6.
Congressional Flack Cameras	i i	\$6
TSCPA Financial Institution Conference	1 1	56:
2012 Ebythonic Payments Forum		\$63
Jahor Law & Japon Arbitration	1	\$8
Kansas Workforce Summit		\$6
Intensive Review of Grammar		\$5
Recent Developments in Consumer Credit and Payment		\$64
APEXposed 2010 Seminal		\$6
Criminal Investigative Techniques	1	\$6
Dalias, TX - Professional Interviewing Skills	<u> </u>	St
FIS's Masters Londing Compliance Seminar		\$6
Informediate Training Seminar	Į.	\$6
investigating on the Interpet		56
2011 Executive Management Conference		\$.5 \$.5
Total Access 19th Annual Advanced Employment Law Course	<u> </u>	3.3 \$5
Deposing the Expert Witness		\$5°
Mingating Risk: Assess Your Institution/s Deficie		5 5
The 2011 National Multistate Tax Symposium		\$5
People 2012 Saba Global Supred	1	\$5
Prosperial Institution Craference		\$5
Leaderains Presence Workshops	1	\$ 5
Advancing Government Accountability – Leadership Conference	1	\$5
Sareas Womeos Anomeys Athuri Conference		\$5
Conference of State Bank Supervisors District II Fall Meeting	į į	\$5
Time Masicry for Lawvers	1	\$5
The New Landscape for Consume: Credit and Payments		\$.5
The Credit Crisis - What West Wrong		\$5
2th Annual Florida Bankers Bank Secrecy Act/Anti Moncy Laundering School		\$ 5
Real Estate Lending Compliance Seminar		\$5
Certified Information Systems Socurity Professional Cartification Examination	<u> </u>	\$5
National Association of Government Guaranteed Lenders Annual Conference		\$5.
Suing, Defending & Negotiating w/ Banks		\$3
Institute for Highway Safety Automotive Conference	1	\$5
2011 Risk and Profit Conference	ļ	\$5
2010 Texas Community Economic Development Summin	<u> </u>	\$5
GTRA Secure GOV Council Meeting		\$5
OFPB Update, FCRA & FACT Act		55
Fundamentals of Pederal Financial Accounting	1	\$5
From The Nightmare to the American Diesan	<u> </u>	\$5. **
Midwest Econumetrician Group conference The Mediator and Public Policy		\$5 \$5
DEFCON / BSides	- The second sec	\$5
Ciender Intelligence Summit		\$5i
Outsourcing Risks, Privacy Issues, and Controls		\$59 \$59
American Bar Association Bus Law Section Spring Mig		،رو الهرا

	Number of FDIC	
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Conference Name/Sponsor Skill Path Seminars	Afficading	Cost \$49
Skil Path Trainings		S49
Strategic Markets and Diversity Conference		\$49
International Association of Privacy Professionals Foundation training exam, materials	1	\$49
Mortgage Regulatory Forum	1 1	\$49
Shared Assersments Workshop	1	\$49
4th Anneal New York Coalition of Community Development Financial Institution Conference	1	\$49
Re-Introduction to iBlaze		\$49
Chicago Assocation for Business Economics	i i	\$49
California Required Mosary Training - Dublin	· · · · · · · · · · · · · · · · · · ·	34
Just Add Willer, Kausas and the Evenomy]	\$45
Problem Real Estate Loans		\$43
Doane's Annual Ag Outlock Conference	i	\$45
Federal Recruitment & Taleni Mgmi Sumegy D	j	\$4:
Freparing For the Inevitable: Dodd Frank Changes	j j	\$4
Strategie issues Summit	l l	\$4:
Есопотніс Меазитетром Зетіння	1 1	\$4
Excelling as a Highly Effective Team Leader		\$4:
2010 Risk and Profit Conference	1	54:
Global Cash Flow: A Real Estate Perspective	1 1	\$4
2012 Economic Policy Conference	1	\$4
SBA 7(a) Lender Traming		\$41
171D Project Management Symposium	1	\$4:
Fowerful Communication Skills	i i	\$4
2011 Kansas Conference on Poverty	į	\$41
Information Technology Conference PPIEC	‡ :	41
Enterprise Architecture & Data Warehousing 2011	*	\$44
Nuality Service	1	\$4
Communicate with Confidence and Competence	1	534
Effectively managing Multiple locations	1	\$3
How To Effectively Manage Lecations	<u> </u>	53
Lander's Comprehensive Guide to Mortgage Loan Comp	1 1	53
People Management	1	\$39
How to Find, Track, Monitor Congressional Document	I I	\$3
Independent Bankers Association of Texas/Texas Bankers Association Financial Literacy Summit	ţ	\$3
Operation Dodd Frank	1	\$3
The Road to Knowledge - Payments Conference].	\$3
Wealth Management and Trust Conference	1	53
Customet Service Skills for Federal Employees	1	\$3
Introduction to Project Management	1	\$3
Managung Difficult Conversations	1 1	\$3
Optimizing Your Time and Focus: Your Best Just Got	1 1	\$3
The Power of Candid Conversation Discussing the ;	į į	53
Edward Turke: Presenting Data & Information		5.3
Catalyst 2011 East	1	\$3
2011 Federal Executive Institute Alumni Association Executive Forum	t t	\$3
Great Plains Land Expo		\$3
Texas Community Development Sumit	j	\$3
Banking Law Institute		\$3
2010 National Educator Conference	ĭ	\$3
2011 Compliance Update School	11	\$ 3
2011 Personal Finance Seminars for Professionals	1	\$3
7th ANNUAL INNOVATIONS IN E-LEARNING SYMPOSIUM	1 1	\$3
Compliance Update School	i i	5)
The Leadership Environment	1	5)
Symposium reclaiming the Vision of Homewonership	i i	\$3
Roston Federal Reserve Conference	Į	\$3
Compiance Covernance Oversight Council Conference	1	£2.
Francis, Svaris & Cons		\$3
Mid-America Lender's Conference	J	\$3
Compliance Update Servinar	l l	\$3
Comptance Updates	1	\$3
Mortgage Update B to Z	i i	\$3
English Grankmar and Usage	1	1 53
Advanced Investigation Skills: Handling Complex Sc	1	\$3
Achieving Extraordinary Outcomes, Lonovanye Think	<u> </u>	\$3
Achieving Your Highest Priorities Time-Management	i i	53
The SUMO Principles of Leadership		\$1

	Number at FUIC Personnel	Aggregate
Conference Name/Sponsor	Attending	Cesi
Tools for making bener decisions	1 I	\$325
2012 Web and New Media Conference	1	3925
Supervisory Update. Emerging issues FrIEC		\$320
Online Trust Focus: 2011	1	\$319
2010 Technical Assistance Program Seminar	Į.	\$319
Toxas Benkers Association August Conference		\$313
Annual Legislative Conference	1	\$390
Kansas Bankers Association 2012 Spring Conference	1	\$300
Leadership Skills for Project Managers		\$300
Scope Management - Smity Management		\$300
Business Writing and Granupar Skills		\$299
Business Writing and Grammer Skills Made Easy and	1	\$299
Communicating w/Diplomacy & Professionalism	1	\$299
How to Excel at Managing and Supervising People		\$299
Indoor Air Quality & IH Sampling Workshop	t to the second	\$299
National Community Reinvestment Cognition 2011 Annual National Conference	<u> </u>	\$299
National Seminars Training		\$299
STARI2 All-Access Training Pass,		\$299
	<u> </u>	
The Essentials of Communicating with Diplomacy	<u> </u>	\$299
The Essentials of Communicating with Diplomacy and		\$299
Thinking Outside The Lines		\$299
Writing and Gramma Skills		\$299
PDIC Suits Against Outside Advisors to Faded Bank	1	\$297
2011 Tandeth User Group & Information Security Coaf	<u> </u>	\$295
Agricultural Landers Conference		\$295
Marketing Communications Roadman		\$295
Now Jersey Bankers Stress Testing for Comm Bks	į į	\$295
Practical Application of Federal EEQ Laws and Reg.		\$295
Reasonable Accommodation Under the American with Disabilities Act	i i	\$295
Taking Defensible Action Against Poor-Performing		\$295
Society of Labor Economists	The state of the s	\$290
2010 Texas Margin Tax and Other State Tax Dayelop.	1	\$279
Effective Writing for Lawvers	1	\$279
Clear and Concise E-mail and Business Writing		\$278
2011 Leading Compliance Update	<u> </u>	\$275
Broids on MSPB Success		\$375
CHANGES ABOUND IN FEDERAL EEO' C(LRIERT AND HADLEY		\$275
Gilbert and Hadley's Top 10 List Key Legal Lesso		\$275
Leadership and Swategic Thinking for Managers		\$275
Off-duty and Criminal Misszondust		\$275
Succeed in Federal Sector Arbitration: Broids	<u> </u>	\$275
Supreme Court Preview		\$275
When Fed Emp Abuse Technology: From Padicy to Disc		\$275
Atlania Economics Club	<u> </u>	\$270
Business Writing and Grammar Skills Made Easy	<u> </u>	\$269
Basis/Distributions For Pass-Through Entities: An	1	\$265
Focus: Achieving Your Highest Priorities	į į	\$265
General Income Tax Practitioner Workshop		\$265
Commercial Real Estate	l l	\$263
This is Government Workforce, Learning Innovations	· I	\$259
Banking Law 2011 Fall Committee Meeting	1	\$255
Loan Applications and Requests Webinar		\$255
2010 S. Regional Asset-Building Condition Confer.		\$250
American Bar Association Backing Crists Fell Meeting		\$250
Fall 2010 CISA Review Course		\$250 \$250
<u> </u>		
Federal Sector Labor Relations	1	\$250
Federal Tax Update	1	\$250
Leadership and Management for Women		\$250
St. Louis Business Journal's Women's Conference		\$250
2011 Deposit Compliance Undae Tele-Web Semmar		\$250
Mastering Microsoft Extel	Y	\$249
Strategie Thinking		\$249
Race, Place and Fair Nousing		\$245
Annual Operations Compliance Recap	1 1	\$245
Big Changes in Loan Originator Compensation		\$245
E-Sign - Cases of Interest and Doozig it Right		\$245
Identifying Evaluating Internal Controls		\$240

Conference Name/Sponsur	Namber of IDIC Personnel	Aggregate	
	Attending	Cost	
Sparking Unitedition & Creativity 2011 Fail Tax Schrol		523	
2011 Full Tax Schwol University of Bilinnis 2011 Full Tax School		\$23	
Cyner/Mobile Crime Workshop	<u> </u>	<u> </u>	
Cyndishashe Crane workshop Dodd-Frank Act. What is the impact on Fiduciaries	<u> </u>	\$22 \$22	
Fiduciary Investing		\$22 \$22	
Creengos Symposium	1	34.7 522	
Individual Referencent Accents -Do's and Do Not's and Did Not's	1 1	\$22	
Know Your Emotional Intelligence: A Professional and Personal Dev Tool	1	527	
2012 Bank Technology Conference and Showcase		\$2	
Microsoff Exect		\$21	
Fiduciary Income Tax Workshop	1	\$2	
WICPA Financial Institution Conference 201;	<u> </u>	\$2	
Sovereign and Bank Credit Outlook 2012	· · · · · · · · · · · · · · · · · · ·	\$21	
2010 University of Bitmoxi Tax School		\$2	
Developing Your Professional Competencies		\$2	
Limiversity of Binguis 2010 Full Tax School	1	\$31	
Internal Revenue Service Nationwide Tax Forage	1	\$20	
2010 Bank Secrecy Art Compliance Management Seminar	i	52	
Certified Commercial Investment Member 2011 Conference	1	\$2	
Financial Literacy Leadership Conference	1	\$2	
The London/New York Dialogue. Keeping the Global C	1 1	\$3	
Insight - A Look at Enverorise Risk Management		\$23	
Creative Leadership Workshop for Managers	1	\$19	
Educa Purhouse!	1	31	
Echics Rock Extreme	i i	\$1	
How To Manage Emphions & Excel Under Presente	1	514	
How to Supervise Off-Size Employees	· · · · · · · · · · · · · · · · · · ·	\$1	
Fioman Resources Law		Si	
Secrets of Great Brief Wrises 2011	1	\$ 1	
Social Media Marketing Conferance Track (]	\$10	
The E-Mail and Business Writing Workshop	1	51	
WalMart v. Dukes: Death of Complex Class Actions?	1	\$1	
Consecuting to Greatness	1	51	
19/11: A Retrospective for Financial Services Secto	1	\$1	
Bauhaus and Beyond	1	\$1	
How to Deliver Presentations with Ease & Confidenc	<u> </u>	\$1	
Time Management & Organization Skills	1	\$1	
2011 New England Appraisal Expo	i i	\$1	
Alabaraa Community Leadurship Network Conference		1 \$1	
Bost Practices in Internal Audit	1	Si	
Lenfers Conference		12	
New England Appraiser's Expo		51	
New England Economic Outlook Conference		1 <u>si</u>	
Risk Assessment and Internal Controls	1	51	
Third Angual Fugancial Literacy Leadership Conf.	i	\$1	
Banking & Finance Symposium 2010		51	
New Hampabuc Women's Leadership Summit	······	<u> </u>	
Phoenix Secure World Expo		1 31	
Professional Educa Undate	<u>.</u> <u>1</u>	SI.	
2010 Security Professionals Seminar		5:	
2011 Agriculture Symposium	i	Si	
Additing Securing Cloud-based Services	<u> </u>	† śi	
Contemporary Accounting Ethics & Related Legal Top	1	\$1	
Esiate Administration		† 	
IFIS Security Professionals Seminar 2010	1	<u> </u>	
FIS Security Professionals Seminar 2011	1	 	
PRBKC Regional Agriculture Symposium	1	Ši	
PM101 Basic Project Management		† <u>' </u>	
Pration dasterioted Management Communication Skills for Women		51	
Continuincation states for worker [Dealing Effectively with Unaccoptable Employee Beh		\$1	
Exmendinary Assistant	<u> </u>	2)	
From Chaos to Control. How to Be Resilient.		51	
Hrow to Become a Better Comminicator from Skillpath		<u>31</u>	
	1	an g anananananasanananananasany	
How to manage conflict and Confrontation		\$1: \$1:	
Making the Transition from Staff to Supervisor		51	
Managing Emotions & Thriving Under Pressure Managing Mult. Proj., Competing Priorities, & Tigh		\$1	

	Number of VDIC Personnel	Aggregau
Canference Name/Sponsor	Attending	Cost
Managing Multiple Projects and Priorities		514
Star 12 Platinum The Women's Conference	1	\$14
The Wolfers Longercree Professional Ethics for CPAs		\$14
Processional cimes for CPAs Ethics Update for VA Lawyers 2010		\$140
Powerful Communication Skilk for Woman	3 3	\$13°
MA Crop Instrumes Conference		\$13
Capital Chapter ISCEBS All-Day Program		\$13
New Jessey Law & Educy for CPAs		\$12
New Jersey Law and Ethics for CPAs 2009 - 11		\$12
2011 American Council on Consumer Injerest Conf	**************************************	512
Affied Social Sciences Association		\$12
Network Branded Prepaid Card Association Prepaid Card Workshop	1	\$12
Understanding & Detecting Money Laundering	£	S 12
Managing Emotions and Thriving Under Pressure	1	\$11
Ethics, Principles and Applications	į į	511
Consumer Federation of America	i i	SII
Department of Defense Cybersecurity Challenges	į	51!
The Consumer to the Financial Services Revolution	ţ	SI
Midwest Economics Association annual meeting - non-member registration		310
Apartzneni and Condo Markets		\$10
Bank Scenecy Act Seminar	I	\$10
Chartered Financial Analyst San Francisco Annual Economic Porceast		\$10
Lasina Mislory Day Confesence	1	\$10
Computer Forensies & Investigations		59
Excel 2067/2010. Beyond the Basics		\$9
Managing Multiple Priorities, Projects and Deadh		59
Prepaid Card Workshop for Policy Makers, Regulator		20
Speed Reading with Evelyn Wood Reading Dynamics		59
Discressed Municipalities Conference		50
NAIOP Market Forceast		\$9
Symposium on Distressed Municipalities		\$9
Tax Implications of Dodd Frank Teleconfinence		\$9 \$9
Wichito Area Economic Outlook Conference Information Security Summit	Į.	\$9
Toasmasters District 16 Conference		\$9
Fibes and Linguisies Lie Detection	1	\$6
Risk Management		58
2012 Economic Ombook Seminar		\$6
COBIT 5 ISACA WORKSHOP	i	82
Neocon East	i	£ \$8
Exect Basics	i i	\$
Microsoft Excel 2007/2010 Basics	· i	\$7
2011 Raise Texas Surumit	1	\$7
Diversity and Inclusion Summit	<u> </u>	\$2
Micwest InfisCard Superconference	1	\$7
Missouri Valley Economic Assa Amarai Meeting	l l	\$7
Emerging II	1	\$7
Ethical Delemmas Facing Financial Experts	1	\$7
survival strategres in CRIX	1	\$6
indusitati summii		50
TGIF for CPAs- Individual Tax Update	1	545
Fraud Investigator	<u> </u>	\$6
National Agricultural Credit Committee Meeting	i i	56
Capital Markets Conference	ţ	
New Tools for New Rules Ag Symposism	1	\$3
Commercial & Industrial Lending in Challenging Times		3:
2011 Interagency Moustity Depository Institutions		55
2011 Southwest Bank Secrety Act & Financial Crimes Finum)	<u> </u>
2012 Federal Errorscous Retirement Coverage Corrections Act Training	<u> </u>	5
Ansiness Engecast 2011	1	<u></u>
Business Foreceast 2012	<u> </u>	3
Continuing Legal Education Servinar on Privacy and Mobile Location-Based Information Systems Audit and Countol Association Chapter Meeting		\$
to torought for Carrier to Australiana tamber of the production of the piece before trade		\$5
	<u> </u>	
Neighbor Works Appensa Training		
		\$5 \$5 \$5

Совістенеє Нате/Бровког	Number of FINC Persoauci Attending	Aggregate Cost
Dingal Pearl Harbox	i	\$4
The Restroyen of SAS 70		\$4
Annual Forecest Panel	i	\$3:
Public Policy Luncheon with Thomas Curry	l I	\$3:
Quarterly meeting of Twin Cities Chapter of CFE	<u> </u>	\$33
Looming Collapse of the Muni Market	<u> </u>	EZ T
The State of the Economy Perspectives of the FRB	1	5 3(
GWDC ARMA October Program	1	\$2
Health Care Insurance Frond	1	\$2
Insurance Praud	1	\$2
Macin Summer Networkling Social		\$2
MSE Rolladiable	<u> </u>	\$2
The 2011 Women's Conference	I	\$2
Analysis of the Fraud Sectus	····	\$29
Ethical Issues for Fraud Examiners	£	\$2
Government Corruption		\$20
Morteast Freud		520
Chartered Financial Analysi San Francisco: Money Never Sleeps	1	\$15
Compensal Real Estate Onlook 201)		3)
State of Small Business in the United States		1 31: S1:
State of Sittas Bosiness in the United States 2011 Association of Financial Professionals Annual Conference	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\$1 \$1
2011 International Public Management Association for Human Resources Intl Training Conference 2011 Milwaukce Tech Security Conference		<u>\$(</u>
		\$
2011 SNDE Conference (Society for Dynamic and Eco)		31
2011 Symanics Government Symposium	<u> </u>	\$(
22nd Annual Derivatives Securities and Risk Manage	I I	5
35th Annaial Texas Association of Bank Coursel Convention	<u>I</u>	\$(
Agricultural Outlook Forem 2012		51
Agstar 2011 Outlook Meeting		340
American Management Association Budgeting Workshop	l l	\$6
American Securitization Conference	,	\$1
American Society for Training & Development 2011 International Conference	1	\$1
Assertive Communication-Essential Skills	í	\$(
Business Architecture: Taking is to the Next Level	1	Si
Business Process and Application Development Foxum	1	50
Business Wriging Skilis	1 1	St
Cloud Security Alliance Congress 2010	1	50
Content & Collaboration Forum	· · · · · · · · · · · · · · · · · · ·	Š
Developing Your Emotional Intelligence		\$
Econometric Modeling		<u> </u>
Financial Institutions in the New Regulatory Envir	i	Š
Future of Financial Services		t
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Germer Security & Risk Management Summit	1	\$ 50
How to Work with Difficult & Demanding People	<u> </u>	\$(
Human Capital Management Federal Symposium		5
Human Resources for Newly Assigned		<u> </u>
lda County beef facilities tour	**************************************	<u> </u>
Information Systems Audit and Control Association Breakfast Meeting	<u></u>	<u></u>
Latines in the Hearland: Migration & Shifting		SI
Leadership and Team Development for Managerial Suc		<u>\$</u>
Lending Comphance, Mortgage Update, HMDA		3
Memory Retention Seminar	1	5
Microsoft TechEd3011		<b>5</b> (
Mid-Yew Retirement	1	3
MS Excel _{se} Hands-On Juteo	1	3
National Economists Club Luncheon	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	\$
On Demand / Publishing Xebange Conference	I I	\$
Oracle Database 11g. Comprehensive Introduction	1	\$
Ourlock Live-Lander Compensation	7	\$
Securities Industry and Financial Markets Association and the Mutticipal Securities Rulemaking Board Maincipal Se		1 6
Seize the Day	j	\$ \$
Speakers Showcase-Five Star Speakers		<del>}                                    </del>
	1 1	\$ \$
Supporting Our Worden Veterans & Military Families		<u> </u>
SW BSA & Financial Crimes Forum	<u>-</u>	\$1 \$1
Techno Fotensics & Digital Investigations Confore	<u> </u>	<u> </u>
The New Face of Relaij Payments		Ší.
Treasury's Community Outroach Event	į į	S.

	Number of Fine	T
	Personnel	Aggregate
Conference Name/Sponsor	Attending	Cost
		.+-3
	156 2,427	\$3,537,512



OFFICE OF THE CHAIRMAN

May 15, 2012

Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for the letter regarding the December 2011 notice of proposed rulemaking for the market risk capital rules (the Proposed Rule)¹, which was issued jointly by the Federal Deposit Insurance Corporation, Board of Governors of the Federal Reserve System, and Office of the Comptroller of the Currency (together, the agencies). The Proposed Rule is part of the agencies' implementation of certain revisions to the Basel market risk capital framework and section 939A of the Dodd-Frank Act (section 939A)². Section 939A generally requires the agencies to remove from their regulations any reference to or requirement of reliance on credit ratings in assessing the credit worthiness of a security or money market instrument and to substitute such standard of credit worthiness as each agency determines what is appropriate for such regulations.

The Proposed Rule incorporated certain methodologies for calculating the specific risk of debt and securitization positions that do not rely on credit ratings. In your letter, you expressed several concerns regarding the proposed methodology for securitization positions, i.e., the "simplified supervisory formula approach" or the "SSFA." We appreciate your comments and will take them into consideration, along with other public comments that we received during the comment period, as we move to finalize the rules.

You expressed in your letter a general desire for greater consistency between the methodologies adopted for purposes of any final market risk capital rules and Congress' intent in enacting section 939A. Accordingly, you encouraged the agencies to adopt a methodology for securitization positions that appropriately reflects any variances in the risk profile of different types of securitization structures. In addition, you indicated that the SSFA would not adequately align capital requirements with the specific risk of securitization positions. You also expressed concern that certain well-functioning securitization markets, such as the auto finance industry, would be negatively impacted

¹ Risk-Based Capital Guidelines: Market Risk; Alternatives to Credit Ratings for Debt and Securitization Positions, 76 Fed. Reg. 79380 (Dec. 21, 2011).

² Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act, 15 U.S.C. § 780-7 (note).

by the implementation of the proposed SSFA, as it would result in reduced availability and a higher price of credit.

The FDIC believes that any alternative creditworthiness standards should, to the extent possible, appropriately distinguish the credit risk associated with a particular exposure within an asset class. In the Proposed Rule, the agencies requested comments on the accuracy of the SSFA, particularly with respect to its ability to measure specific risk. In addition, the Proposed Rule sought comment on whether the SSFA was appropriately calibrated, and whether other adjustments should be considered to better recognize credit enhancements, asset class, loss experience, prudential requirements, and other criteria.

We welcome your comments regarding the Proposed Rule and, specifically, the SSFA for securitization positions. We also are reviewing other comments that provided additional insights and information in response to specific questions in the Proposed Rule. We expect that comments responsive to these questions will assist the agencies in addressing the issues that you raise in a final market risk capital rule.

Thank you again for sharing your views. The concerns you expressed will be given careful consideration. If you have other questions, please feel free to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

Sincerely,		
	The second second second second second second second second second second second second second second second se	(b)(6
Martin J. Gruenberg		
Acting Chairman		



Office of Legislative Affairs

# 13 April 2012

Honorable Tim Johnson Chairman Committee on Banking, Housing and Urban Affairs United States Senate Washington, D.C. 20510

Dear Mr. Chairman:

	Thank you for your letter requesting the assistance of the Federal Deposi	t Insurance
(b)(6)	Corporation in assigning as a detailee to the Senate Banking	Committee from
	now through the end of this year.	
(b)(6)	This is to confirm that will begin her detail to the Committee of	n Monday,
	April 23 and will complete her detail by December 31, 2012.	
(b)(6)	We agree that will be a valuable asset to the Committee. If yo	u or your staff
	have any questions, please contact me at 202-898-8730 or	(b)(6)
	Sincerely,	
(b)(6)		
	Alice C. Goodman	
	Deputy Director	

This Report Should Be Filed With Both Offices:

#### ORIGINAL

Committee on Rules and Administration United States Senate Room 305 RSOB

COPY Select Committee on Ethics United States Senate Room 220 SHOB Washington, DC 20510

Washington, DC 20510

# **SELECT COMMITTEE ON ETHICS**

### AGREEMENT TO COMPLY WITH THE SENATE CODE OF OFFICIAL CONDUCT

Who should complete and file this form: Pursuant to paragraph 4 of Rule 27 or as authorized by Senate Resolution, a committee can appoint to its staff any experts or other personnel detailed from any department or agency of the Federal Government with the written permission of the Committee on Rules and Administration. Pursuant to statute, joint committees also are authorized to use detailees from the Federal Government.

When and where to file: Before the detailed service will be approved, this agreement must be filed with the Committee on Rules and Administration (original), and a copy must be submitted to the Select Committee on Ethics.

Senate Code of Official Conduct: http://ethics.senate.gov/downloads/pdffiles/smell_books/CodeOfConduct.pdf

Report pursuant to Rule 41, Paragraph 3, for Government employees detailed to a United States Senate Committee.

	(1) Individual's name, address and telephone no.	Committee on Broking Filme - Whom Affer
	JACK Reed	securities, Insurunce, and Investment Sul
	(2) Name of supervising senator	(3) Name of committee (and subcommittee, if any) which is to utilize service
	FD IC 550 17th St. N. W., WAShir . JON D.C. 20429	(b)(6)
	(4) Name and address of government employer (not Senate)	(5) Rate of your government full-time annual compensation
	I have familiarized myself with the Senate Code of Official Co the same manner and to the same extent as an employee of t	
(b)(6)		4/13/12
(b)(6)	Signature of Individual	Date '

#### **RULE XLI** POLITICAL FUND ACTIVITY: DEFINITIONS

3. Before approving the utilization by any committee of the Senate of the services of an officer or employee of the Government in accordance with paragraph 4 of rule XXVII or with an authorization provided by Senate resolution, the Committee on Rules and Administration shall require such officer or employee to agree in writing to comply with the Senate Code of Official Conduct in the same manner and to the same extent as an employee of the Sanata. Any such officer or employee shall, for purposes of such Code, be treated as an employee of the Senate receiving compensation disbursed by the Secretary of the Senate in an amount equal to the amount of compensation he is receiving as an officer or employee of the Government.

(41.3)Rev. 3/2011



OFFICE OF THE CHAIRMAN

May 1, 2012

Honorable Scott Garrett
Chairman
Subcommittee on Capital Markets and Government Sponsored Enterprises
Committee on Financial Services
House of Representatives
Washington, D.C. 20515

Dear Chairman Garrett:

Thank you for your letter expressing concerns about the premium capture cash reserve account (PCCRA).

We appreciate your comments and questions and will consider carefully the issues you have raised in developing a final rule to implement Section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Section 941 requires, subject to certain exceptions, that a securitizer retain a minimum 5 percent economic interest in a portion of the credit risk for any asset that the securitizer transfers to a third party through the issuance of an asset-backed security. The legislative history to Section 941 states that by requiring a securitizer to retain an economic interest in the securitized assets the securitizer has "skin-in-the game," thereby aligning the securitizer's economic interests with the performance of the assets and the interests of the investors.

In the Notice of Proposed Rulemaking, the PCCRA was proposed as a mechanism to prevent the securitizer from reducing or negating its financial exposure to risk retention. Even though risk retention was a feature of securitizations historically, many commentators have noted that the ability to capture profit immediately upon sale had the effect of reducing the influence that risk retention had on underwriting standards and asset quality. As a result, the interagency group that developed the notice of proposed rulemaking proposed the PCCRA as a means to prevent the securitizer from reducing or negating the intended effects of risk retention by immediately monetizing excess spread. Nonetheless, we are very conscious of the potential impact that individual elements of the final rule could have on the availability of credit. We take very seriously your concerns and will work to develop a final rule that accomplished the statutory goals, while preserving the availability of affordable credit.

FDIC staff is participating in the Section 941 interagency rulemaking, and discussions and analyses of the many comments received on the proposed risk retention rule, including the PCCRA, are ongoing. At this stage of these interagency discussions,

no decisions have been made about whether the PCCRA should be included in a final rule. We continue to look carefully at this important issue and will continue to evaluate both the impact and the benefits of individual requirements in developing a final rule in concert with the other agencies.

Thank you again for sharing your concerns. If you have other questions, please feel free to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

Martin J. Gruenberg
Acting Chairman



OFFICE OF THE CHAIRMAN

May 1, 2012

Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Chairman Bachus:

Thank you for your letter expressing concerns about the premium capture cash reserve account (PCCRA).

We appreciate your comments and questions and will consider carefully the issues you have raised in developing a final rule to implement Section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Section 941 requires, subject to certain exceptions, that a securitizer retain a minimum 5 percent economic interest in a portion of the credit risk for any asset that the securitizer transfers to a third party through the issuance of an asset-backed security. The legislative history to Section 941 states that by requiring a securitizer to retain an economic interest in the securitized assets the securitizer has "skin-in-the game," thereby aligning the securitizer's economic interests with the performance of the assets and the interests of the investors.

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FDIC staff is participating in the Section 941 interagency rulemaking, and discussions and analyses of the many comments received on the proposed risk retention rule, including the PCCRA, are ongoing. At this stage of these interagency discussions, no decisions have been made about whether the PCCRA should be included in a final

rule. We continue to look carefully at this important issue and will continue to evaluate both the impact and the benefits of individual requirements in developing a final rule in concert with the other agencies.

Thank you again for sharing your concerns. If you have other questions, please feel free to contact me at (202) 898-3888 or Paul Nash, Deputy for External Affairs, at (202) 898-6962.

Martin J. Gruenberg
Acting Chairman



OFFICE OF THE CHAIRMAN

May 25, 2012

Honorable Debbie Stabenow Chairwoman Senate Committee on Agriculture, Nutrition and Forestry United States Senate Washington, D.C. 20510

Dear Senator Stabenow:

Thank you for your letter in support of the many reforms in the Dodd-Frank Wall Street Reform and Consumer Protection Act, including important reforms of the derivatives market.

Please be assured we will give careful consideration to your comments on these issues as we work with the other regulators to adopt a final rule as expeditiously as possible.

Thank you again for sharing your views. If you have other questions, please feel free to contact me at (202) 898-3888 or Alice Goodman, Acting Director, Office of Legislative Affairs, at (202) 898-8730.

Martin J. Gruenberg
Acting Chairman



OFFICE OF THE CHAIRMAN

June 4, 2012

Honorable Spencer T. Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your follow-up questions to the joint hearing of the Subcommittee on Capital Markets and Government Sponsored Entities and the Subcommittee on Financial Institutions and Consumer Credit of the House Financial Services Committee entitled "Examining the Impact of the Volcker Rule on Markets, Businesses, Investors and Job Creation." I apologize for the delay in responding.

As I testified during the hearing, the agencies' proposal for the implementation of section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Volcker Rule) is intended to allow banking entities to continue to engage in permitted activities consistent with the statutory mandates and without undue impact on market liquidity. Such activities include bona fide market making and underwriting activities, risk-mitigating hedging, trading activities on behalf of customers, and investments in covered funds.

Your questions concern the manner in which the FDIC plans to respond to various specific comments that have been received in conjunction with the agencies' joint notice of proposed rulemaking (NPR). The issues you raised were important enough that the agencies posed questions and requested comment on each one in the NPR. I assure you that we will seriously consider all comments received as we move forward in the final rulemaking.

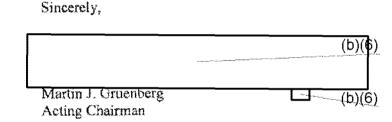
Regarding question 9, which recommended the agencies' development of a general cost-benefit analysis of the proposal, please note that for rulemakings, the FDIC conducts various types of economic impact assessments for all proposed and final rules. For final rules, under the Congressional Review Act, the FDIC determines, among other factors, whether a final rule is likely to result in a \$100 million or more annual effect on the economy. For proposed and final rules, under the Regulatory Flexibility Act, the FDIC determines it a proposed or final rule is likely to have a "significant economic impact on a substantial number of small entities." As noted in my testimony, the agencies have taken an initial look at the potential economic impact on small banking entities and concluded that the proposed rule will not result in a significant economic impact on small banks. The Agencies based this conclusion on two primary factors:

(1) while the proposed rule, per statutory requirements, covers all banking entities, significant reporting and recordkeeping requirements apply only to banking entities with consolidated

trading assets and liabilities and aggregate covered fund investments greater than \$1 billion, respectively, or where trading assets are more than 10 percent of total assets; and (2) the compliance program requirements under the proposed rule are established in a manner that mainly impacts entities engaged in covered trading or fund activities—activities that are not typical of small banks. In addition, in this rulemaking the agencies have encouraged public comments on this issue and have asked commenters to include empirical data to illustrate and support the potential impact on small banks. Also, see questions 348 – 383 in the NPR, which concern the economic impact of various provisions in the joint proposed rule.

Enclosed are responses to the questions from other Members of the Committee. I also have sent responses to the Members directly.

If you have additional comments on the Volcker Rule NPR, please feel free to contact me at (202) 898-3888, or Alice C. Goodman, Acting Director, Office of Legislative Affairs, at (202) 898-8730.



Enclosures

¹ See 76 Fed. Reg.68846, 68939 (November 7, 2011).

 $^{^{2}}$  1d. at 68933 -68936.

## Response to Questions from the Honorable Judy Biggert by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Your questions concern the timing for the issuance of the interagency final rule to implement the Volcker Rule, the process for a phased-in implementation of the final rule's compliance regime, and the regulatory authority for the respective agencies in achieving regulatory compliance with the Volcker Rule in a measured manner.

While it remains our desire to finalize the regulations by July 21, 2012, we note that full conformance is not required by that date. The Federal Reserve Board on April 19, 2012, issued a Statement of Policy that clarified the implementation of the Volcker Rule during the conformance period for banking entities engaged in prohibited proprietary trading or sponsored private equity fund or hedge fund activities. In addition, the notice of proposed rulemaking on the Volcker Rule, which was issued by the federal banking agencies and the U.S. Securities and Exchange Commission on November 7, 2011, provides further clarification of those conformance regulations by the Federal Reserve Board.4

³ See Board of Governors of the Federal Reserve System, Statement of Policy Regarding the Conformance Period for Emities Engaged in Prohibited Proprietary Trading or Private Equity Fund or Hedge Fund Activities, April 19, 2012.

** See 76 Fed. Reg. 68846, 68922 - 68923 (November 7, 2011).

## Response to Questions from the Honorable Gary Peters by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Your questions concern whether the agencies agree that covered entities under the Volcker Rule might decrease market-making activity as a result of the Volcker Rule. In such a financial markets situation, you asked whether any such decreases in liquidity would result in other parties providing the requisite liquidity. Regarding such new market-making participants, you asked "what kinds of institutions do you expect will emerge to provide the liquidity necessary for well functioning markets, and what kind of regulatory scrutiny are those institutions subject to?"

You also had questions which involve issues on the application of the Volcker Rule to affiliates of insured depository institutions, including commercial companies that own a thrift or an industrial loan company, as well as all of the companies in which these covered entities may have a significant investment that makes the recipient of the investment an "affiliate."

Since we currently are reviewing the various issues presented in this rulemaking for purposes of the final rule, we cannot provide a definitive answer to your questions, which also were raised by certain commenters. Note that question 83 as provided in the preamble of the NPR asked similar questions involving the impact on the "liquidity, efficiency, and price transparency of capital markets."

We agree that the issues you raise are important, and the agencies posed questions and requested comment on them. I can assure you that we will carefully consider your concerns and all comments received as we move forward in the final rulemaking.

⁵ Id. at 68870.

## Response to Questions from the Honorable Bill Huizenga by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Your questions involve issues on the application of the Volcker Rule to affiliates of insured depository institutions, including commercial companies that own a thrift or an industrial loan company, as well as all of the companies in which these covered entities may have a significant investment that makes the recipient of the investment an "affiliate."

Since we are reviewing the options for the various issues presented in this rulemaking to implement the Volcker Rule, we cannot provide a definitive answer to your questions, which also were raised by certain commenters. Please be assured that we will carefully consider your questions in conjunction with our development of the final rule. Question 6 of the preamble of the NPR asked for comments on entities that should not be covered in the definition of "covered entity" in the proposed rule.⁶

The questions you raise present significant issues of law and policy that will be addressed in the final rule for the implementation of the Volcker Rule.

⁶ Id. at.68856.

## Response to Questions from the Honorable Michael Grimm by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Your questions involve the impact of the Notice of Proposed Rulemaking for the Volcker Rule on various proprietary trading activities conducted by "non-U.S. based institutions" with various categories of U.S. and foreign counterparties. Please note that the Volcker Rule applies to proprietary trading and covered fund activities by certain "covered entities" that generally are U.S. insured depository institutions and their affiliates and subsidiaries.

Since we currently are reviewing the various issues presented in this rulemaking for purposes of the final rule, we cannot provide a definitive answer to your questions, which also were raised by certain commenters. Please be assured that we will carefully consider your questions in conjunction with our development of the final rule.

The questions you raise present significant issues of law and policy that will be addressed in the final rule for the implementation of the Volcker Rule.

## Response to Questions from the Honorable Carolyn McCarthy by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

You ask what possible changes the regulators should be thinking about or are necessary as the result of stakeholder feedback on the Notice of Proposed Rulemaking (NPR) for the Volcker Rule. This section of the Dodd-Frank Act is designed to strengthen the financial system and constrain the level of risk undertaken by firms that benefit from the safety net provided by federal deposit insurance or access to the Federal Reserve's discount window. The challenge to regulators in implementing the Volcker Rule is to prohibit the types of proprietary trading and investment activity that Congress intended to limit, while allowing banking organizations to provide legitimate intermediation in the capital markets.

In response to the NPR, the regulators have received a high volume of comments from stakeholders, suggesting many issues and changes that we should think about in drafting the final rule. We are carefully reviewing these comments as they raise significant issues of law and policy.



OFFICE OF THE CHAIRMAN

June 4, 2012

Honorable Carolyn McCarthy House of Representatives Washington, D.C. 20515

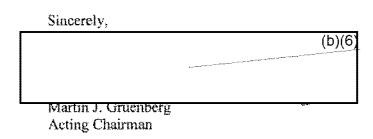
Dear Congresswoman McCarthy:

Thank you for your follow-up questions to the joint hearing of the Subcommittee on Capital Markets and Government Sponsored Entities and the Subcommittee on Financial Institutions and Consumer Credit of the House Financial Services Committee entitled "Examining the Impact of the Volcker Rule on Markets, Businesses, Investors and Job Creation." I apologize for the delay in responding.

You ask what possible changes the regulators should be thinking about or are necessary as the result of stakeholder feedback on the Notice of Proposed Rulemaking (NPR) for the Volcker Rule. This section of the Dodd-Frank Act is designed to strengthen the financial system and constrain the level of risk undertaken by firms that benefit from the safety net provided by federal deposit insurance or access to the Federal Reserve's discount window. The challenge to regulators in implementing the Volcker Rule is to prohibit the types of proprietary trading and investment activity that Congress intended to limit, while allowing banking organizations to provide legitimate intermediation in the capital markets.

In response to the NPR, the regulators have received a high volume of comments from stakeholders, suggesting many issues and changes that we should think about in drafting the final rule. We are carefully reviewing these comments as they raise significant issues of law and policy.

Please let me know if you have further questions. You can contact me directly at 202-898-3888, or Alice Goodman, Acting Director, Office of Legislative Affairs at 202-898-8730.





OFFICE OF THE CHAIRMAN

June 4, 2012

Honorable Michael Grimm House of Representatives Washington, D.C. 20515

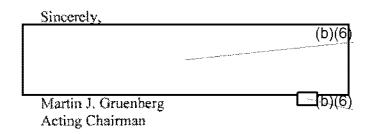
Dear Congressman Grimm:

Thank you for your follow-up questions to the joint hearing of the Subcommittee on Capital Markets and Government Sponsored Entities and the Subcommittee on Financial Institutions and Consumer Credit of the House Financial Services Committee entitled "Examining the Impact of the Volcker Rule on Markets, Businesses, Investors and Job Creation." I apologize for the delay in responding.

Your questions involve the impact of the Notice of Proposed Rulemaking for the Volcker Rule on various proprietary trading activities conducted by "non-U.S. based institutions" with various categories of U.S. and foreign counterparties. Please note that the Volcker Rule applies to proprietary trading and covered fund activities by certain "covered entities" that generally are U.S. insured depository institutions and their affiliates and subsidiaries.

Since we currently are reviewing the various issues presented in this rulemaking for purposes of the final rule, we cannot provide a definitive answer to your questions, which also were raised by certain commenters. Please be assured that we will carefully consider your questions in conjunction with our development of the final rule.

The questions you raise present significant issues of law and policy that will be addressed in the final rule for the implementation of the Volcker Rule. Please let me know if you have further questions. You can contact me directly at 202-898-3888, or Alice Goodman, Acting Director, Office of Legislative Affairs at 202-898-8730.





OFFICE OF THE CHAIRMAN

June 4, 2012

Honorable Bill Huizenga House of Representatives Washington, D.C. 20515

Dear Congressmen Huizenga

Thank you for your follow-up questions to the joint bearing of the Subcommittee on Capital Markets and Government Sponsored Entities and the Subcommittee on Financial Institutions and Consumer Credit of the House Financial Services Committee entitled "Examining the Impact of the Volcker Rule on Markets, Businesses, Investors and Job Creation." I apologize for the delay in responding.

Your questions involve issues on the application of the Volcker Rule to affiliates of insured depository institutions, including commercial companies that own a thrift or an industrial loan company, as well as all of the companies in which these covered entities may have a significant investment that makes the recipient of the investment an "affiliate."

Since we are reviewing the options for the various issues presented in this rulemaking to implement the Volcker Rule, we cannot provide a definitive answer to your questions, which also were raised by certain commenters. Please be assured that we will carefully consider your questions in conjunction with our development of the final rule. Question 6 of the preamble of the NPR asked for comments on entities that should not be covered in the definition of "covered entity" in the proposed rule. \(^1\)

The questions you raise present significant issues of law and policy that will be addressed in the final rule for the implementation of the Volcker Rule. Please let me know if you have further questions. You can contact me directly at 202-898-3888, or Alice Goodman, Acting Director, Office of Legislative Affairs at 202-898-8730.

Sincerely,		
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Martin J. Gruenberg Acting Chairman		1
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¹ Id. at.68856.



OFFICE OF THE CHAIRMAN

June 4, 2012

Honorable Gary Peters House of Representatives Washington, D.C. 20515

Dear Congressman Peters:

Thank you for your follow-up questions to the joint hearing of the Subcommittee on Capital Markets and Government Sponsored Entities and the Subcommittee on Financial Institutions and Consumer Credit of the House Financial Services Committee entitled "Examining the Impact of the Volcker Rule on Markets, Businesses, Investors and Job Creation." I apologize for the delay in responding.

Your questions concern whether the agencies agree that covered entities under the Volcker Rule might decrease market-making activity as a result of the Volcker Rule. In such a financial markets situation, you asked whether any such decreases in liquidity would result in other parties providing the requisite liquidity. Regarding such new market-making participants, you asked "what kinds of institutions do you expect will emerge to provide the liquidity necessary for well functioning markets, and what kind of regulatory scrutiny are those institutions subject to?"

You also had questions which involve issues on the application of the Volcker Rule to affiliates of insured depository institutions, including commercial companies that own a thrift or an industrial loan company, as well as all of the companies in which these covered entities may have a significant investment that makes the recipient of the investment an "affiliate."

Since we currently are reviewing the various issues presented in this rulemaking for purposes of the final rule, we cannot provide a definitive answer to your questions, which also were raised by certain commenters. Note that question 83 as provided in the preamble of the NPR asked similar questions involving the impact on the "liquidity, efficiency, and price transparency of capital markets."

We agree that the issues you raise are important, and the agencies posed questions and requested comment on them. I can assure you that we will carefully consider your concerns and all comments received as we move forward in the final rulemaking. Please

i Id. at 68870.

let me know if you have further questions. You can contact me directly at 202-898-3888, or Alice Goodman, Acting Director, Office of Legislative Affairs at 202-898-8730.

Martin J. Gruenberg
Acting Chairman



Office of Legislative Affairs

June 25, 2012

Honorable Michael E. Capuano Ranking Minority Member Subcommittee on Oversight and Investigations Committee on Financial Services House of Representatives Washington, D.C. 20515

#### Dear Congressman Capuano:

This letter is in response to your request for information during the testimony of Bret Edwards, Director, Division of Resolutions and Receiverships, on May 16, 2012, at the hearing entitled "Oversight of the Structured Transaction Program" before the Subcommittee on Oversight and Investigations of the House Financial Services Committee.

At the hearing you asked for an explanation of the price paid by Rialto for its 40 percent equity interest in the two structured transactions with the Federal Deposit Insurance Corporation. Enclosed is a report prepared by the Federal Deposit Insurance Corporation's Division of Resolutions and Receiverships of the economic structure of those transactions and the price paid by Rialto.

We hope that this information is helpful. If you have further questions, please do not hesitate to contact me at 202-898-8730, or Ike Jones, Legislative Attorney and Advisor, at 202-898-3657.

Cimamanter

	MARIOWA VIJY
(b)(6)	
	Alice C. Goodman Acting Director Office of Legislative Affairs

Enclosure

cc: Honorable Randy Neugebauer Chairman, Subcommittee on Oversight and Investigations

### Response to questions from the Honorable Michael E. Capuano by Bret Edwards, Director, Division of Resolutions and Receiverships Federal Deposit Insurance Corporation

During the hearing, there were a number of questions regarding the financial aspects of the structured transactions entered into by the FDIC with Rialto Capital Management (Rialto) and per the Committee's request, below we attempt to provide a simple and clear explanation of the economics of structured transactions generally and that deal in particular.

For those unfamiliar with the FDIC's structured transaction program, it may prove useful to walk through a simple example to explain the economics of these transactions. Assume the following facts:

#### Example 1: Unleveraged transaction

- FDIC as receiver inherits one severely delinquent loan with an unpaid principal balance (UPB) of \$100.
- FDIC's financial advisor estimates an immediate cash sale of the loan would bring \$40. (In other words, the loan would only be worth 40 cents on the dollar if sold immediately for cash)
- FDIC as receiver forms an LLC and contributes the loan to an LLC in exchange for a 100 percent ownership interest in the LLC.
- FDIC offers to sell a 40 percent equity interest in the LLC (while FDIC retains 60 percent).
- The winning bidder in a highly competitive sale offers to pay \$25 for the 40 percent equity interest and FDIC closes the sale.
- The "Implied Value" of the loan in the structured sale is based on the highest bid and is calculated to be \$62.50. That is, if someone pays you \$25 for 40 percent of something, then the value they are placing on the entire thing—in this case, a defaulted loan—is simply \$25/.40, or \$62.50. Note the FDIC as receiver is retaining 60 percent of the equity of the LLC, so by definition, its share is valued at \$37.50 (or \$62.50 \$25).
- Given the FDIC's financial advisor's estimate of the loan's value in an immediate cash sale of \$40, the FDIC achieves a much better return by putting this loan in a structured sale. Specifically, the FDIC will receive \$25 immediately and is expected to receive \$37.50 over time as the asset is worked within the LLTC structure. This total of \$62.50 compares very favorably to the \$40 it was expected to have received had it sold the loan immediately. Indeed, it may be argued that the FDIC is statutorily required to engage in these transactions because they achieve the least loss resolution of failed bank assets (in this case, \$22.50 additional return) that the structured sale vehicle provides:
- A comparison of what the winning bidder paid to the UPB of this severely delinquent loan is misleading. First, suggesting that the winning bidder paid "25 cents on the dollar" for this loan ignores the fact that the winning bidder is only purchasing 40 percent of the equity in the LLC. So by that measure, it is more accurate to state it paid 25 cents on 62.5 cents for its 40 percent share of the LLC. Second, the inference that any discount amount or percentage off the UPB constitutes a "sweetheart" deal ignores the fact that this loan is severely delinquent and thus by definition, is worth substantially

- less than the UPB. Indeed, we would argue the winning bidder paid market value for its equity share of the LLC in a competitive sale and therefore there was no "sweetheart" deal.
- It is important to note that the likely value of the loan is greater than \$62.50. Remember that each dollar of recovery in the LLC is split 60 percent/40 percent with the FDIC. Hence, the winning bidder does not achieve a return of its initial investment until collections on the loan reach the \$62.50 level. The winning bidder is betting that it can collect more than that and thus achieve a return on its initial investment of \$25.

### Example 2: Leveraged transaction

- FDIC as receiver inherits one severely delinquent loan with an UPB of \$100.
- FDIC's financial advisor estimates an immediate cash sale of the loan would bring \$40. (In other words, the loan would only be worth 40 cents on the dollar if sold immediately for cash)
- FDIC as receiver forms an LLC and contributes the loan to an LLC in exchange for a 100 percent ownership interest in the LLC.
- The FDIC as receiver then offers to sell a 40 percent interest in the equity portion of the LLC (while FDIC retains a 60 percent interest).
- In order to induce greater competition for the structured sale, the FDIC offers leverage in the transaction. It does this by inducing the LLC to pay for 50 percent of the assets the FDIC as receiver contributed to the LLC by issuing a note payable to the receiver. This allows the winning bidder to put in half as much initial cash as it would in the unleveraged example. Importantly, this debt must be paid back in full from the cash flow generated by the LLC before any equity distributions are made to the LLC members.
- The winning bidder in a highly competitive sale offers to pay \$12.50 for the 40 percent equity interest and FDIC closes the sale. Although the bidder paid only half the cash it would have an unleveraged deal, the implied value of the assets remain \$62.50.
- As above, a comparison of what the winning bidder paid to the UPB of this severely delinquent loan is misleading. First, suggesting that the winning bidder paid "12.5 cents on the dollar" for this loan ignores the fact that the winning bidder is only purchasing 40 percent of the equity portion of the LLC, and that the equity portion is only 50 percent of the total capital of the LLC given the issuance of the purchase money note. So by that measure, it is more accurate to state it paid the equivalent of 12.5 cents on 31.25 cents for its 40 percent share of the equity portion of the LLC. And as above, the inference that any discount amount or percentage constitutes a "sweetheart" deal ignores the fact that this loan is severely delinquent and thus by definition, is worth substantially less than the UPB. Indeed, we would argue as we did in Example #1, that the winning bidder paid market value for its equity share of the LLC in a competitive sale and therefore there was no "sweetheart" deal.

#### The Specifics of the Rialto Deal

In February 2010, the FDIC closed two Structured Transactions (LLCs) with Rialto. The two transactions were composed of 5,511 distressed acquisition and development (ADC) loans representing approximately \$3.1 billion in UPB. These loans were severely distressed—over 80

percent of the asset portfolio was greater than 150 days delinquent at the time of the sale. Hence, the market value of these loans was significantly lower than the UPB at the time of sale just as we noted in the examples above. Rialto paid the FDIC as receiver approximately \$243 million in cash for a 40 percent equity interest in the two leveraged LLCs. The FDIC retained the remaining 60 percent equity interest, which had an implied value of approximately \$365 million. Additionally, the LLCs issued approximately \$627 million in purchase money notes to the FDIC as receiver. The FDIC competitively bid the equity interests in the LLCs with the sale notification being sent to more than 960 prequalified bidders, and bid packages sent to more than 57 potential bidders.

Using logic similar to that outlined in the examples above, Rialto did not pay "8 cents on the dollar" for \$3.1 billion in assets. In fact, Rialto paid approximately \$243 million for a 40 percent interest of the equity portion of the LLCs. While Rialto manages the day-to-day administration of the portfolio, it does not realize a recovery on its equity interest until the LLC fully repays the purchase money notes. Rialto's purchase price for its equity interest is the basis for establishing the implied value of the loan portfolio as a whole.

Similar to the definition of implied value outlined above, it is the sum of Rialto's equity interest, the FDIC's equity interest and the UPB of the purchase money notes at issuance. The implied value is calculated by adding the combined equity interests to the debt issued (which includes a guaranty fee of approximately \$18 million payable to the FDIC) and then dividing the total by the UPB of the portfolio. The implied value of the loan portfolio owned by the LLCs as illustrated and calculated below is approximately 40.5 percent.

When applying the purchase price definition and calculation to the Rialto structured sale the following purchase price is achieved based on the structure offered for this sale which was 1:1 debt to equity, 60 percent and 40 percent equity split to the FDIC and Rialto, respectively:

Unpaid Principal Balance of ADC Loan Portfolio Rialto Bid to Purchase 40 percent Equity Interest Divided by Rialto Equity percent	\$3,052,645,902 \$243,458,812 40 percent
Total Implied Value of Equity (\$243MM/0.40=\$608.6MM)	\$608,647,030
Purchase Money Notes before guaranty fee (1:1 debt/equity) FDIC Corporate Guaranty Fee (3 percent) Total Purchase Money Note	\$608,647,030 \$18,259,411 \$626,906,441
Total Loan Portfolio Value based on Sales Price Portfolio Unpaid Principal Balance Sold	\$1,235,553,471 \$3.052,645,902
Calculated Implied Value (\$1.235B divided by \$3.052B)	40.5 percent

While the implied value is 40.5 percent, the FDIC received approximately (i) \$243 million in eash upfront from Rialto for Rialto's equity interest in the LLCs, and (ii) \$627 million in purchase money notes. Recoveries after the LLCs fully repay the purchase money notes are split 60 percent for FDIC and 40 percent for Rialto.

In order for Rialto to receive a return on its equity investment, the LLCs must recover in excess of \$1.2 billion. The \$1.2 billion consists of the LLCs repayment of the \$627 million in purchase money notes plus \$608 million in equity disbursements. The \$608 million is derived by adding the approximately \$243 million for Rialto's 40 percent equity interest and approximately \$365 million for the FDIC's 60 percent equity investment. Rather than 8 cents on the dollar, it is more accurate to say that Rialto paid approximately 24.3 cents on 60.8 cents for its 40 percent share of the two LLCs.

In summary, Rialto paid market value for its interest in these loans in a highly competitive sale that is expected to achieve returns well in excess of those the FDIC would have achieved from an immediate cash sale of the loans. While the transaction initially realized an implied value for the portfolio of 40.5 percent of the UPB, the ultimate recovery will be determined over time based on the LLCs recovery on the loans.

Office of Legislative Affairs

June 26, 2012

Honorable Maxine Waters House of Representatives Washington, D.C. 20515

Dear Congresswoman Waters:

This letter is in response to your request for information during the testimony of Bret Edwards, Director, Division of Resolutions and Receiverships, on May 16, 2012, at the hearing entitled "Oversight of the Structured Transaction Program" before the Subcommittee on Oversight and Investigations of the House Financial Services Committee.

At the hearing you asked for information on the participation of minority- and women-owned businesses in the structured transaction and related programs. Enclosed is a report prepared by the Federal Deposit Insurance Corporation's Division of Resolutions and Receiverships that provides the information you requested.

We hope that this information is helpful. If you have further questions, please do not hesitate to contact me at 202-898-8730, or lke Jones, Legislative Attorney and Advisor, at 202-898-3657.

Sincerely,	
	(b)(6
Alice C. Goodman	
Acting Director	
Office of Legislative Affairs	

Enclosure

cc: Honorable Randy Neugebauer Chairman, Subcommittee on Oversight and Investigations

Honorable Michael E. Capuano Ranking Member, Subcommittee on Oversight and Investigations

### Response to questions from the Honorable Maxine Waters by Bret Edwards, Director, Division of Resolutions and Receiverships Federal Deposit Insurance Corporation

### <u>Participation of Minority- and Women-Owned Businesses in the FDIC's Structured</u> Transaction Program

#### Investor Pre-Qualification:

#### General Prospective Bidder Pre-Qualification

The FDIC initiated the structured transaction sales program in May 2008 and has entered into 32 LLC transactions to date. Structured sales transactions are marketed only to individuals and companies that can attest to a minimum net worth and institutional investors that meet the definition of bank, savings and loan association, or other institution as defined by the Securities Act of 1933, broker dealers under the Securities Exchange Act of 1934, and investment companies, business development companies or private business development companies as defined by the Investment Company Act of 1940 or the Investment Advisors Act of 1940, as applicable. In addition, prospective investors must attest, represent, and warrant to additional criteria including their ability to evaluate and bear the risk associated with such transactions and also sign the Purchaser Eligibility Certification. If an entity attests to these requirements, contact information for the entity is sent to the financial advisor retained by the FDIC to conduct the sale.

As of May 31, 2012, 713 prospective bidders have been pre-qualified to receive information on security sales, including structured sales transactions. One hundred twenty-two minority- and women-owned (MWO) firms have been pre-qualified comprising 17 percent of the pre-qualified investors.

May 31, 2612 a	Minurity and Women Owner Summary	
Race/Ethnicity	Gender	No. of
American Indian or Alaskan Native	М	1
	F	2
	Subtotal	<b>[5]</b>
Asian	M	25
	F	6
	Subtotal	[2] 医胆可引发
Black or African American	M	27
	F	7
	Subtotal	(146. <b>. 1</b> 04 (1 )
Native Hawaijan or	M	0
Other Pacific Islander:	F	0
	Subtotal	<b>有种种的</b> "是我,
Hispanic/Latino	М	16
	F	4
	Subtotal	经等款的 经

Woman or Entity Woman Owned	Y	33
	N	0
	Subtotal	
Claimed Minority		1
No Designation Provided		0
Total MWOB Firms		211 22 <b>102</b> 5 5 5

#### Transaction Specific Qualification

All prospective bidders wishing to bid on a specific transaction, after performing due diligence, must be approved by the FDIC to bid on the transaction. In order to be approved, the prospective bidder must demonstrate adequate capital to close the transaction and have the ability to manage and service the assets in the structure. In many cases, bidders form consortia or ventures comprised of several capital investors together with firms that have the necessary skill sets to manage and dispose of the assets in the transaction. The complexity of the transactions and need for multiple sources of capital and expertise create opportunities for firms to create ventures to bid on the transactions.

#### Tracking MWO Participation in Structured Transactions - 2010:

Early transactions did not ask prospective investors to provide information on their status as a minority- or woman-owned business (MWOB). Beginning in May 2010, the FDIC's Division of Resolutions and Receiverships (DRR) began reporting on the status of MWOB participation for individual transactions at key decision points: bidder qualification, bid submissions, and successful bids. In September 2010, DRR also began to collect MWOB information from investors, asset managers, and servicers pre-qualifying with DRR to receive announcements about upcoming structured transactions.

In response to investor feedback on the prior transactions, in late 2010 the FDIC announced that it would offer structured sales transactions with loan pools that were more geographically focused and had smaller aggregate values than prior transactions. In fulfillment of this announcement, the FDIC created the Small Investor Program (SIP) Pilot Sale with loans of equal or better quality than the loans previously included in the multibank structured loan sales to increase the opportunity for participation by diverse bidders or consortia of bidders.

#### **Structured Sales Program Awareness:**

During 2010 and early 2011, FDIC conducted outreach workshops for minority- and womenowned businesses and investors to educate firms on how to do business with FDIC and explore available opportunities. FDIC held eight workshops throughout the country. The FDIC sent out 5,300 invitations that resulted in 887 RSVPs and 615 attendees at the workshops. The programs were designed to accurately reflect opportunities for contracting and participation in asset sales at the FDIC, including the SIP Pilot Program. Prior to the SIP sale, DRR and the FDIC's Office of Minority and Women Inclusion (OMWI) included information about the SIP pilot program in the workshops to give prospective investors, asset managers, and servicers more time and information to form investor groups capable of bidding on the sales.

In addition to the workshops, DRR and OMWI follow-up regularly with MWOBs on an individual basis and attend conferences to help MWOBs, many of whom are smaller investors, understand the FDIC's programs.

#### Investor Match Program - September 2011:

As a result of feedback from the workshops, the FDIC launched the Investor Match Program (IMP) in September 2011 to encourage all firms interested in bidding on FDIC asset sales programs, especially minority and women-owned businesses, the ability to share information on their companies with other like-minded firms. The IMP is based on an automated platform that allows companies to network with each other so firms may form ventures to bid on FDIC asset sales programs. The FDIC benefits from use of the program by allowing investors, asset managers, and servicers the ability to communicate with each other in an effort to more effectively compete in structured sales transactions. As of May 31, 2011, 176 pre-qualified investors have registered to use IMP and 60 of the investors (34 percent of the users) are MWOBs.

### <u>Minority and Women-Owned Participation in Structured Sales Transactions</u> <u>Transactional Overview - 2010 - 2011:</u>

The following information reviews the participation of MWO entities in Structured Transactions in 2010 and 2011. Winning bidder teams that include a MWO component regardless of size are identified, along with the MWO category and the role in the investment team. It is important to note that the following information tracks marketing efforts for all structured sale transactions since April 2010. In certain cases, FDIC chose to award the sale on a cash basis when both cash and structured sales options were offered. In other cases, pools were allowed to be consolidated into one LLC when the same investor was the successful bidder on multiple pools.

#### 2010

- Of 13 structured sale auctions from April 2010 through December 2010, minority and women-owned businesses participated in 38 of 146 (26 percent) applications, 21 of 71 (30 percent) bids, and 7 of 13¹ (54 percent) winning bids.
- Of the 7 winning bids, 4 include minority investors, 2 include minority asset managers, and 1 includes a combination of minority- and woman-owned businesses as both lead bidder and asset manager.

Group	Applications*	Bids Submitted	:: Winning Blds / s
Minority	26	15	6
Women	12	б	[**
Total Minority & Women	38	21	7
Non-MWOB	108	50	6
Total	146	71	13

^{*} Only counts an application once even though a bidder may qualify and bid multiple times.

^{**} Represents a combination minority and woman-owned business participation.

¹ Structured Transaction Sales may have no winning bids or multiple winning bids.

#### Winning MWO Bidders:

Transaction :	Winning Bidder	MWO Category	Role (%)
2010-CRE-1	Colony Capital	Black or African	Investor
		American Male	
2010-CADC-1	Mariner RE Partners	American Indian or	Asset Manager
		Alaskan Native	
		Male	
2010-RADC-1	Mariner RE Partners	American Indian or	Asset Manager
<del>1</del>		Alaskan Native	A. everante
		Male	
2010-CRE-2 (SE	Hudson	Asian Female	Lead Bidder, Asset
Pool)			Manager
2010-CRE-2 (W	Colony Capital	Black or African	Investor
Pool)		American Male	***
2010-CRE-2 (N	Colony Capital	Black or African	Investor
Pool)		American Male	
2010-C/RADC-2	Colony Capital	Black or African	Investor
		American Male	

#### 2011

DRR completed nine competitive marketing efforts for structured transactions which had bid dates in 2011 (2011-SIP-2 closed in January 2012). Statistics from these auctions follow:

- Of 9 structured sale auctions during 2011, minority and women-owned businesses participated in 33 of 102 (32 percent) applications, 25 of 66 (38 percent) bids, and 5 of 10 (50 percent) winning bids.
- Of the 5 winning bids, 3 include minority investors, 1 includes a minority as both lead bidder and asset manager, and 1 includes a combination of minority- and woman-owned business as both lead bidder and asset manager.

Group :	Applications*	, Bids Sybmitted	Winning Blus
Minority	17	13	4
Women	16	12	**
Total Minority & Women	33	25	5
Non-MWOB	69	41	5
Total	102	66	10

^{*} Only counts an application once even though a bidder may qualify and bid multiple times.

^{**} Represents a combination minority and woman-owned business participation.

## Winning MWO Bidders:

Transaction *	Winning Bidder	MWO Category	Role
2011-SIP-1 (CRE, CADC)	Acorn (Oaktree)	American Indian or Alaskan Native Male	Investor
2011-SIP-1 (RADC)	Hudson	Asian Female	Lead Bidder, Asset Manager
2011-ADC-1	Acom (Oaktree)	American Indian or Alaskan Native Male	Investor
2011-ADC-2	Oaktree Capital	American Indian or Alaskan Native Male	Investor
2011-SIP-2	Mariner	American Indian or Alaskan Native Male	Lead Bidder, Asset Manager



Office of Legislative Affairs

June 26, 2012

Honorable Lynn A. Westmoreland House of Representatives Washington, D.C. 20515

Dear Congressman Westmoreland:

This letter is in response to your request for information during the testimony of Bret Edwards, Director, Division of Resolutions and Receiverships, on May 16, 2012, at the hearing entitled "Oversight of the Structured Transaction Program" before the Subcommittee on Oversight and Investigations of the House Financial Services Committee.

You asked for examples of the Federal Deposit Insurance Corporation funding loan commitments on acquisition, development, and constructions loans since 2008. Since 2008, the FDIC as receiver has funded over 1,100 commitments for approximately \$396 million. Enclosed is a detailed report prepared by the Federal Deposit Insurance Corporation's Division of Resolutions and Receiverships for the hearing record.

We hope that this information is helpful. If you have further questions, please do not hesitate to contact me at 202-898-8730, or Ike Jones, Legislative Attorney and Advisor, at 202-898-3657.

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#### Enclosure

cc: Honorable Randy Neugebauer Chairman, Subcommittee on Oversight and Investigations

Honorable Michael E. Capuano Ranking Member, Subcommittee on Oversight and Investigations

### Response to questions from the Honorable Lynn A. Westmoreland by Bret Edwards, Director, Division of Resolutions and Receiverships Federal Deposit Insurance Corporation

#### FDIC Receivership Funding and Repudiation of Unfunded Loan Commitments

As receiver for a failed institution, the Federal Deposit Insurance Corporation has a legal responsibility to maximize recovery for the benefit of depositors and creditors who may have lost money when the institution failed. In accordance with this responsibility, the FDIC must carefully analyze any requests for funding construction projects as well as evaluate the risks associated with the proposed transaction, to determine whether the funding will provide the best opportunity to achieve the highest possible recovery for the failed institution's estate. The FDIC's Division of Resolutions and Receiverships staff review each funding request on a "case-by-case" basis. If the advancement of funds for construction purposes will result in a net increase in the underlying collateral value or such funds will protect, preserve, or allow for build-out so that marketing of the real estate project can immediately begin, the FDIC as receiver may advance such funds. Since 2008, the FDIC as receiver has funded over 1,100 commitments for approximately \$396 million. Attached is a summary of the loan fundings by state.

At times, the statutory responsibilities of the FDIC have a necessary yet unintended consequence of delaying funding of construction draws for builders and developers as our receivership staff determine the value and viability of the construction project as well as the companies who have pledged to repay those loans. In some instances, following a detailed review of the project plans, appraisals, and current financial information from the company and/or guarantors, the receiver will make the decision that continued funding of a project will not minimize losses nor maximize recovery for the receivership estate and thus, the receivership will terminate funding on construction projects.

The overarching goal of the receiver is to wind up the affairs of the failed financial institution. In order to achieve that goal, the receiver is given the right under 12 U.S.C. Section 1821(e) to repudiate undertakings entered into by the failed financial institution where it finds such undertakings to be burdensome and where such repudiation will promote the orderly administration of the failed financial institutions affairs.

Accordingly, our receivership management personnel work to achieve a balance between making financial decisions that are in the best interests of the receivership estate while being cognizant of business decisions that may have an adverse financial impact upon construction companies, real estate developers, and small business enterprises—and to those they employ. Immediately following the failure, the FDIC contacts the loan customers of the failed bank to stress the importance of establishing a banking relationship with a local financial institution that will be able to provide on-going traditional lending and financing. We are aware that at many locations around the nation, the depreciating real estate environment has made it exceptionally difficult for many failed bank customers and business owners in the construction industry to successfully transition their banking relationships in an effort to obtain new lending sources. Nevertheless, we must base our decisions regarding continued funding of loans from a failed bank on our statutory duty to minimize losses and maximize recoveries for the failed bank receiverships.

	Failed Financial in	etitution	Number of	Total Amount of
Falled Financial Institution	City	State	Fundinge	Funding
st Centennial Bank	Redlands	CA	8	\$3,535,45
Ist Heritage Bank	Newport Beach	CA	1	\$301,06
st National Bank of Nevada	Reno	NV	185	\$54,723,45
Alpha Bank & Trust	Alpharetta	GA	8	\$2,189,52
Ameriβank	Welch	w	3	\$349,45
AmTrust Bank	Cleveland	он	9	\$14,543,33
ANB Financial	Bentonville	AR	51	\$20,030,89
Bank of Clark County	Vancouver	WA	6	\$1,681,43
Bank of the Commonwealth	Norfolk	VA	1	\$491,25
Sank of Wyoming	Thermopolis	ŴŶ	1	\$50,00
Sames Banking Company	Kaysville	UT	1	\$250,00 \$250,00
Broadway Bank	Chicago	IL.	2	
		V UT	1	\$2,080.53
Centennial Bank	Ogden		1	\$4
Citizens Community Bank	Ridgewood	NJ		\$21,07
Colonial Bank	Montgomery	AL	78	\$2,974,27
Columbian Bank & Trust	Topeka	KS	6	\$2,318,99
Community Bank of Nevada	Las Vegas	NV	3	5147,56
Community Bank of West Georgia	Villa Rica	GA	, 3	\$794,62
Corn Belt Bank & Trust	Pittsfield	ìL.	1	<b>\$53,5</b> 9
Corus Bank	Chicago	<b>L</b>	10	\$15,212,20
First Bank of Beverly Hills	Calabasas	CA	41	\$16,404,15
First Bank of Idaho	Ketchum	ID	7	\$461,82
First Georgia Community Bank	Jackson	GA	2	\$27,00
First Integrity Bank	Staples	MN	1	\$28,69
FirstCity Bank	Stockbridge	GA	32	\$2,443,25
Florida Community Bank	Immokalee	FL	3	\$205,42
Franklin Bank SSB	Houston	TX	148	\$27,051,08
Freedom Bank	Bradenton	FL	1	\$49.59
Haven Trust Bank	Suluth	GA	24	\$14,981,92
Home Savings of America	Little Falls	MN	96	\$21,281,61
ndependent Banker's Bank	Springfield	IL	6	\$2.865,11
IndyMac Federal Bank FSB	Pasadena	CA	2	\$30,99
Integrity Bank	Alpharetta	GA.		\$402,20
rwin Union Bank & Trust	Columbus	IN	2	\$6,08
La Jolla Bank FSB	La Jolla	ČA		\$46,95
MagnetBank	Salt Lake City	UT	2 3	
Main Street Bank	Northville	MI	8	\$118,88
	***************************************			\$876,06
Miami Valley Bank	Lakeview	OH	1	\$24,09
Nelbank	Alpharetta	GA	2	\$154,00
New Frontier Bank	Greeley	CO	7	\$255,03
Ocala National Bank	Ocala	FL	2	\$85,09
Republic Federal Bank	Miami	FL	1	\$115,97
Riverside Bank of the Gulf Coast	Cape Coral	FL	6	\$368.04
RockBridge Commercial Bank	Atlanta	GA	2	\$591,19
Sanderson State Bank	Sanderson	TX	1	\$62,00
Security Pacific Bank	Los Angeles	CA	3	\$767,38
Security Savings Bank	Henderson	NV	7	\$9,930,14
Silver State Bank	Henderson	NV	32	\$10,783,10
Silverton Bank	Atlanta	GA	151	\$158,302,90
Tennessee Commerce Bank	Franklin	TN	2	\$255,69
The Bank of Bonifay	Bonifay	FL	3	\$43,6
The Community Bank	Loganville	ĠĀ	7	\$1,174,1
Union Bank	Gilbert	AZ	2	\$393,26
Warren Bank	Warren	Mí	8	\$1,916,0
Westsound Bank	Bremerton	WA	16	\$1,767,82
	I Total	F F4 3	1011	\$396,140,1



Office of Legislative Affairs

July 13, 2012

Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to the questions submitted by Congressman Bill Posey subsequent to testimony by Richard Osterman, the Federal Deposit Insurance Corporation's Acting General Counsel, at the hearing on "Examining the Settlement Practices of U.S. Financial Regulators" before the Committee on Financial Services on May 17, 2012.

Enclosed are Mr. Osterman's responses. If you have further questions, the Office of Legislative Affairs can be reached at (202) 898-7055.

Sincerely	<u>,                                    </u>	(b)(6
Eric J. Sp Director	itler	
	Legislative Affairs	

Enclosure

### Response to questions from the Honorable Bill Posey by the Federal Deposit Insurance Corporation

Please provide the following data on your agency's settlement practices. Should your agency lack the authority to pursue criminal prosecutions, please tell me what referrals related to the questions posed your agency has given to the Department of Justice and the outcome of those referrals.

Q1: Number of criminal prosecutions pursued

Q2: Number of convictions arising from those prosecutions

A1&2: As you are aware, banks and their institution-affiliated parties who violate federal or state criminal statutes can be prosecuted by the United States Department of Justice (DOJ) or criminal prosecutors in the various states. The FDIC has no authority to pursue criminal prosecutions against banks and bankers, but it does play an important role in ensuring that information about suspected crimes is brought to the attention of criminal prosecutors, as do other federal and state regulators.

The FDIC has promulgated a regulation, 12 C.F.R. Part 353, that requires an insured state nonmember bank to file a Suspicious Activity Report (SAR) when the bank detects a known or suspected criminal violation of federal law or a suspicious transaction related to a money laundering activity or a violation of the Bank Secrecy Act. SARs are filed with the Financial Crimes Enforcement Network (FinCEN) of the United States Department of Treasury. When FDIC examiners discover suspicious activity and the bank has not filed a SAR, the FDIC will file a SAR with FinCEN. The FDIC 2011 Annual Report indicates that for the years 2009, 2010, and 2011, a total of 128,973, 126,098, and 125,460 SARs, respectively, were filed regarding open and closed FDIC supervised insured depository institutions. Of this total of 380,531 SARs filed, 301 were filed by the FDIC and the rest by banks the FDIC supervises. Law enforcement SAR review teams, made up of DOJ attorneys and agents from the Federal Bureau of Investigation, access and analyze the data collected by FinCEN for purposes of pursuing criminal investigations and possible criminal prosecutions and refer cases for prosecution to the appropriate United States Attorney.

While SARs are a critical tool in detecting and prosecuting crimes against financial institutions, they are only reports of suspected criminal activity, not evidence of a crime. Prosecutors at DOJ must decide whether to prosecute based on the facts, seriousness of the alleged crime, and available resources. Thus, while many SARs result in criminal prosecutions and convictions, many do not. While prosecutors may communicate informally with the FDIC in individual cases, any comprehensive statistics regarding prosecutions and convictions would have to come directly from DOJ.

The Office of Investigations of the FDIC's Office of Inspector General (OIG) works closely with the supervisory side of the FDIC to identify and investigate financial institution crime, especially various types of fraud. The OIG works cooperatively with U.S. Attorneys throughout the country and those efforts have resulted in the prosecution of numerous individuals for financial

institution fraud and mortgage fraud schemes. Highlights of the cases pursued by the OIG are detailed in its semiannual reports to Congress, which can be found on its website <a href="https://www.fdicig.gov">www.fdicig.gov</a> under the "Publications" tab. In addition, the following is a summary of the volume and outcome of Office of Investigations' cases during and following the most recent banking crisis.

#### Office of Investigations Open/Closed Cases Statistics

	-	•			
	Fiscal Year ending 9/30				
	2008	2009	2010	2011	2012
Total Cases Opened	79	83	79	75	36
Open Banks	41	33	23	36	25
Closed Banks	26	36	43	30	10
Total Cases Closed	53	48	38	52	34
Judicial Actions					
Indictments/Informations	123	137	169	184	53
Bank Officers/Directors	11	17	17	23	5
Convictions	103	100	109	168	46
Bank Officers/Directors	14	14	ક	25	5
Arrests	44	84	98	112	27

^{*}First half of FY 2012, ending 3/31/12

Additional information regarding these investigative activities can be obtained from the FDIC Inspector General at (703) 562-2166.

# Q3: Number and amount of stipulated settlements (and the total amount of damages to which the settlement pertains

A3: As FDIC witness, Richard Osterman noted in his May 17 testimony, with regard to open banks, most enforcement orders are issued based upon a stipulation with the respondent. From 2007 through 2011, the FDIC issued approximately 1,000 Cease-and-Desist Orders, 377 Prohibition Orders and 753 Civil Money Penalties (CMPs). To provide more detail on the CMPs assessed following the banking crisis of 2008, we reviewed all CMPs issued from 2009 through 2011. Excluding the CMPs assessed for inaccurate Home Mortgage Disclosure Act reporting and for Flood Disaster Protection Act violations, in 2009 the FDIC issued 33 CMPs with assessments totaling \$1,371,500. In 2010, the FDIC issued 59 CMPs with assessments totaling \$3,970,900. Finally, in 2011 the FDIC issued 49 CMPs with assessments totaling \$14,566,500. With respect to consumer enforcement cases where there is evidence of significant consumer harm, the FDIC typically seeks restitution for the benefit of aggrieved consumers. During the period 2009 through 2011, the FDIC issued 14 restitution orders against banks. Collectively, those orders resulted in \$65 million of restitution for consumers.

#### O4: Number of compensation committees examined for impropriety

A4: While the FDIC incorporates review of executive compensation as a matter of course in every safety and soundness examination, most of the financial institutions supervised by the FDIC are smaller community banks that do not have dedicated compensation committees. For these smaller institutions, executive compensation generally is addressed by the bank's board of directors or perhaps by an executive committee of the board. In examining for executive compensation, where the level of compensation does not match the duties and responsibilities of the office or is inconsistent with peer group comparison, FDIC examiners will further investigate the situation. In most cases where compensation irregularities are discovered, the institution will voluntarily address and correct the situation. In rare cases, the FDIC has been forced to pursue formal enforcement actions such as Cease-and-Desist Orders requiring correction and reimbursement of excessive compensation previously paid.



Office of Legislative Affairs

July 16, 2012

Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Enclosure

Thank you for your letter requesting the Federal Deposit Insurance Corporation review H.R. 4002, *Improving Security for Investors and Providing Closure Act of 2012*.

Your letter asks that the FDIC address the impact of the proposed legislation on the Deposit Insurance Fund (DIF), the preferred treatment that certificates of deposit could receive from non-FDIC insured institutions, and the effect on depository institutions given that preferred treatment and Securities Investor Protection Corporation's more generous coverage than that afforded by the DIF. Enclosed are technical comments prepared by FDIC staff that identify a number of significant issues raised by the bill.

Your interest in this matter is appreciated. If you have further questions, I can be reached at (202) 898-7140.

(b)(6)	-	Sincerely,
		Eric J. Spitler Director Office of Legislative Affairs

# Technical Comments on H.R. 4002 Provided by the Federal Deposit Insurance Corporation's Legal Division and the Division of Insurance and Research

Chairman Bachus' letter requests information on the potential impact of H.R. 4002 on the Deposit Insurance Fund (DIF), the preferred treatment that certificates of deposit (CD) could receive from non-FDIC insured institutions, and the effect on depository institutions given that preferred treatment and Securities Investor Protection Corporation's (SIPC) more generous coverage than that afforded by the DIF.

Under current law and the FDIC's deposit insurance regulations, a broker-dealer, acting as an agent or fiduciary for its customers, may place customer funds in a deposit account in an FDIC-insured bank in the form of CDs. In the event of a failure of that FDIC- insured bank, those customers would be entitled to "pass-through" deposit insurance coverage of up to \$250,000 per beneficial owner if the account is set up correctly. If the broker-dealer does not satisfy the requirements for pass-through coverage, the account would be deemed a corporate account with a maximum of \$250,000 in deposit insurance coverage.

Under current law, funds of customers of a broker-dealer deposited in an agency or fiduciary account in insured depository institutions in the form of a CD are funds owned by customers of the broker-dealers placing them at these banks. The failure of the broker-dealer would have no direct impact on the status of these funds. They would still belong to the beneficial owners of the account, i.e., the customers of the broker-dealer. In the event of the failure of the insured depository institution, the provisions of the Federal Deposit Insurance Act and its implementing regulations would govern the amount distributed from the failed institution on the CD, again for the beneficial owner, regardless of whether the broker-dealer is a going concern or has failed.

The language of H.R. 4002 relating to certificates of deposit, a term that is not defined, is ambiguous, so it is difficult to identify with any confidence the bill's possible impact on the DIF or insured depository institutions. A stated objective of the bill is to afford customers with claims against a failed broker-dealer the opportunity to apply for a one-time payment from SIPC. (In a recent decision issued by the District Court for the District of Columbia, the court denied the SEC's petition to compel SIPC to commence a liquidation proceeding in connection with a "Ponzi scheme" perpetrated by Alan Stanford, involving "certificates of deposits" issued by his uninsured Antiguan bank. Essentially, the court concluded that the victims were not customers of Stanford's broker-dealer for purposes of Securities Investor Protection Act.) Some of the questions that would need to be resolved include:

In the event of the failure of an insured depository institution (IDI), if the broker-dealer presents the FDIC with records sufficient to determine the interests of the individual customers, deposit insurance is paid to the broker for distribution to its customers whose funds were deposited in the CD. To the extent there are uninsured funds in the account, the broker-dealer would receive funds from the liquidation of the failed IDI's estate for distribution to its customers, if such funds are available.

- Is it the intention of the bill to include certificates of deposit issued by insured depository institutions in the proposed SIPC claims scheme, notwithstanding their insured status under the FDI Act?
- Does the bill intend to extend deposit insurance to "certificates of deposit" issued by financial institutions not insured by the FDIC, e.g., foreign banks and broker-dealers themselves?
- Does the bill intend to alter SIPC's liquidation functions when a broker-dealer fails? It is
  our understanding that SIPC works to return customers' cash, stock, and other securities,
  and other customer property to the customer when those customer assets are missing.
  Thus, if a customer's CD were missing, that is, not deposited in an FDIC-insured bank,
  the missing funds might be the subject of claim to be filed with SIPC and, under H.R.
  4002, an immediate, one-time only claim.

In light of the ambiguity in the text and the concomitant questions noted above, it is difficult to articulate the possible implications of extending SIPC insurance to foreign, non-FDIC insured bank CDs or to CDs issued by broker-dealers.

Similarly, without further clarification, we cannot determine the impact, including any competitive impact, on the DIF, on insured institutions and, importantly, on the customers that purchase a CD from a broker-dealer. For example, it is not clear in what name or capacity the CD would be issued, such as whether it would be the broker-dealer in an agency capacity or simply the broker-dealer.

Office of Legislative Affairs

August 7, 2012

Honorable Randy Neugebauer Chairman Subcommittee on Oversight and Investigations Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to the questions submitted by you and Congressman Westmoreland subsequent to testimony by Bret Edwards, the Federal Deposit Insurance Corporation's Director of Resolutions and Receiverships, at the hearing on "Oversight of the FDIC's Structured Transaction Program" before the House Subcommittee on Oversight and Investigations on May 16, 2012.

Enclosed are our responses. A copy was provided to Committee staff for the hearing record. If you have further questions, the Office of Legislative Affairs can be reached at (202) 898-7055.

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Enclosure

### Response to questions from the Honorable Randy Neugebauer by Bret D. Edwards, Director, Division of Resolutions and Receiverships, Federal Deposit Insurance Corporation

# Q1: How can the FDIC verify that pursuing structured transaction sales will maximize the return to the Deposit Insurance Fund?

A1: The verification is comprised of several components: analysis of performance, evaluation of structured sale results compared to the estimated cash sale value, and monitoring for compliance.

During the structuring process for each LLC, the FDIC's financial advisor prepares an estimated cash flow projection for the pool of loans being conveyed to the LLC, including how the cash flows will flow through the deal structure for distribution to the equity holders. These projections become the FDIC's baseline for subsequent monitoring of transaction performance. In the aggregate, for the 29 LLC transactions closed through September 2011, total projected equity distributions to the FDIC, as of March 31, 2012, are substantially in line with the FDIC's initial projections, with an approximate 0.1 percent difference.

Another measure is the comparison of selling the loans in a structured sale versus a cash sale. The present value of the cash flows to the FDIC on the LLC transactions as of the respective closing dates is compared to the cash sale value to determine the dollar amount of the benefit to the FDIC from having entered into the LLC transaction. As of December 31, 2011, the aggregate present value of actual and projected LLC cash flows to the FDIC, as of the closing dates for each LLC transaction, was approximately \$11.7 billion (or 47.2 percent of the initial unpaid principal balance (UPB)), compared to the cash sale values of approximately \$7.4 billion (or 29.8 percent of the initial UPB). By this measure, the benefit to the FDIC of having entered into the LLC transactions instead of selling assets for cash is approximately \$4.3 billion (or 17.4 percent of initial UPB).

The managing members are required by the LLC agreements to maximize return to the LLC. The FDIC monitors management of the portfolio and compliance with the agreements by reviewing monthly reports, reviewing actual performance against consolidated business plans, and conducting site visitations on at least an annual basis. In addition, the FDIC utilizes an accounting contractor to perform closing and interim management reports and review and process monthly cash flow and account statements.

# Q2: What discounts and financing does the FDIC provide to its private sector partners to facilitate structured transaction sales?

A2: When the FDIC as receiver conveys assets to an LLC it receives as payment all of the equity interest in the LLC, as well as, in some cases, purchase money notes. The FDIC then sells a portion of the equity (typically 40 percent) to private sector partners. The LLC repays the purchase money notes over time from cash flow generated by the LLC, and the repayment of the purchase money notes is made prior to the members of the LLC receiving any equity

distributions. The FDIC does not offer any discounts, but rather conveys the assets to the LLC based on the market value of the assets.

It is important to note that the managing member pays cash to the FDIC for its winning bid amount. The FDIC does not finance the managing member's equity interest.

## Q3: Can FDIC managing partners use TARP funds to purchase their equity interest in LLCs?

A3: No buyers to date had received TARP funds.

# Q4: How many complaints has the FDIC received from borrowers whose loans have been transferred into structured transaction sales?

A4: Of the more than 42,300 assets that the FDIC transferred into structured transactions, the FDIC has received a total of 181 inquiries from borrowers from June 2010 to the present.

# Q5: How does the FDIC manage complaints received from borrowers whose loans have been transferred into structured transaction sales?

A5: When the FDIC receives a borrower's inquiry, the following steps are performed:

- We determine if the inquiry is associated with a structured transaction;
- We contact the borrower, usually via email;
- The inquiry is assigned to an FDIC specialist, who contacts the acquirer of the loan to obtain and review the information that will address the borrower's specific concerns;
- Following review and approval, a response is mailed to the inquiring party.

# Q6: How many complaints has the FDIC received from Members of Congress advocating on the borrowers' behalf?

A6: From June 2010 to the present, the FDIC has received 80 inquiries from Members of Congress relating to borrowers whose loans were sold in structured transactions.

# Q7: How does the FDIC manage complaints received from Members of Congress advocating on the borrowers' behalf?

A7: A Congressional inquiry is handled similarly to a direct inquiry from a borrower described above. Inquiries are carefully tracked to assure a prompt response. The inquiry is assigned to an FDIC specialist, who contacts the acquirer of the loan to obtain and review the information that will address the borrower's specific concerns. Following confirmation that we have a signed

Privacy Act release from the constituent, a response is then prepared for the Member of Congress so they can provide a response to their constituent.

#### Q8: How many more structured transaction sales are in the pipeline?

A8: There are currently several structured transaction sales in the pipeline. The first to be offered will be a Small Investor Program (SIP) sale from a single receivership. A multi-receivership offering is in the initial planning and development stages. The portfolio has not been finalized, but the sale is expected to include commercial real estate, acquisition development and construction and single family residential loans from 70 receiverships. It is expected that additional loans will be included from new receiverships. The sales are projected to bid in the fourth quarter and close before year-end.

#### Q9: Is there an end date for the structured transaction sales program?

A9: No, there is no anticipated end date at this time, but frequency and volume is likely to diminish going forward. Nationally, through August 6, 2012 there have been 454 bank failures since the beginning of 2008. While still high, the current pace of failures is slowing. As of August 6, 2012, there have been 40 financial institution failures in 2012 compared to 63 failures at this same point last year. Additionally, a contributing factor that affects the structured transaction sales program is the type of resolution and the number of loans the FDIC retains.

# Q10: On what criteria will the FDIC judge the ultimate success of the structured transaction sales program?

A10: The transaction agreement term is generally seven years for commercial real estate and acquisition, development and construction loan sales, and ten years for single family residential loan sales. As such, the success of the structured transaction sales program cannot be completely measured until termination of the agreements. An analysis of the overall recovery considering the costs of marketing and monitoring as compared to selling the loans in a cash sale will be the most meaningful way to judge the success of the program. The FDIC gathers substantial data throughout the course of these transactions so we will have the ability to evaluate costs, recovery, and many other factors.

# Q11: Does the FDIC direct its private sector partners' approach to collecting outstanding debt on loans transferred into structured transactions LLCs?

A11: The transaction documents provide that the managing member service and liquidate the assets in the way in which a prudent servicer would do. While the FDIC does not direct the collection efforts of the managing member, the FDIC has a monitoring process in place to ensure that the managing member and its servicer comply with the terms of the Servicing Agreement and other transaction documents. If a servicer fails to comply with the servicing standard, the

FDIC has the right to put the managing member in default and, among other remedies, remove the servicer.

An example of servicing standards for loans secured by single-family properties is the requirement that the managing member implement a loan modification program consisting of either: (i) HAMP, (ii) the FDIC's mortgage loan modification program, or (iii) a managing member proprietary program that is approved by the FDIC.

# Q12: Why does Rialto seem to have a much higher number of Congressional inquiries regarding its practices than other managing members in the structured transaction sales program?

A12: Of all structured transactions sold to date, Rialto is the managing member with the highest number of loans. In addition, at the time of the sale, 89 percent were non-performing acquisition, development, and construction (ADC) loans, with many of the remaining loans expected to default prior to their maturity date due to collateral characteristics and type. Over 80 percent of the loans were more than 150 days delinquent. Many of the ADC loans have undeveloped land or vacant land as collateral, and it is difficult to restructure a loan with collateral that does not have a payment stream. The large number of ADC loans combined with the high percentage of delinquencies is a significant contributor to the number of congressional inquiries received by the FDIC. Since the structured transaction sale, the number of inquiries and the percent of these inquiries to total assets transferred to the LLCs is less than 1 percent.

### Response to questions from the Honorable Lynn Westmoreland by Bret D. Edwards, Director, Division of Resolutions and Receiverships, Federal Deposit Insurance Corporation

# Q1: Has the FDIC established a taskforce of independent experts to evaluate and submit recommendations on the high number of bank failures?

A1: Certain internal and external groups are reviewing aspects of the recent banking crisis and have made or will make recommendations to the FDIC regarding changes to policies, programs, and deposit insurance.

As of the end of June 2012, the FDIC's Office of Inspector General (OIG) had completed 96 Material Loss Reviews (MLR), 11 in-depth reviews, and 141 failed bank reviews as required by statute. In addition to those efforts, in May 2009, the OIG issued an internal memorandum that outlined the major causes, trends, and common characteristics of FDIC-supervised financial institution failures that had resulted in a material loss to the DIF. That memorandum, in part, prompted the FDIC to make a number of process changes to its supervision program in order to more quickly identify potential issues in banks at risk of deterioration. In December 2010, the OIG published the results of an audit that identified (1) the actions that the FDIC had taken to enhance its supervision program since the May 2009 memorandum, and (2) trends and issues that had emerged from subsequent MLRs. The OIG's report stated that the FDIC had either implemented or planned actions that substantially addressed its previously reported MLR-related trends and issues and that would enhance the FDIC's supervision program. The report included additional recommendations, which the FDIC's Division of Risk Management Supervision agreed to implement.

The OIG also has embarked on a comprehensive study of bank failures in accordance with Pub. L. No. 112-88, which requires the study of bank failures and the effects of shared-loss agreements; examination policies associated with troubled loans, appraisals, capital, and enforcement orders; and capital investment policies. The legislation also requires the Government Accountability Office to study the causes of bank failures since 2008, as well as similar topics that the OIG is addressing.

Pursuant to the recommendations of a study of Prompt Corrective Action (PCA) by the banking agencies' Inspectors General, FDIC staff is exploring the feasibility of incorporating non-capital triggers into the PCA framework. We also are studying how various risk factors should affect deposit insurance premiums. The FDIC's large insured depository institution assessment system was revised in April 2011 to better differentiate for risk and to better take into account losses the FDIC may incur should a large institution fail. Similarly, staff is evaluating the small bank deposit insurance assessment system to determine if changes are needed to account for risk taking observed in the majority of smaller institutions that have failed in recent years.

In a related area, the FDIC is conducting a comprehensive study of the future of community banking. The study will review the last 25 years and address a variety of issues related to

community banks, including their evolution, characteristics, performance, challenges, and role in supporting local communities. More information on these studies will be available later this year.

Finally, the FDIC established the Advisory Committee on Community Banking in May 2009 to provide the FDIC with advice and guidance on a broad range of critical policy issues impacting small community banks, as well as the local communities they serve. The Advisory Committee, which is composed of a cross-section of community bankers from across the country, has discussed issues related to the financial crisis, the bank resolution process, and the impact of the Dodd-Frank Act on community banks.



Office of Inspector General

#### TRANSMITTED VIA ELECTRONIC MAIL

August 27, 2012

Honorable Darrell Issa Chairman Committee on Oversight and Government Reform U.S. House of Representatives Washington, DC 20515-6143

Dear Mr. Chairman:

Thank you for your interest in the federal Inspector General (IG) community. This letter responds to your August 3, 2012 letter, which highlighted the need for an IG's prompt and frequent communication with the Congress and asked questions related to the specific communication mechanisms of my office. Provided below are the answers to your questions.

1. Since January 1, 2009, have you issued any seven-day letters? If yes, please describe the matters involved.

The FDIC Office of Inspector General (OIG) has not issued any seven-day letters since January 1, 2009.

2. Since January 1, 2009, have there been any serious or flagrant problems at your agency that were not reported to Congress? If yes, please describe the matters and explain why Congress was not informed.

There have not been any serious or flagrant problems at the FDIC that were not reported to the Congress by the FDIC OIG.

3. Please explain what you and your staff understand section 4(a)(5) of the IG Act to require.

I view maintaining an active dialogue with the Congress to be one of my basic responsibilities as an Inspector General. The IG Act mandates that I keep the FDIC Chairman and the Congress fully and currently informed concerning fraud and other serious problems, abuses, and deficiencies relating to the administration of FDIC programs and operations; recommend corrective action concerning such problems, abuses, and deficiencies: and report on the progress made in implementing such corrective action. This dual reporting responsibility is the framework under which IGs perform their functions, and serves as a legislated safety net that protects the OIG's independence and objectivity and provides an avenue for open and direct communication.

My office places a high priority on communicating with the Congress in a timely, complete, and high-quality manner. We have at our disposal and employ, as

circumstances warrant, a variety of tools to ensure effective, full, and current communications with the Congress. As discussed below, some of these tools are specifically required by law while other mechanisms have been cultivated over time to develop and foster these communications.

First, Section 5 of the IG Act sets forth very specific requirements for each IG to follow related to semiannual reporting. For each semiannual period ending March 31 and September 30, my office produces reports that describe our audit, evaluation, and investigation work related to FDIC programs and operations, detail the status of the FDIC's implementation of recommendations for corrective action, and highlight the statistical accomplishments of this work. My office takes this reporting responsibility very seriously and spends the appropriate resources needed to deliver a comprehensive, high-quality, and informative report every 6 months.

Section 5 also provides for immediate reporting to the Congress, in the form of a "seven-day letter." As previously noted, I have not, to date, become aware of any particularly serious or flagrant problems, abuses, or deficiencies relating to the administration of FDIC programs and operations that would warrant my immediate reporting to the FDIC Chairman and the Chairman's transmission of a "seven-day letter" to the Congress.

Additionally, over time, my office has developed a set of congressional communication protocols to guide and foster its relationship with the Congress. I believe these protocols set forth the type of relationship that was envisioned by the requirements spelled out in section 4(a)(5) of the IG Act. Specifically, my office routinely communicates with both majority and minority leadership and staff of the committees and subcommittees overseeing FDIC and OIG programs and operations on matters of importance, and as requested, will offer briefings or testify on issues of interest to the committee and subcommittee leadership.

In that regard, I consider the mandated reviews, per Section 38(k) of the Federal Deposit Insurance Act, that my office conducts on failed FDIC-supervised banks that caused a material loss to the Deposit Insurance Fund to be a matter of importance. A material loss review (MLR) ascertains why the bank failed and reviews the FDIC's supervision. Over the last 4 years, my office has completed 96 MLRs. As a matter of policy, my office sent the completed MLR reports to the House and Senate leadership of the Financial Services and Banking, Housing, and Urban Affairs Committees, respectively; the Senators representing the state where the failed institution's main office is located; and the Member of the Congress representing the district of the failed institution's main office. In addition, we shared with committee leadership a report, entitled Follow-up Audit of FDIC Supervision Program Enhancements (December 2010), in which we reported on the actions that the FDIC took in response to our MLR-related work and identified trends and issues that emerged from this comprehensive body of work.

Finally, as appropriate, we interact directly with congressional staff to communicate the results of audits and evaluations and, as needed, non-public information related to investigations; offer comments on legislation and regulations; and discuss areas of

interest whereby the committee or subcommittee leadership could request a review of an FDIC program and operation. Should a committee or subcommittee leader request that the OIG conduct a review on a particular issue, we work with the staff to ensure understanding of the request and generally brief the staff on the results of work before that work is made public. We also respond to requests from committee or subcommittee leadership for reports that have not yet been made publicly available and respond directly to inquiries from Members of the Congress in a timely, thorough, and high-quality manner. Finally, we routinely provide materials related to OIG funding to our appropriators and provide briefings and statements for the record, as requested.

Prior to the financial crisis, my office would routinely reach out to those committees and subcommittees overseeing FDIC programs and operations and brief staff, on a bi-partisan basis, on our business plan for future audits and evaluations, and our focus for investigative work. A primary purpose of these briefings was to highlight recently completed work and obtain feedback from the staff on the committees' areas of interests. These meetings were extremely useful in focusing the OIG's priorities going forward. With the mandated reviews noted above by Section 38(k) and a year-long, comprehensive study on the impact of the failure of insured depository institutions required by P.L. 112-88 (to be issued no later than January 3, 2012), we have had little opportunity over the last 3 years to conduct work outside of what was required by law. As the crisis-driven demand for our work has begun to decline, we are currently undertaking a business planning effort and plan to obtain input from interested committee and subcommittee staff regarding areas of interest when the 113th Congress convenes.

Complementing the more specific mechanisms for communicating with the Congress discussed above, my office maintains a public website, <a href="www.fdicig.gov">www.fdicig.gov</a>, where audit and evaluation reports, press releases related to criminal investigations, and other important information related to the OIG are posted. We offer a subscription service on our website whereby congressional staff and members of the public can subscribe to be notified when we post a document.

I appreciate the opportunity to share my views on the importance of open, prompt, and frequent communication with the Congress, and the professional, responsible manner in which my office puts the mechanisms detailed in this letter into practice to serve the needs of the Congress. We are also providing a copy of our response to the Committee's Ranking Minority Member. If you need additional information, please feel free to contact me at (703) 562-2166 or or Leslee Bollea. Congressional Relations Director, at (703) 562-6311 or

	nation, please feel free to contact me at (703) 562-2166 or Leslee Bollea, Congressional Relations Director, at (703) 5
(b)(6) Sincerely.	
Jon T. Rymer Inspector General	

### Office of the Comptroller of the Currency Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation

September 11, 2012

The Honorable Barney Frank United States House of Representatives Washington, DC 20515

Dear Representative Frank:

Acting Chairman

Federal Deposit Insurance Corporation

Thank you for your letter dated July 30, 2012, regarding the rulemaking by the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve, and the Federal Deposit Insurance Corporation (collectively, the "Federal banking agencies") to revise their respective risk-based capital requirements.

In your letter, you suggest that the Federal banking agencies coordinate the final risk-based capital requirements applicable to residential mortgage loans with the standards outlined in the final versions of the Qualified Mortgage (QM) and Qualified Residential Mortgage (QRM) rulemakings. You state that loans that meet these standards should be classified as "category 1 residential mortgage exposures" for purposes of the risk-based capital rules and should receive preferential risk weighting.

In crafting the definition of "category 1 residential mortgage exposures," the Federal banking agencies were mindful of the proposed standards for the QM and QRM and have requested comment from the public on all aspects of the proposed risk-based capital rules. Moreover, in Question 5 of the notice of proposed rulemaking titled "Regulatory Capital Rules: Standardized Approach for Risk-weighted Assets; Market Discipline and Disclosure Requirements," the Federal banking agencies specifically requested comment on whether mortgages that meet the QM definition (which has not yet been finalized) should be included in category 1 residential mortgage exposures.

The Federal banking agencies will carefully consider all comments and suggestions on the proposals, including your letter, in determining how to move forward with the rulemaking. (b)(6)Sincerely. (b)(6)Thomas L Curry Ben S. Bernanke (b)(6)Comptfoller Chairman Office of the Comptroller of the Currency Board of Governors of the Federal Reserve System (b)(6)(b)(6)Martin J. Gruenberg/ (b)(6)



#### FEDERAL DEPOSIT INSURANCE CORPORATION, Washington, DC 20429

OFFICE OF THE CHAIRMAN

September 17, 2012

Honorable Tim Johnson Chairman United States Senate Committee on Banking, Housing, and Urban Affairs Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for the opportunity to testify before the Committee at the June 6, 2012 hearing Implementing Wall Street Reform: Enhancing Bank Supervision and Reducing Systemic Risk.

Enclosed are my responses to the follow up questions you provided to complete the hearing record. If you have further questions or comments, please do not hesitate to contact me at (202) 898-3888 or Eric Spitler, Director of the Office of Legislative Affairs at (202) 898-7140.

	Sincerely,
(b)(6)	
	Martin J. Gruenberg Acting Chairman

Enclosure

### Response to questions from the Honorable Roger Wicker by Martin J. Gruenberg, Acting Chairman Federal Deposit Insurance Corporation

Section 165 of the Dodd-Frank Act requires certain nonbank financial companies and each bank holding company with total consolidated assets of \$50 billion or more to periodically file a Resolution Plan, or "living will," for the company's resolution in the event of material financial distress or failure, and to report on the nature and extent of each company's credit exposures. In implementing this requirement, please explain:

Q1: Whether and to what extent the FDIC will compare Resolution Plans submitted by each institution to assess how many have identified the same issues in their plans and whether that might have systemic risk implications.

A1: The FDIC's plan review process is designed to include a 'horizontal review' of certain identified topics expected to be addressed by each institution. This horizontal review includes an analysis of the strategies of each institution put forward for its material entities, as well as the various resolution regimes (such as bankruptcy for holding companies, receiverships for insured depository institutions and administrations for foreign entities) under which the material entities will be required to be resolved, identified obstacles, related mitigants to those identified obstacles, and the assumptions upon which the institution relies to support the feasibility of those strategies.

This comparative review will help to focus on key systemic issues that have been raised in the industry domestically as well as globally. The review will include:

- interconnections and interdependencies such as cross company borrowing, lending, or shared services;
- the treatment and booking of derivatives, domestically and cross-border
- the impact of qualified financial contracts;
- the ability to separate and substitute core business lines and critical operations;
   and
- the reliance on common global payment systems and financial market utilities and infrastructures.

Additionally, the comparative review and assessment will help to identify gaps and areas that may require further regulatory consideration and guidance in order to strengthen the oversight of systemically important financial institutions.

Q2: To what extent regulators have ascertained the costs to the private sector of preparing Resolution Plans. (Has the FDIC considered asking each company to compile a cost of assembling such a plan?)

A2: Each of the companies that were required to submit plans by July 1, 2012, expended significant resources in developing their resolution plans, representative of the seriousness placed on these plans and the challenges associated with a first time reporting requirement. In addition to the dedication of internal staff resources, many of these initial companies, which included the largest and most complex financial institutions, also hired external legal, accounting, and general consulting firms to support their efforts. The FDIC has not asked each company to compile the total cost of assembling such plan. In conjunction with the 165(d) rulemaking, the FDIC developed some preliminary estimates of the hours that would likely be required to complete the initial plan submissions, which assumed an internal preliminary estimate of 9,200 hours for an initial full report by the largest institutions and approximately half that amount for others. Once baseline plans are established, we would anticipate the burden to be substantially less in future years. These estimates did not include the cost of systems upgrades and other investments that firms may make in order both to comply with the ongoing requirements and to better manage resolution risk.

Q3: Whether the FDIC intends to report to Congress or otherwise release any information about what the FDIC has learned as a result of receiving such information.

A3: Please see response to Question 2.

Q4: Whether the FDIC expects that its review of the initial Resolution Plans will form the basis of revising the requirement for the institutions required to file by July 1, 2013.

A4: Yes, we expect that the FDIC and the Federal Reserve Board (FRB) will provide further guidance to those institutions that are required to submit initial plans by July 1, 2013, that will be informed by our review of the first submissions. These initial plans will inform the FDIC and FRB as to whether the guidance provided to the firms needs further clarification, and which assumptions provided to the firms should be modified. Through a comparative review of the plans, we expect to identify the approaches which best address the intent of the resolution plan requirement and facilitate FDIC and FRB review.

We also anticipate that guidance for those institutions required to file by July 1, 2013, may be modified beginning in the fourth quarter of 2012 because of the nature of those firms relative to the initial filers, which included some of the largest and most complex financial institutions.

Q5: With respect to the FDIC's stated intention to resolve a failing financial institution by placing the top-tier holding company into the orderly liquidation authority and continuing to operate all of the subsidiaries, how, if at all, this approach should affect the content or direction of a Resolution Plan.

A5: The "Living Wills" are the firms' plans to resolve themselves under the U.S. Bankruptcy Code and therefore the plans should not be affected by the FDIC's strategies for resolving the firms under Title II of the Dodd-Frank Act.

Q6: Whether the FDIC intends to report to Congress or otherwise release any information about what the FDIC has learned as a result of reviewing Resolution Plans.

**A6:** The public portion of the plans are currently available to the public on our website and have been the subject of considerable analyst comment.

#### Q7: Whether Resolution Plans will be used in enforcement actions.

A7: The Resolution Plans are not being sought for the purpose of developing or supporting an enforcement action. If, however, a situation arises in which a Resolution Plan (or a portion of it) would constitute relevant evidence in an enforcement action, there is no prohibition on the FDIC or another appropriate federal regulator using it for that purpose.

Q8: While the Dodd-Frank Act does not appear to require that an institution make any part of its Resolution Plan public, federal regulations seem to permit an institution to prepare a public section (with the institution exercising its own judgment about what information is proprietary and should not be disclosed). Does the FDIC plan to second-guess those judgments? Does it plan to issue any further guidance about the content of the public section?

A8: 12 CFR Part 381.8(c) sets forth the required elements of the public section of a resolution plan filed pursuant to section 165(d) of the Dodd-Frank Act. The FDIC intends to review the public section of each resolution plan for compliance with this subsection of the regulation. Based on this review, the FDIC's Office of Complex Financial Institutions may add to or amend one or more of the required elements. However, there are no specific plans to do so at this time.

Q9: With regard to the confidential portion of a Resolution Plan, will the FDIC accord it the same degree of confidentiality that it accords reports of examination? If not, why not, and what degree of confidentiality would the FDIC extend to such information? How widely will the FDIC share a Resolution Plan with other banking regulators?

A9: Yes, the FDIC will provide the Resolution Plans with the same level of confidentiality as accorded to reports of examination. Section 112(d)(5)(A) of the Dodd-Frank Act (18 U.S.C. §5322(d)(5)(A)) requires the Federal Reserve Board and the FDIC to maintain the confidentiality of any data, information, and reports submitted under Title I (including the resolution plans prepared and submitted as required under section 165(d) of the Dodd-Frank Act), and the FDIC fully intends to comply with that legal requirement. The FDIC has implemented security practices for the plans to ensure that we maintain their confidentiality consistent with applicable exemptions under the Freedom of Information Act (5 U.S.C. 552(b)) and the FDIC's Disclosure of Information Rules (12 CFR part 309).

The FDIC will share the resolution plans with other banking regulators to the extent permitted by law.

# Response to questions from the Honorable Pat Toomey by Martin J. Gruenberg, Acting Chairman Federal Deposit Insurance Corporation

When Congress passed the Volcker Rule provisions of the Dodd-Frank Act, Congress intended to give regulators the authority to exclude venture capital funds from the definition of "covered funds." In a recent study, the FSOC recommended "that Agencies carefully evaluate the range of funds and other legal vehicles that rely on the exclusions contained in section 3(c)(1) or 3(c)(7) and consider whether it is appropriate to narrow the statutory definition by rule in some cases."

- Q1. Do you agree that you have the authority and discretion to exclude venture capital funds from the definition of "covered funds?"
- Q2. Do you agree that sound venture capital investments lead to job creation and economic growth?

A1 & 2: Section 619(h)(2) of the Dodd-Frank Act defines the terms "hedge fund" and "private equity fund" as "an issuer that would be an investment company, as defined in the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.), but for section 3(c)(1) or 3(c)(7) of that Act, or such similar funds as the appropriate federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission may, by rule, as provided in subsection (b)(2), determine." This definition, as written, would cover the majority of venture capital funds.

As part of the Notice of Proposed Rulemaking (NPR), the agencies sought public comment on whether venture capital funds should be excluded from the definition of "hedge fund" and "private equity fund" for purposes of the Volcker Rule. In Question 310 in the NPR, the agencies ask:

Should venture capital funds be excluded from the definition of "covered fund"? Why or why not? If so, should the definition contained in rule 203(*l*)-(1) under the [Investment] Advisers Act be used? Should any modifications to that definition of venture capital fund be made? How would permitting a banking entity to invest in such a fund meet the standards contained in section 13(d)(1)(J) of the [Bank Holding Company Act]?

Sound venture capital investments, like other investment activities, can contribute to job creation and economic growth. In conjunction with the development of the final rule, the agencies are reviewing public comments responding to the NPR, including comments on Question 310 related to venture capital funds. The agencies will take these and all comments into consideration in the development of the final rule.

# Response to Questions from the Honorable David Vitter By Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Q1: On December 31st, Section 343 of the Dodd-Frank Act, addressing unlimited FDIC-insurance coverage for non-interest bearing transaction accounts, is scheduled to sunset. As you know this section was based upon the FDIC's Transaction Account Guarantee Program. Whether or not TAG is extended through the end of the year, it is clear that this type of supernatural government involvement cannot be maintained indefinitely. Can you advise the Committee whether any alternatives exist, or which are under consideration by the FDIC, that would instill the confidence our small businesses and our local governments need to avoid having to pull payroll or transaction accounts from their local community banks since each Friday it seems that these folks read about some local bank being put on the FDIC's receiverships list?

# Q2: What precisely has the FDIC done to foster the development of private sector solutions to TAG?

A1&2: From the FDIC's standpoint, the most effective action that bank regulatory agencies can take to maintain the confidence of small business and local government depositors in their community banks is to ensure that these banks strengthen their capital and liquidity positions. To the great credit of community banks, with the encouragement of bank examiners, they have significantly strengthened their capital and liquidity over the past several years. As of June 2012, the average leverage capital ratio for banks with less than \$1 billion in assets was 10.3 percent, almost exactly what it was at the end of 2007, when it was 10.4 percent, and more than it was at the end of 2002, when it was 9.6 percent. As of June 2012 the average ratio of short-term assets to short-term liabilities for commercial banks with less than \$1 billion in assets was 105.7 percent, compared to 84.7 percent at the end of 2007 and 86.7 percent at the end of 2002. These actions by community banks to increase their capital and liquidity are, in fact, a strong private sector response to the issue of maintaining confidence.

# Response to questions from the Honorable Sherrod Brown by Martin J. Gruenberg, Acting Chairman Federal Deposit Insurance Corporation

During the June 6th hearing, Mr. Gruenberg agreed that "historically, including to the present day, the biggest risk of banking is the lending activity that is inherent to the banking process."

In testimony before the Subcommittee on Financial Institutions and Consumer Protection on May 9th, the former Chief Economist of the Senate Committee on Banking, Housing, and Urban Affairs stated:

"In a remarkably understated 2007 annual inspection report on Citigroup, the Federal Reserve Bank of New York observed that '[m]anagement did not properly identify and assess its subprime risk in the CDO trading books, leading to significant losses. Serious deficiencies in risk management and controls were identified in the management of Super Senior CDO positions and other subprime-related traded credit products.' By the end of 2008 Citigroup had written off \$38.8 billion related to these positions and to ABS and CDO securities it held in anticipation of constructing additional CDOs."

Testimony of Marc Jarsulic, Chief Economist, Better Markets, Inc., before the Senate Committee on Banking Housing and Urban Affairs Subcommittee on Financial Institutions and Consumer Protection, "Is Simpler Better? Limiting Federal Support for Financial Institutions" 9, May 9, 2012.

According to accounts of the hearings held by the Financial Crisis Inquiry Commission, two witnesses agreed that CDOs were responsible for Citigroup's financial difficulties:

"[Former Citigroup chief executive Charles] Prince ultimately blamed much of Citi's problems on CDOs, which he said were complex and entirely misunderstood. He said the company, its risk officers, regulators and credit rating agencies believed CDOs were low-risk activities. As it turned out, they resulted in \$30 billion worth of losses...

"[Former Comptroller of the Currency John] Dugan, too, put much of the blame on CDOs, partly as a way of defending his own agency. He said the bank, which the Office of the Comptroller of the Currency oversaw, did not damage the holding company, while Citi's securities broker-dealers, which managed the CDOs and were overseen by the Securities and Exchange Commission, were at fault.

'The overwhelming majority of Citi's mortgage problems did not arise from mortgages originated by Citibank,' Dugan said. 'Instead, the huge mortgage losses arose primarily from the collateralized debt obligations structured by Citigroup's securities broker-dealer with mortgages purchased from third parties.'"

Cheyenne Hopkins, No One Was Sleeping as Citi Slipped, Am. BANKER, Apr. 8, 2010.

Q1: Do you agree with the New York Fed, the former Comptroller of the Currency, the former Chief Economist of the Senate Banking Committee, and the former CEO of Citigroup that CDOs were a substantial cause of Citigroup's financial difficulties in 2008, resulting in significant support from the federal government, including capital injections from the Treasury Department, debt guarantees from the FDIC, and loans from the Federal Reserve?

A1: Without getting into the specifics with respect to Citigroup, I agree that CDOs and other model-driven, structured products played a substantial role in the most recent crisis. Many banks viewed the creation of these products as a means to fund lending activities and shift credit risk off balance sheet. Unfortunately, as these products continued to develop, they resulted in untenable concentrations of systemic risk and leverage in products that, by their very nature, lacked transparency. The popularity of these instruments as investment vehicles increased dramatically as the senior-most tranches received the highest investment-grade ratings, and their coupon rates dramatically exceeded the steadily declining Federal Funds and U.S. Treasury rates. The high investor demand for CDOs placed considerable stress on banks and non-bank mortgage brokers to underwrite the significant volume of mortgages that ultimately backed the CDOs. This resulted in the weakening of underwriting standards and the issuance of poorer quality CDOs.

# Response to questions from the Honorable Richard Shelby by Martin J. Gruenberg, Acting Chairman Federal Deposit Insurance Corporation

Q1: You testified today that small bankers have told the FDIC that compliance with the escrow account requirement in Dodd-Frank could be so costly as to be prohibitive, and that they would cease originating mortgage loans for their customers. What specific recommendations have you given the Bureau as it develops the final rule implementing the Dodd-Frank escrow requirements?

A1: As you know, the FDIC is the primary federal regulator for the nation's small community banks. My staff engages frequently with community banks in roundtables around the country to be certain that we understand how regulatory changes affect them and to listen to their concerns. We know that in many rural and underserved areas, community banks are the primary source to meet the financial services needs in those communities.

We understand that the Dodd-Frank Act's mandatory escrow accounts do not apply to all mortgage lending. The requirement does not apply to market-rate loans that are not insured by a government agency, unless state or federal law provides otherwise. Additionally, the Dodd-Frank Act allows the Bureau to exempt banks and other lenders operating in rural or underserved areas from the escrow requirements.

Prior to the implementation of the CFPA (Consumer Financial Protection Act of 2010) and the Consumer Financial Protection Bureau's start-up date, the Federal Reserve Board issued a notice of proposed rulemaking that would amend the existing escrow rule to reflect the Dodd-Frank Act changes.² As of July 21, 2011, this proposal became a CFPB proposed rule.

The proposed rule contemplated an exemption for creditors in rural and underserved areas. We have shared with the CFPB the feedback we have received from community banks, particularly those in rural areas, regarding the banks' concerns about the impact of the proposed escrow rule, and we have suggested that the Bureau exempt from the escrow requirement all banks that operate predominantly in rural areas.

We will continue to explore options to improve the examination process for community banks while preserving the benefits of appropriate regulation that ultimately will serve the interest of lenders, consumers, and the economy as a whole. We will continue to offer to the Bureau the perspective we bring as a result of our commitment both to the health and continued vibrancy of small community banks and to the needs of the customers they serve.

Q2: Mr. Gruenberg, in a recent speech you said that the failure of a systemically important financial institution will likely have significant international operations and that

^{1 15} H.S.C. 1639d(b)

² 76 Fed. Reg. 11598 (March 2, 2011), proposing amendments to Regulation Z. 12 C.F.R. 1026.35(b)(3).

this will create a number of challenges. What specific steps have been taken to improve the cross-border resolution of a SIFI?

**A2:** The following specific steps have been taken to improve the cross-border resolution of a SIFI:

• Identification of Priority Jurisdictions: The FDIC has conducted a series of "heat map" exercises with respect to the global footprint of U.S. SIFIs to identify the priority jurisdictions and regulators for cross-border coordination in connection with crisis management, recovery and resolution planning, and implementation. Based on the onbalance sheet and off-balance sheet information reported by each of the top eight U.S. SIFIs, the FDIC has identified 12 priority jurisdictions that are host to over 97 percent of the total reported foreign activities of the top U.S. SIFIs. Of these 12 jurisdictions, over 90 percent of the SIFIs' total reported foreign activities are in two jurisdictions, the United Kingdom and Ireland. The FDIC is conducting robust outreach in these priority jurisdictions.

<u>Jurisdictional Survey</u>: In addition to these heat mapping exercises, the FDIC is conducting a survey on the legal and regulatory regimes in the priority jurisdictions. The survey assists us in identifying the obstacles to effective cross-border resolution and cooperation and the coordination measures we may take with fellow regulatory and resolution authorities to mitigate such obstacles.

• Participation in Crisis Management Group Meetings: Under the auspices of the Financial Stability Board, the FDIC and its U.S. and non-U.S. banking regulatory authority colleagues are working in Crisis Management Groups on recovery and resolution strategies for each of the global systemically important financial institutions identified by the G-20 at their November 4, 2011 meeting. The work of these Crisis Management Groups, consisting of both home and host authorities, is intended to enhance cross-border institution-specific planning and cooperation for a possible resolution, should it become necessary. The work also allows regulators to identify impediments to a more effective resolution based on the unique characteristics of a particular financial company and the jurisdictions in which it operates.

# Q3: In your view, what additional steps must be taken with respect to the cross-border resolution of a SIFI?

**A3:** In our view, the following additional steps must be taken with respect to the cross-border resolution of a SIFI:

Dialogues with foreign resolution counterparties must continue. Many jurisdictions are
in the process of amending their resolution regimes and we are following these
developments with great interest.

- As jurisdictions develop resolution strategies for their respective SIFIs, we must understand their impact on the U.S. operations.
- The FDIC is in the process of understanding the usage of financial market utilities by each SIFI and the impact of a SIFI's entry into Title II receivership on its membership and processing arrangements with financial market utilities.
- Through the review of the Title I resolution plans or "living wills" and enhanced heat
  mapping exercises, the FDIC will gain transparency on the location and usage of each
  SIFI's data and profit centers, as well as location where liquidity is concentrated.
- The FDIC is working with fellow regulators in determining the extent of information
  with respect to each SIFI that may be shared on a confidential basis with other resolution
  authorities in connection with our cross-border coordination efforts on crisis
  management, recovery and resolution planning, and implementation.

## Response to questions from the Honorable Tim Johnson by Martin J. Gruenberg, Acting Chairman Federal Deposit Insurance Corporation

- Q1: In recent testimony on the trading loss by JP Morgan Chase & Co. (JPMorgan), you stated that the FDIC's "discussions have also focused on the quality and consistency of the models used in the CIO as well as the approval and validation processes surrounding them." What have you learned about the quality and consistency of the models and the approval and validation processes at JPMorgan?
- A1: The FDIC continues to work with both OCC and Federal Reserve staff to review the models used in JPMorgan Chase's CIO unit for the assessment of risk associated with that unit's credit hybrid's business. This review has focused on an assessment of the JPMorgan Chase's VaR methodology and the identification of any weaknesses in the firm's processes and procedures for model governance, validation, and controls. This evaluation is ongoing and the FDIC does not publicly disclose regulators' findings.
- Q2: You have stated that your agency is in the process of internally reviewing the transactions, including identifying any "potential gaps within the firm's overall risk management." Mr. Curry has additionally stated that the Office of the Comptroller of the Currency (OCC) will be assessing how it can improve supervisory processes at the OCC. What gaps have you identified at the bank and as supervisors?
- A2: Along with the OCC and the Federal Reserve, the FDIC continues its evaluation of the CIO portfolio, its governance structure, and the results of the work performed by JPMorgan Chase's internal investigation. The firm has identified major gaps in several areas within the CIO business line that contributed to the losses incurred. The primary areas of focus for the firm include the CIO trading strategy, VaR methodology and model governance, strength of risk management, and the CIO limit structure/escalation process.
- Q3: You also stated in recent testimony, that the FDIC has added temporary staff to assist in its review. How many staff members have been hired, and do you have any updates on the FDIC's review?
- A3: The FDIC has a permanent staff of four professionals onsite at JPMorgan Chase. Three additional FDIC staff members have been engaged to focus on the analysis of CIO related issues in addition to the analytical support of other FDIC examiners on an ad hoc basis.
- Q4: At the Committee's hearing where Jamie Dimon, Chairman of the Board, President and Chief Executive Officer of JPMorgan testified, Mr. Dimon indicated that while the company has a compensation clawback policy in place, that authority has not been exercised. For the largest banks that benefit from the \$250,000 deposit insurance

guarantee, are you aware of any bank exercising a clawback of compensation when major mistakes are made? Is it important for Boards of Directors of a large bank to utilize their clawback authority to deter other employees from making the same mistakes, and correct some of the misaligned pay incentives we saw leading up to the recent financial crisis?

A4: JPMorgan Chase announced during its second quarter earnings release that the firm intended to claw back compensation from CIO managers in London responsible for the CIO Synthetic Credit Portfolio. These employees were terminated without a severance or 2012 incentive compensation and the firm imposed the maximum claw back amount of two years of annual compensation. In one instance, an employee volunteered the claw back; and all claw back decisions were reviewed by JPMorgan Chase's Board of Directors. A firm's board of directors should be involved in the application of claw back provisions; and in the JPMorgan Chase situation, it appears that senior management took action without prompting from the Board.



### FEDERAL DEPOSIT INSURANCE CORPORATION, Washington, DC 20429

OFFICE OF THE CHAIRMAN

October 1, 2012

Honorable Spencer Baucus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for the opportunity to testify before the Committee at the June 19, 2012 hearing "Examining Bank Supervision and Risk Management in Light of JPMorgan Chase's Trading Loss."

Enclosed are my responses to the follow up questions from you and Congressman Leutkemeyer to complete the hearing record.

If you have additional comments, please feel free to contact me at (202) 898-3888, or Eric Spitler, Director, Office of Legislative Affairs, at (202) 898-7140.

	Sincerely,			
b)(6)				
	Martin J. Gruenberg Acting Chairman	(b)(6)		

Enclosures

# Response to questions from the Honorable Spencer Baucus by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

Q1: Does the Dodd-Frank Act end "Too Big to Fail"? If so, why could former Kansas City Federal Reserve President and current FDIC Acting Vice Chairman Thomas Hoenig say in December 2010 that "the five largest financial institutions are 20 percent larger than they were before the crisis. They control \$8.6 trillion in financial assets — the equivalent of nearly 60 percent of gross domestic product. Like it or not, these firms remain too big to fail?"

A1: The absence of effective alternatives to merging large, failing firms with other large financial organizations during a financial crisis created a system with more asset concentration and larger banking and other financial companies. In March 2007, the 10 largest insured depository institutions (IDIs) and their affiliates had about 49 percent of total IDI assets – this has grown to 52 percent today. Further, the four largest IDIs and their affiliates had about 38 percent of industry assets in 2007, as compared with 45 percent today.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) provides tools and powers that were not available during the crisis to end too-big-to-fail. Specifically, the Dodd-Frank Act:

- Requires large bank holding companies to prepare resolution plans or living wills that would allow for the orderly resolution of the company under the bankruptcy code; and
- Provides the FDIC new authority to place a bank, its holding company, and affiliates into an orderly resolution process if it is determined that the company cannot be resolved under the bankruptcy code without severe disruption to the financial system.

The FDIC will use these newly-available tools as necessary to ensure that the largest financial companies can successfully be resolved without significant adverse effects on the financial stability of the U.S.

Q2: Some have used JPMorgan's trading loss to argue that we should not permit insured depository institutions to engage in the kinds of activities that produced that loss, such as the purchase and sale of credit derivatives, on the grounds that such activity is "too risky." Yet there is also general consensus that the recent financial crisis was largely caused by poor underwriting of residential and commercial real estate loans — banks' "bread-and-butter" business — which suggests that focusing banks on their traditional lines of activity would not necessarily make them safer. Don't we need banks to take risks if we are going to have a dynamic market economy in which job creators can access the capital they need to establish and grow their businesses? In light of that, what do you make of calls to "derisk" the banking system?

A2: As financial intermediaries, banks need to effectively manage risk to operate successfully and serve the needs of businesses and consumers. Banks support our economy with credit and depository services and play a critical role in the expansion of commercial enterprises that create jobs. Financial institutions facilitate economic growth and commerce by lending to creditworthy borrowers, providing payment systems and deposit services, and properly managing on- and off-balance sheet positions.

The federal banking supervisors have long supported strong risk management processes that enable financial institutions to better manage their organizations and mitigate unexpected losses. As you point out, myriad causes were behind the recent financial crisis. A central theme was the lack of effective risk management at many insured institutions and unregulated non-bank entities. Poor credit underwriting and outsized concentrations of real estate loans precipitated numerous bank failures and a rapid weakening of the economy and financial system generally. Furthermore, losses related to trading and hedging positions reinforced the need for careful risk taking, implementation of effective policies and exposure limits, strong controls and management information systems, and appropriate capital support. Since the crisis began, the FDIC has worked closely with banks to improve risk selection and management processes, address concentrations of risk, and strengthen earnings, capital, and liquidity.

In response to your question about "de-risking" the banking system, we believe that prudently controlled risk taking is an integral part of financial intermediation. Financial institutions, which are vital to our economy, should fully understand and control various exposures while minimizing undue concentrations that can cause significant losses. Regardless of an institution's size or business strategy, risk taking must be well managed within a robust policy and risk management framework that promotes safe-and-sound operation.

Q3: There is general agreement that our financial system was far too complex in the years leading up to the financial crisis, which led to risks being hidden from the view of the regulators and even from the boards of directors and management of the firms taking the risks. Yet the policy response to the crisis – the 2,300-page Dodd-Frank Act with its 400 new Federal regulations – has only made the system more complex and provided more opportunities for clever industry lawyers to game the system. Wasn't Dodd-Frank a missed opportunity to simplify our system and rationalize our financial regulatory structure? How would you recommend we go about creating a system that is less complex?

A3: The Dodd-Frank Act enacted reforms intended to address the causes of the recent financial crisis. Foremost among these reforms were measures to curb excessive risk taking at large, complex banks and non-bank financial companies where the crisis began. Title I of the Dodd-Frank Act includes new provisions that enhance prudential supervision and capital requirements for systemically important financial institutions (SIFIs), while Title II authorizes a new orderly liquidation authority that significantly enhances the ability to resolve a failed SIFI without contributing to additional financial market distress.

The FDIC is aware of concerns that the complexity of banking statutes and associated oversight processes are having an unintended effect on financial institutions.

The FDIC is committed to an effective regulatory process that is not needlessly complex and will support efforts to address the appropriateness of current requirements. As part of our implementation of the Dodd-Frank Act, we are updating, streamlining, or rescinding certain rules to comply with the statute. We also are sponsoring a Community Bank Initiative during 2012 to further our understanding of the challenges and opportunities for community banks and to review our examination and rulemaking process to ensure any unnecessary processes or requirements are eliminated. This will include an evaluation of our own risk-management and compliance supervision practices to determine if there are ways to make the process more efficient without sacrificing supervisory standards. We have engaged in a dialog with community bankers by holding a series of regional roundtables to solicit their input on these and other matters.

Further, we have taken steps to reduce complexity and increase transparency in rulemaking. In response to input from members of the FDIC's Advisory Committee on Community Banking on ways to streamline the regulatory process, we conducted a review of the materials that banks file with us and made changes to improve the process through greater use of technology and automation. Also, to make it easier for smaller institutions to understand the impact of new regulatory changes or guidance, we are now including a statement in our Financial Institution Letters (the communication that alerts banks to any regulatory changes or new guidance) as to whether the change applies to institutions with assets less than \$1 billion.

Finally, the FDIC will perform a comprehensive review of its regulations to identify any outdated, unnecessary, or unduly burdensome regulations pursuant to the Economic Growth and Regulatory Paperwork Reduction Act (EGRPRA). This well-established process requires the FDIC to conduct a complete review of our regulations at least once every ten years. To prepare for the upcoming EGRPRA review, the FDIC published for public comment, earlier this year, a plan outlining this process.

Q4: It is my understanding that the FDIC has been working with JPMorgan's primary federal regulators, the OCC and the Fed, as well as the institution itself, to investigate both the circumstances that led to the losses and the institution's ongoing efforts to manage the risks at the firm. What have you discovered so far?

A4: Along with the Comptroller of the Currency and the Federal Reserve Board, the FDIC continues its evaluation of the CIO portfolio, its governance structure and the results of the work performed as part of JPMorgan's internal investigation. Further, the FDIC continues to work with both OCC and Federal Reserve staff to review the models used in JPMorgan's CIO unit for the assessment of risk associated with that unit's credit hybrid business. This review has focused on an assessment of JPMorgan's value at risk (VaR) methodology and the identification of any weaknesses in the firm's processes and procedures for model governance, validation, and controls.

The firm has identified major gaps in several areas within the CIO business line that contributed to the losses incurred. The primary areas of focus for the firm include the CIO trading strategy, VaR methodology and model governance, strength of risk management, and the CIO limit

structure/escalation process. While the FDIC has been focused on a variety of issues and risk areas, we cannot publicly disclose supervisory findings.

Q5: Basel III's new capital requirements will make banks less profitable, and we have discovered – thanks to the law of unintended consequences – that any time government tries to thwart profitable enterprises, profitable enterprises find new ways to make money. Does Basel III encourage banks to make up lost profits by chasing riskier, more speculative activities? By encouraging them to raise the fees they charge individual consumers? Small business? Large firms? Who ultimately pays the price for Basel III – the big banks, or the American consumer?

A5: The new capital requirements reflect lessons learned during the recent financial crisis and improve and strengthen the overall quality and quantity of capital. This builds additional capacity into the banking system to absorb losses in times of economic and financial stress.

We do not believe that Basel III would encourage banks to engage in excessive risk taking. The core of the agencies' Notice of Proposed Rulemaking to implement Basel III is to increase the overall minimum requirements for the quality and quantity of bank capital. Over 90 percent of banks already meet the proposed standards even if they were put in place immediately (the NPR proposes a multi-year phase-in of the standards).

With respect to the costs of Basel III, the Financial Stability Board and the Basel Committee on Banking Supervision undertook studies of the potential economic impact of transitioning to the proposed new capital requirements. The studies concluded there would be considerable economic benefits from stronger capital requirements. The reason for this conclusion is that banking and financial crises have had significant negative effects on economic growth. By reducing the frequency and severity of banking crises, the new capital standards should make economic growth higher and more sustainable over time.

Q6: Can you explain how higher capital requirements would have guarded against some of the spectacularly bad decisions that led to the financial crisis? Would higher capital requirements have mitigated or blunted government housing goals, which put people in houses they couldn't afford? Would higher capital requirements have prevented Lehman from doubling down on a housing market that was about to collapse? In other words, are higher capital requirements a cure for bad business decisions?

A6: Capital requirements, by themselves, are not a sufficient safeguard against speculative behavior and poor decision making. Capital is, however, the shock absorber that allows banks to absorb losses and continue to act as financial intermediaries during periods of financial stress. Adequate bank capital promotes a stronger and more resilient financial system and protects the FDIC Deposit Insurance Fund from loss, minimizing the likelihood that the banking industry's premiums will need to be raised and, ultimately, the federal full faith and credit guarantee of insured deposits would need to be exercised.

# Response to questions from the Honorable Blaine Leutkemeyer by Martin J. Gruenberg, Acting Chairman, Federal Deposit Insurance Corporation

## Q1: Are you making any recommendations on investing in European government bonds?

A1: The federal bank regulatory agencies do not make investment recommendations. However, the agencies have issued investment permissibility regulations and guidance articulating the expectation that appropriate due diligence should be performed on the suitability of individual investments before purchase. Under the investment permissibility regulations, foreign sovereign debt must meet certain requirements before a bank is permitted to invest. For example, the debt instruments should be marketable obligations that are not predominantly speculative in nature. Furthermore, as a result of statutory lending limits, banks are subject to limitations on the investment that they can make in the securities of any one foreign government. For example, a National Bank must limit the investment in the securities of any one foreign government to no more than 10 percent of that National Bank's capital and surplus. The laws of most states contain similar limits.

#### Q2: Are you classifying investments in European government bonds?

A2: Overall, U.S. banks are not large buyers of European government bonds. Additionally, European government bonds held for trading are marked-to-market daily and, as such, are not classified. To the extent U.S. banks hold European government bonds for investment purposes, classification decisions are made on a case-by-case basis. If a particular European country misses payments or defaults, the bonds would be classified based on our classification standards.

# Board of Governors of the Federal Reserve System Office of the Comptroller of the Currency Federal Deposit Insurance Corporation

November 13, 2012

The Honorable Richard C. Shelby United States Senate Washington, D.C. 20510

Dear Senator:

Thank you for your letter to the federal banking agencies ("agencies") dated October 15, 2012, expressing support for strong capital requirements as necessary for the safety and soundness of banking organizations, the need for the careful consideration of the costs and benefits of regulatory capital requirements, and the importance of transparency in the federal rulemaking process. The agencies agree that robust capital requirements are vital to safety and soundness and the resiliency of the financial system. The agencies are also aware of the potential costs of such requirements, which may affect banking organizations' lending and other activities. Accordingly, the agencies sought public comment on the potential impact of the proposals, and are now carefully considering all of the comments received.

In your letter, you refer to analyses undertaken with respect to the agencies' recently issued notices of proposed rulemaking (the NPRs) to revise U.S. capital standards. You specifically request that the agencies provide: (i) an analysis underlying the determination that implementation of the NPRs would leave our banking system adequately capitalized; (ii) a quantitative analysis of how these proposed rules would affect the capitalization levels of U.S. banking organizations by size and asset class; and (iii) a cost-benefit analysis of the impact that these proposed rules would have on the operation of the U.S. banking system and the overall economy. Each request is addressed below.

The analysis provided in response to each of your questions is a preliminary analysis based on the capital proposals published for comment. The agencies have invited the public to comment on the proposals and will consider those comments and any information provided during the comment period.

# I. Analysis underlying the determination that implementation of the NPRs would leave our banking system adequately capitalized

Your letter first inquires whether Basel III is correctly calibrated for U.S. institutions and requests analysis underlying the agencies' belief that the implementation of the NPRs would leave our banking system adequately capitalized.

The agencies believe that all banking organizations need a strong capital base to enable them to withstand periods of economic adversity yet continue to fulfill their role as a source of The Honorable Richard C. Shelby Page Two

credit to the economy. The proposals in the three NPRs each address identified weaknesses in the current U.S. regulatory capital regime. Generally, the proposals can be characterized as strengthening the definition of capital to allow banking organizations to better absorb losses and increasing required levels of capital so that banking organizations can better withstand periods of economic adversity. They would also change risk weights to better reflect risks inherent in specific assets. Each NPR contains extensive discussion of the specific proposed changes and why the agencies view these proposed changes as appropriate for U.S. banking organizations.

Prior to developing the NPRs, the agencies participated in the international efforts conducted by the Basel Committee on Banking Supervision (BCBS) to study the losses experienced in past banking crises in various countries. The results of this study were made publicly available in October, 2010, and are attached as Attachment A (BCBS analysis). As indicated in the BCBS analysis, there is no single correct approach for determining adequate capital ratio levels; rather, the analysis provides a variety of different perspectives on banking organizations' loss experiences to help inform what is ultimately a regulatory judgment regarding appropriate levels of minimum capital ratios and other measures of capital adequacy.

As described in the BCBS analysis, a conceptual framework was established as the starting point for the calibration of the capital standards. Under this framework, a minimum requirement for loss-absorbing capital is viewed as the amount of capital a banking organization would need to hold so that investors, creditors, and counterparties would view it as a viable going concern. Moreover, a buffer to be held in excess of minimum requirements is viewed as an amount sufficient for a banking organization to withstand significant downturn events while continuing to meet its minimum capital requirement.²

The BCBS calibration analysis focused on information submitted by member countries regarding losses relative to risk-weighted assets incurred over long historical periods in order to identify an appropriate range for minimum capital requirements. The minimum ratio levels agreed to by the BCBS, which were those proposed in the NPRs, fall within the ranges suggested by the analysis. The agencies believe that the ratios proposed in the NPRs are an appropriate basis for U.S. minimum capital requirements based upon the losses experienced by U.S. banking organizations, including both during and after the financial crisis.

# II. Quantitative analysis of how these proposed rules would affect the capitalization levels of U.S. banks by size and asset class

You further requested a quantitative analysis of how the proposed rules would affect the capitalization levels of U.S. banking organizations by size and asset class. The agencies considered the potential impact of the proposed requirements on banking organizations using regulatory reporting data, supplemented by certain assumptions where data needed to calculate

¹ See "Calibrating regulatory minimum capital requirements and buffers: a top-down approach" (Attachment A) and available at: http://www.bis.org/publ/bcbs180.pdf.

² See BCBS analysis para, LA.

The Honorable Richard C. Shelby Page Three

the capital requirements was not reported (these analyses, related assumptions, and descriptions of methodologies used for the analyses are included as Attachment B). While the agencies conducted analyses that incorporated a range of assumptions, the general conclusion of each agency was that the vast majority of banking organizations, including community banks, already would meet the proposed minimum requirements on a fully phased-in basis and would also have capital sufficient to exceed the proposed capital buffer threshold for restrictions on capital distributions and certain discretionary payments to executive officers.

The agencies recognize that the attached tables are estimates and that banking organizations may have additional data to assess the impact of specific aspects of these proposals. The agencies developed a capital estimation tool, available on each of our websites, to help banking organizations gain a better sense of the possible capital impact of these proposals. The agencies anticipate that the review of the comments submitted will likely shed additional light on the capital implications of a number of specific provisions of the NPRs.

# III. Cost-benefit analysis of the impact these proposed rules would have on the operation of the U.S. banking system and the overall economy

You requested a cost-benefit analysis of the impact that the proposals would have on the U.S. banking system and the overall economy. As with all rulemakings, the agencies conducted those cost and burden analyses required by the Regulatory Flexibility Act, the Paperwork Reduction Act, and the Unfunded Mandates Reform Act of 1995, among others, all of which are further detailed in the NPRs. The relevant excerpts from the NPRs are attached as Attachment C. The agencies have invited public comment on these analyses and will revise them in light of the comments received. The Unfunded Mandates analyses conducted by the Office of the Comptroller of the Currency are also attached as Attachment D.

The agencies also participated in the development of a number of studies to assess the potential impact of the revised capital requirements, including participating in the BCBS's Macroeconomic Assessment Group (MAG) as well as its Quantitative Impact Study, the results of which were made publicly available by the BCBS upon their completion.³ BCBS analysis has suggested that stronger capital requirements could help reduce the likelihood of banking crises while yielding positive net economic benefits.⁴ Moreover, the MAG analysis found that the requirements would only have a modest negative impact on the gross domestic product of member countries, and that any such negative impact could be significantly mitigated by phasing in the proposed requirements over time.⁵

³ See "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements" (MAG Analysis), Attachment E, also available at: http://www.bis.org/publ/othp12.pdf; see also "Results of the comprehensive quantitative impact study," Attachment F, also available at: http://www.bis.org/publ/bcbs186.pdf.

⁴ See "An assessment of the long-term economic impact of stronger capital and liquidity requirements," Executive

Summary, pg. 1, Attachment G.

See MAG Analysis, Conclusions and open issues, pg. 9-10.

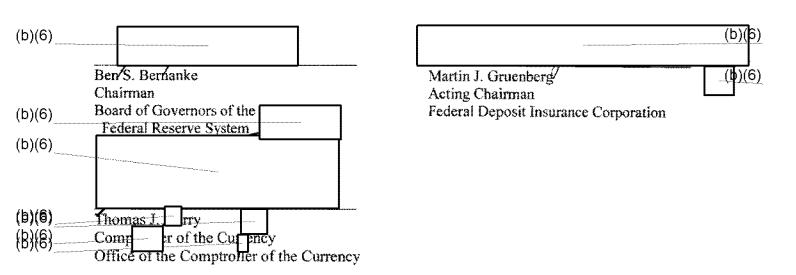
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The agencies also sought public comment on the proposed requirements in the NPRs to better understand their potential costs and benefits. The agencies asked several specific questions in the NPRs about potential costs related to the proposals, and are considering all comments carefully. During the comment period, the agencies also participated in various outreach efforts, such as engaging community banking organizations and trade associations, among others, to better understand industry participants' concerns about the NPRs and to gather information on their potential effects. These efforts have provided valuable additional information to assist the agencies as we determine how to proceed with the proposed rulemakings.

The agencies believe that an appropriately structured, robust and comprehensive regulatory capital framework will be essential to increasing the resiliency of U.S. banking organizations and the financial system. As the agencies work toward this goal, we will carefully consider all the comments received on the proposed changes to the U.S. regulatory framework.

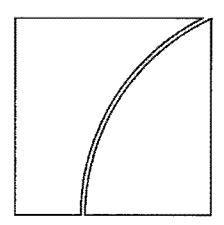
We hope this information is helpful to you. Please let us know if we may be of further assistance.

Sincerely,



Enclosures

# Basel Committee on Banking Supervision



Calibrating regulatory minimum capital requirements and capital buffers: a topdown approach

October 2010



ATTACHMENT A

ATTACHMENT A

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ATTACHMENT A

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# Calibrating regulatory minimum capital requirements and capital buffers: a top-down approach

## I. Overview and executive summary

As part of its work to strengthen global capital requirements, the Basel Committee on Banking Supervision established a working group to conduct a "top-down" assessment of the overall level of capital requirements that should be held within the banking system. The working group was tasked with undertaking empirical analysis to inform the calibration of the common equity and Tier 1 risk-based ratios and the Tier 1 leverage ratio, as well as the regulatory buffers above the common equity and Tier 1 risk-based ratios. This analysis represented one of the inputs to the Committee's calibration of the new capital framework, and complements the cost-benefit analysis conducted by the Long-Term Economic Impact (LEI) group and the detailed "bottom up" Quantitative Impact Study (QIS) of the effects of the proposed regulatory reforms on individual banks.

This note summarises the findings of the top-down calibration work. In particular, it provides a conceptual framework for the calibration work, describes the various empirical exercises that were performed, and summarises the results.

It is important to highlight that there is not a single correct approach to determine the calibration, nor is there a single model that can be used to provide the "right" answer. The approach adopted in this paper, therefore, is to generate information from a range of sources and from a variety of perspectives. In the face of uncertainty, the combination of many estimates will produce better outcomes than reliance on a single estimate or approach. Also, as explained in the paper, a number of caveats need to be carefully kept in mind when interpreting the results, primarily relating to the use of historical data generated under a regulatory regime different from that which will prevail in the future.

#### I.A. Conceptual framework

An appropriate starting point for calibration is to first establish a conceptual framework outlining the role of minimum capital and buffer requirements, along with strategies and methods for putting these concepts into practice. The following high-level concepts are adopted in this paper: the regulatory minimum requirement is the amount of capital needed for a bank to be regarded as a viable going concern by creditors and counterparties, while a buffer can be seen as an amount sufficient for the bank to withstand a significant downturn period and still remain above minimum regulatory levels. An overview of the strategies and empirical work undertaken to inform the high-level concepts is provided in the remainder of this section. Further details are contained in the third section of the paper, which also presents the results.

The definition of the buffer draws directly from the December 2009 Consultative Document, which stated that the capital conservation buffer "...should be capable of being drawn down through losses and large enough to enable banks to maintain capital levels above the minimum requirement throughout a significant sector-wide downturn." (Basel Committee on Banking Supervision, "Strengthening the Resilience of the Banking Sector", December 2009)

#### I.B. Regulatory minimum requirements

It is not possible to directly observe the minimum amount of capital needed for a bank to be viewed as viable and solvent by investors and creditors, including short-term funding providers. Presumably, market participants make some assessment of the likelihood and size of shocks that they expect a bank to be able to withstand, and transact only with those banks that they believe have a high probability of remaining solvent in the future, consistent with their risk tolerance. Unfortunately, we cannot observe these market assessments directly. Further, the assessments will vary across institutions and over time given differences in business models and as macroeconomic and banking industry environments change. An additional complication is that the level of capital demanded by market participants may be influenced by historical regulatory requirements and the perceived costs of falling below those ratios. This introduces a certain circularity into the relationship between historical ratios, regulatory ratios and assessments of potential losses.

In the face of these factors, one operational approach is to examine the distribution of historical earnings in the banking industry under the assumption that a high percentile net loss realisation for a typical bank is a good approximation of the market's ex ante, unconditional view of going-concern capital sufficiency. This seems an appropriate benchmark for a risk-based regulatory capital standard that applies across all banks for all points in time. In this regard, it is important to note that risk-weighted assets are intended to capture differences in risk across institutions, so that the task in calibrating a minimum regulatory requirement is to find a minimum amount of capital relative to each firm's risk that seems consistent with a bank being viewed as a viable going concern.

To put this approach into practice, analysis of the "Return on Risk-Weighted Assets" (RORWA) was undertaken, using data on net income for a large set of banking companies in seven member countries over relatively long time periods. Each country looked at the ratio of net income to risk-weighted assets (RWA) for each bank in every period that company was in the sample, and then examined the left-hand (negative net income) "tail" of the distribution. High percentiles of this distribution might be a reasonable proxy value for the degree of "shock" that market participants would expect banks to be able to withstand.

The RORWA analysis focused on the volatility of realised net income as a measure of potential loss and capital needs for a bank. Since negative net income feeds directly to common equity via declines in retained earnings, it has comparable effects on both Tier 1 and the common equity component of Tier 1 (holding other deductions constant). One question, therefore, is whether the analysis of net income is most directly applicable to calibration of the Tier 1 capital or common equity-risk based ratio.

There are reasonable arguments on both sides. One argument is that losses via negative net income feed directly into common equity, and thus the RORWA analysis is most relevant for calibration of the regulatory minimum level of the common equity risk-based ratio. An alternative view is that other Tier 1 capital components are also loss-absorbing and can protect creditors, and thus the RORWA work is best applied to the Tier 1 ratio. To some extent, the balance of the argument depends on the extent to which the non-common elements of Tier 1 capital are viewed as contributing to a banking company's viability. The experience of the recent crisis suggests that in many cases market participants viewed the

This approach is derived from Andrew Kuritzkes and Til Schuermann, "What We Know, Don't Know and Can't Know about Bank Risk: A View from the Trenches." In *The Known, the Unknown and the Unknowable in Financial Risk Management*, ed. F.X. Diebold, N. Doherty, and R.J. Herring, Princeton University Press. (March 2008).

non-common components of Tier 1 as less useful as a loss absorber or less relevant as a determinant of viability in periods of acute stress. This implies that a reasonable baseline for the RORWA analysis around potential stressed losses would be the amount of common equity needed for the minimum regulatory requirement, and this is the approach followed in this analysis.³

#### I.C. Capital buffers

To help determine the size of a buffer large enough for a bank to withstand a significant downturn period and remain above regulatory minimum capital levels, analysis of actual historical experience and the results of recent stress tests, both singly and in combination, was undertaken. Both realised loss experience during the current and past crises and projections of losses (negative net income or impact on Tier 1 capital or common equity) made during the recent crisis are relevant metrics for assessing the possible impact of severe stress and thus for sizing the capital buffer.

- Current and Historical Crisis Losses this examines cumulative losses (negative net income, as a proxy for the impact on Tier 1 capital and the common equity component of Tier 1 capital) that banking companies sustained during the recent global financial crisis and peak losses during past financial crises in individual jurisdictions or regions.
- Stress tests the projected decreases in capital from stress tests conducted by
  eight member countries during the recent financial crisis are examined. In addition,
  results for individual banking companies for one country are also examined, to
  provide a sense of the dispersion underlying aggregate or average countrywide
  numbers. An important challenge in interpreting the results of this work is to address
  the lack of comparability in the stress tests conducted by different countries.
- The RORWA analysis was also used to help calibrate the supervisory buffer, as that analysis provides information about large, negative shocks to income and capital.

These exercises reveal considerable diversity across banks in the size of current and past crisis-related losses. In thinking about calibration, one important question is how to interpret this diversity of experience. Should the buffer be set relative to the average or typical experience across banks (that is, as the weighted average or median) or should the buffer be set as a higher percentile of the cross-sectional experience (for instance, the 75th percentile outcome, the 95th percentile outcome, or the maximum)? In general, all available information is considered, so that calibration of the buffers could be determined in light of the full range of experience across banks and countries, acknowledging that the analysis does not identify the sources of historical losses that may differentiate between business models and the source and incidence of the next banking crisis cannot be known.

As an additional benchmark, a range of regulatory and other capital ratios from the period immediately before and in the early phases of the financial crisis were examined. The idea was to see if there was a "critical value" of each ratio such that banks that eventually became severely stressed during the crisis tended to have capital ratios below this level, while less stressed banks tended to have ratios above it. The analysis, which is described in greater detail in the discussion of the leverage ratio, was used as a supplement to the analysis based on historical earnings, primarily as a means of benchmarking the results of the RORWA analysis against recent historical experience. This type of analysis, almost by definition, will imply critical values greater than the regulatory minimum stipulated in the pre-crisis regulation given that the minimum is typically the point of resolution and funding markets are likely too close to an institution before it reaches this point. In addition, the results are highly sensitive to the critical value limit used. This may reduce the reliability of using these critical values as a guide to the optimal level of the minimum capital requirement.

#### I.D. Leverage ratio

The calibration of a backstop Tier 1 leverage ratio is not addressed in the same way as the risk-based ratios. The longer testing and transition period associated with the leverage ratio as compared to the new risk-based ratio standards is intended to provide a period to examine the performance and calibration of the leverage ratio in "parallel run" mode. That said, information was collected on historical trends in leverage in the banking systems of ten member countries. This data includes information on trends in traditional leverage – capital relative to balance sheet assets – as well as information on trends in different elements of Tier 1 capital, in risk-weighted to total assets and in the impact of off-balance sheet positions on overall leverage. As noted, these measures provide a sense of recent historical trends that is useful background for calibration, but do not lead directly to suggested regulatory requirements.

An analysis was also undertaken of the differences in leverage ratios between banks that eventually became severely stressed during the crisis and less stressed banks. The precrisis and early crisis leverage ratios were defined as Tier 1 capital to total assets, common equity to total assets, common equity minus Tier 1 deductions to total assets, or tangible common equity to tangible assets. This analysis provides a very general sense of the levels of these ratios that discriminated between severely stressed and other banks prior to the crisis, and thus provides valuable context to the possible calibration of a new leverage ratio.

#### I.E. Risk-weighted assets

Much of the calibration work described above uses historical levels of risk-weighted assets as the denominator – that is, most of the analysis scales results by risk-weighted assets, but by necessity, the risk-weighted assets use historical values, either on a Basel I or Basel II basis. Of course, the Basel Committee reforms will result in significant changes to the level of risk-weighted assets that would apply to a given activity or set of positions.

#### I.F. Caveats

As noted, there are some significant caveats that must be considered in weighing the results of the work presented in this report. Much of the work relies on analysis of historical data, either from the recent crisis or from past crises. The benefit of using such data is that they reflect actual realised outcomes for large banks across multiple jurisdictions, thus grounding the work in real history and events. The shortcoming of using cross country historical data is that they are not perfectly consistent across jurisdictions. It is not possible, for example, to isolate the impact of Basel II versus Basel I in the computations, or differences in the definition of capital. Moreover, the historical data reflect outcomes under different regulatory capital regimes than will prevail under the revised Basel standards. This means that the data reflect regulatory restrictions, a range of banking sector and macroeconomic environments, and bank behaviour that will almost certainly differ from those prevailing in the future. The tosses that banks would have experienced had the new, more risk-sensitive Basel capital and liquidity requirements been in place might have been smaller than the losses actually sustained. In addition, improvements in the quality of the capital base should make banks more resilient to shocks in the future.

Conversely, data from the recent and previous financial crises are also affected by official sector actions – capital injections, liquidity facilities, liability guarantees – that may have significantly altered realised losses and revenues, probably improving them relative to what they would have been in the absence of official intervention. In addition, the analysis conducted in this report is subject to survivorship bias, as losses from banks that failed are not always fully captured in the analyses. This biases down the estimates. Further, some

numbers exclude mark-to-market variation of "available for sale" assets that is not included in accounting income (but which is deducted directly from capital). More generally, most of the analysis focuses on losses incurred by banks and does not reflect how much additional capital would have been needed to maintain a reasonable level of lending during the crisis to help avert adverse "credit crunch" effects. In gauging the results, these caveats need to be kept firmly in mind.

#### I.G. Summary of calibration findings

The table below provides a high-level summary of the calibration results for the regulatory minimum capital requirement for the common equity-based ratio and for the buffer above that ratio, and some indicative findings for the leverage ratio. These are all based on historical definitions of risk-weighted assets (in the case of the minimum requirement and the buffer) and of Tier 1 capital and Tier 1 deductions (in the case of the leverage ratio findings). The table reports the mean and median results across countries of the various empirical exercises, as well as minimum and maximum values, to provide a sense of the range of results. In many cases, the country-level results are themselves averages of individual bank data, so there is further diversity of findings not captured in the table. This diversity of experience seems particularly important to recall when considering average results for calibration purposes, which is geared towards identifying the tails of loss distributions. More detailed explanations and discussion of the findings, importantly including discussion of caveats of the analysis, are contained in the remainder of this paper.

In determining the level of the new prudential requirements, judgements need to be made about the appropriate benchmarks for the severity of crises and the performance of individual banks during different crises. At one extreme, there are the largest losses experienced by banks during the most severe crises, while at another extreme one could consider average bank losses experienced during more frequent but less severe crises. This report does not in and of itself provide an answer as to the right choice, and should be read as informing, and not prejudging, such judgements.

# High-level summary table: Range of calibration results

47, 48, 48, 49, 49, 49, 49, 49, 49, 49, 49, 49, 49	Minimum	Max.	Arithmetic Mean	Median	Countries #
Calibration of the minimum	**************************************			<del></del>	***************************************
RORWA (large bank results)					
99 th percentile ^a	+0.89%	-8.66%	-3%	-4%	7
99 th percentile, excluding gains*	-0.18%	-8.66%	-4%	-5%	6
Maximum ^e	+0.89%	-41.5%	-10%	-5%	6
Maximum, excluding outliers and gains ^a	-2.71%	-6.83%	-5%	-5%	5
Calibration of the regulatory buffers					
Historical losses ^d				<u> </u>	
Peak losses / RWA	0.00%	-29.2%	-3%	-1.0%	7 ^b
Peak losses / RWA - systemic crises	-0.09%	-29.2%	-7%	-3.7%	4 ^t
Losses during the recent crisis ^d			#		
Pre-tax net income / RWA	-0.60%	-25.7%	-5%	-3%	14
Stress tests ^d				# + + + + + + + + + + + + + + + + + + +	***************************************
Tier 1 capital / RWA	-1.2%	-4.0%	-3%	-3%	6°
Calibration of the leverage ratio					
Critical values ^e			Range	***************************************	
Tier 1 Capital / Assets		***************************************	3.0% - 5.0%	***************************************	19
Common Equity / Assets	3.0% - 4.0%			19	
Tangible Common Equity / Tangible Ass	2.5% - 4.0%			19	
Common Equity minus Tier 1 Deduction	2.5% - 4.5%			19	

- a. The 99th percentile or maximum is first determined within each country. The data presented in each row summarises the data across countries. Because of insufficient data, percentiles higher than the 99th percentile cannot be identified in some countries' samples. While 99th percentile values are reported in this table, higher percentiles may be more reasonable measures for calibration purposes.
- This refers to the number of crisis episodes. The averages and ranges reported are based on individual bank figures.
- c. Individual bank stress test results in a number of countries are significantly more severe than -4.0%.
- d. Results for banks experiencing losses during the stress period. For the historical loss results, these are peak losses; for the recent crisis these are cumulative losses; for the stress tests, these are average losses for banks subject to the stress test and do not include losses already incurred prior to the stress test period.
- Levels of the ratio at which at least 50% of banks that became severely stressed during the financial crisis and 50% of banks that did not become severely stressed.

# II. Detailed discussion of the findings

#### II.A. Regulatory minimum requirements

Seven member countries calculated "return on risk-weighted assets" (RORWA) for banks in their jurisdictions over relatively long historical periods. For each bank in each time period, RORWA is calculated as the ratio of net income to risk-weighted assets. The distribution of this ratio across all observations in each country's data set, or for subsets of observations, is calculated.

The analysis focused on the left-hand (negative net income) "tail" of the distribution. This part of the distribution contains the largest losses relative to RWA, and thus is most relevant for capital calibration purposes – conceptually this is quite similar to a "Value-at-risk" measure. High percentiles of the income distribution might be a reasonably proxy value for the degree of "shock" that market participants would expect banks to be able to withstand. Of course, there are important differences across countries in the risk profiles of the banking sector that will affect the results produced for each country.

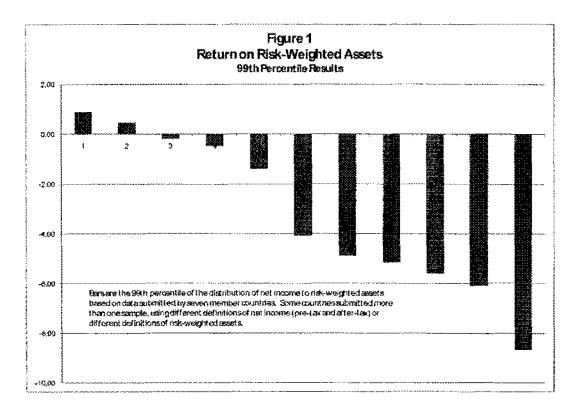
There are significant caveats in making comparisons in the results from different countries. To begin, some countries calculated RORWA for both pre-tax and after-tax net income, while other countries reported on just one basis or the other. Further, while most countries calculated RORWA on a one-year basis (that is, using annual net income), at least one country used semi-annual data. Finally, there are differences across countries as to whether risk-weighted assets were computed on a Basel I or Basel II basis. Some countries' data reflects a mix of both, as banks transitioned from Basel I to Basel II over the historical period examined, at least one is entirely on a Basel I basis, and another presented data on both bases.

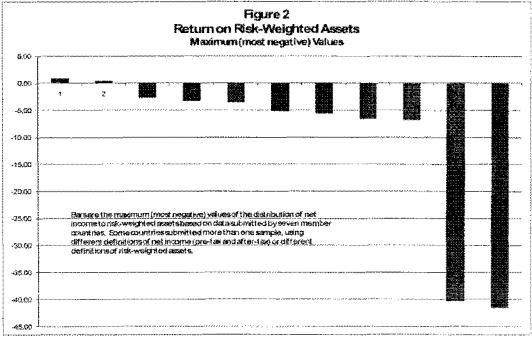
There are also important differences in sample size and in the length of the historical horizon used in the analysis. The historical sample period varied from 5 to 29 years (that is, the longest was from 1981 to 2009, while the shortest was from 2005 to 2009). Similarly, the number of banks included in the sample also varied, from as few as 4 to as many as 300 to 400. However, some countries whose data covered larger numbers of banks also broke out a "large bank" subsample, and these are somewhat more comparable across countries. Focusing on just the large bank subsample for those countries that provided them, in combination with the full samples for those countries whose data covered fewer banks, the number of banks included in the analysis ranges from 4 to 20.

Overall, these differences meant that the sample sizes varied significantly across countries, as did the number of business cycles included in the data. The samples generally contained between 200 and 600 observations, which means the very high tails of the distribution could not truly be identified because there were not enough observations to populate this fine a decomposition of the distribution. (For example, the 99.9th percentile of the distribution cannot be identified if there are fewer than 1000 observations in the sample.) In most cases, the countries reported these high percentiles by repeating the largest (most negative) observation in the sample.

The main results are illustrated in Figures 1 and 2. The figures report results for large bank samples, for countries that provided this decomposition, and for full samples for countries that did not. In general, the negative "tails" of the net income-to-RWA distribution are smaller for larger banks than for smaller ones. These smaller tail events could reflect differences in diversification and business focus, as well as the impact of official intervention when large banks are in distress. To avoid extreme outliers in the data owing to small bank size, the working group focused on the results for large banks, where those were provided.

Turning to the rest of the results, one question is which percentile of the distribution to consider; there is certainly no single theoretically "correct" answer. At one end of the spectrum, we can consider the 99th percentile, as nearly all the samples are large enough to identify this percentile. The 99th percentile figures for large banks range between 0.89% and -8.66% (see Figure 1). The mean value across all the large bank samples is approximately -3.20% and the median is about -4.0%. Excluding the observations reflecting positive net income in the tails, the mean value is about -4.0% and the median is about -4.9%.





While the 99th percentile results provide some consistency across the different country results, it is not an exceptionally high percentile to consider — much capital work considers percentiles of 99.9 and above. However, due to small sample sizes, these percentiles are not well identified in the data. The maximum value ranges between 0.89% and -41.47% (see Figure 2). For the full set of results, the median value is about -5.1% and the mean is -10.4%. Excluding the observations reflecting positive net income in the tails and two very large negative "outlier" observations, the mean is -4.8% and the median is -5.1%.

One point to consider is the length of the net income horizon examined in this analysis. In particular, the analysis examines net income over one year. The focus on a one year horizon is in part for practical reasons — annual data are in many cases more readily accessible than data over other horizons — and because one year is a somewhat standard horizon in capital analysis. However, there may be a downward bias in the figures by focusing on a calendar year since these capture negative net income "spells" only within a year. In addition, much recent supervisory work — for instance, the stress tests conducted in many jurisdictions in 2009 and 2010 — focused on longer horizons. Finally, we do not know with any certainty that market participants focus on solvency at a one-year horizon. For all these reasons, considering other, longer horizons may provide valuable insights.

To this end, to examine longer horizons, quarterly RORWA data is available from one country. The analysis examined "rolling" horizons of 4, 6 and 8 quarters – that is, cumulative net income over 4, 6 and 8 quarters, where the observations roll forward one quarter each time. This approach captured "loss spells" that did not fit within a single calendar year, captures banking companies up until the last quarter before they fail and allows for an examination of longer horizons without losing a significant number of observations (though the observations are now no longer independent). The results suggest that as the length of the rolling window increases, the values also tend to increase, in the range of 20% to 35% for the 8-quarter horizon as compared to the 4-quarter horizon. Thus, the overall results suggest that the length of the horizon matters for the size of the estimates, and this is a result that should be considered in the interpretation of these results for calibration purposes.

#### II.B. Buffers

Several empirical approaches have also been used to inform calibration of a buffer above the regulatory minimum. Recalling that the purpose of a buffer is to provide capital sufficient for a banking company to withstand downturn events and still remain above its regulatory minimum capital requirement, the analysis focuses on different ways of measuring the size of downturn events — particularly systemic stressful events — that a banking company might experience. In particular, losses experienced by banks during the recent global financial crisis and in past banking crises experienced by several countries are examined. The results of stress tests performed in 2009 by eight countries were also collected, as these represent estimates of the potential impact of a stress event — an economic downturn — on the capital positions of the banks participating in the stress tests. Finally, the RORWA work discussed above is also useful for considering the size of the buffer, as it identifies extremely negative net income outcomes actually experienced by banks in the seven countries that performed this analysis.

None of these analyses is ideal in the sense that they each have shortcomings, primarily to do with the use of historical data and lack of consistency across countries. Some of the key issues are that there was a range of experience across countries in the severity of the recent crisis, so the stress felt by some banking systems was more severe than others, which were relatively less affected; official intervention in some countries may have reduced the full extent of losses that might have been experienced in the absence of the intervention; differences in methodologies and the severity of the underlying economic scenario make it difficult to perform direct comparisons across stress test results from different jurisdictions; and differences in data availability and accounting treatments across countries reduce the direct comparability of the data, both for the recent and historical crises. In addition, the analyses are subject to survivorship bias, as only banks that survived crises are included in the sample. This biases down the estimates.

#### II.B.1 Losses during the recent crisis

This section provides an analysis of losses by large internationally active banks during the recent financial crisis. The analysis is based on data collected for 73 banks in 14 countries. For each bank, cumulative net income over the financial crisis period (from Q3 2007 to Q4 2009) is calculated as a share of year-end 2006 risk-weighted assets. Net income is a proxy for the impact of the financial crisis on the banks' Tier 1 capital and Tier 1 common equity in the absence of any actions by management to increase or adjust capital, such as new issuance. However, it excludes any impact on banks' capital that is not directly reported in the income statement (eg mark-to-market variations of "available for sale" assets, which are deducted directly from capital). The analysis covers both pre-tax and after-tax net income, as well as a measure of pre-tax net income adjusted for non-recurring revenues (though it turned out that this adjustment had little effect on the results).

Figures 3 and 4 present the distribution of cumulative pre-tax and after-tax net income from Q3 2007 to Q4 2009 for the banks in the sample. The first result to note is that more than two-thirds of the banks had positive cumulative net income over the 10 quarters of the financial crisis (Q3 2007 to Q4 2009). Fifty-three of the 73 banks (73%) had positive net income before taxes and distributions, and 44 of 70 (63%) had positive cumulative net income after taxes and distributions. This finding may reflect differences across jurisdictions in the severity of the losses experienced during the crisis – some banks may not have experienced cumulative negative net income because the financial crisis was not overly severe in their primary areas of operation, or their business models positioned them to have more diversified earnings streams with fewer fat tail risks. It may also reflect that the loss (net income) measures are cumulative over 10 quarters, and thus the "peak" losses experienced may be masked by some profitable quarters.

Since we are interested in understanding the size of potential losses during a crisis or very stressful period, the focus of this analysis is on the negative tail of the net income distribution, that is, on the banks with negative cumulative net income. As the figures illustrate, there were about 20 such institutions. Mean losses (negative net income) equalled -4.56% of RWA for pre-tax, pre-distribution net income and -3.31% of RWA for after-tax, after-distribution net income across these institutions. The median figures are smaller, at -2.51% and -1.85% of RWA, reflecting the impact of one particularly large outlier. Overall, losses range between -0.60% and -25.69% of RWA for pre-tax net income and between -0.03% and -25.75% of RWA for after-tax net income.

The mean values excluding the outlier observation are -3.44% for pre-tax net income and -2.41% for after-tax net income.

Figure 3

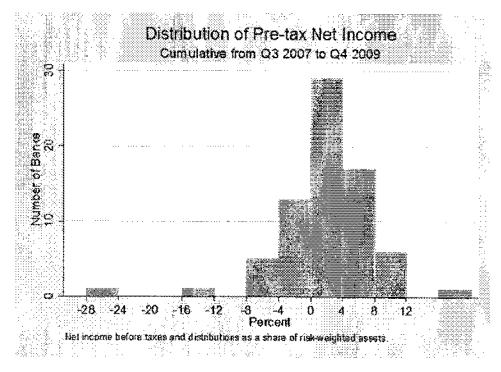
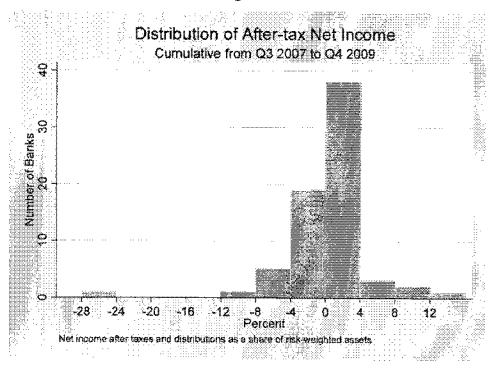


Figure 4



As noted above, these cumulative loss figures may understate "peak" losses if they include profitable quarters either before or after the worst period of the financial crisis. "Peak" losses refer to losses over whatever sub-period of the financial crisis produced the largest

cumulative negative net income figure – this is a relevant concept for calibration of the supervisory buffer because it represents the largest stress that the banks in question experienced, and would therefore have required capital to absorb such losses.

To explore this idea, net income data over shorter horizons for 53 banks in ten countries is also examined. Table 1 shows the average and median values of "peak" and cumulative losses relative to RWA for banks in the ten-country sub-sample that experienced negative cumulative net income over the entire 10-quarter period. For comparison, the table also reports the average and median values of cumulative losses for the entire sample.

Average and median peak losses are markedly larger than cumulative losses over the entire 10-quarter period for these banks. Average "peak" losses on a pre-tax basis equal -5.40% of RWA, as compared to -4.36% over the entire period, and median "peak" pre-tax losses are nearly double median losses over the entire period (-3.22% of RWA, as compared to -1.67% for the entire period). The differences on an after-tax, after-distribution basis are smaller, but still distinct. In total, 13 of the 17 banks with cumulative negative pre-tax net income and 17 of the 23 banks with negative cumulative after-tax net income had "peak" losses that exceeded their cumulative losses over the full 10-quarter period. These findings suggest that data based on cumulative figures may understate realised "peak" losses for these banks, if we take results from the ten-country sample as indicative, the differences in the ratio of negative net income to RWA are on the order of 50 to 150 basis points.

Table 1

Difference between cumulative and "peak" loss rates for banks experiencing negative cumulative net income Q3 2007 – Q4 2009

	Net income before taxes and distributions			Net income after taxes and distribution				
<del>ann an earl ann an earl ann an earl ann an earl an</del>	Q3 2007- Q4 2009	Q3 2007- Q4 2008	"Peak"	"Peak" for all Banks	Q3 2007 - Q4 2009	Q3 2007- Q4 2008	"Peak"	"Peak" for all Banks
Ten-coun	try sample		grant and any and any and any and any and any and any and any and any and any and any and any and any and any				•••••	
Average	-4.36%	-4.36%	-5.40%	-3.22%	-3.08%	-2.73%	-3.69%	-2.30%
Median	-1.67%	-2.10%	-3.22%	-2.02%	-1.52%	-1.75%	-2.31%	-0.93%
Whole sa	mple (14 co	untries)		<u> </u>	***************************************	***************************************	*	\$ <u></u>
Average	-4.56%	n/a	n/a	n/a	-3.31%	n√a	n/a	n/a
Median	-2.51%	n/a	n/a	n/a	-1.85%	r/a	n/a	n/a

Figures are the average and median values of the ratio of net income to risk-weighted assets for those banks with cumulative negative net income from Q3 2007 to Q4 2009. The ten-country sample is for 53 banks. Of these, 17 had cumulative negative net income before taxes and distributions and 23 had cumulative negative net income after taxes and distributions. "Feek" values equal the largest value of cumulative negative net income over any period between Q3 2007 and Q4 2009. Figures in the columns labelled "Peak" for all Banks' are the average and median values of "peak" losses for across all banks with negative net income for some period during Q3 2007 to Q4 2009, whether or not cumulative net income was negative over this period. In total, 32 banks had negative pre-tax net income for some period during Q3 2007 to Q4 2009 and 42 banks had negative net income after taxes and distributions for some period during this time.

The figures in the first set of columns in Table 1 are for banks with cumulative negative net income over the entire Q3 2007 to Q4 2009 period. The final column (labelled ' "Peak" for all Banks') reports data for all banks in the sample that experienced negative net income at some period during this time. Overall, 15 banks with positive pre-tax cumulative net income and 19 banks with positive cumulative after tax net income had periods of negative net

income during the 10-quarter period, for a total of 32 and 42 banks that experienced negative pre-tax or after-tax net income, respectively, for some period during the financial crisis. The mean and median values for this sample are smaller than those for the sample of banks that had cumulative negative net income over the full 10-quarter period. The additional banks tended to have short and generally mild periods of negative net income as compared to the sample of banks that experienced cumulative negative net income over the 10 quarters.

#### II.B.2 Losses during past financial crises

As a complement to the work on losses experienced during the recent global financial crisis, losses during past financial crises in individual countries were also examined. Seven past crises were analysed: the Japanese crisis (2000-2002), the Korean FX (1997-1999) and credit card crises (2003), the Swedish crisis (1990-93), the Norwegian crisis (1988-93)⁵, the Finnish crisis (1990-93), and the US commercial and real estate crisis in the 1980s and early 1990s. For comparison, data of the peak losses incurred by banks in some countries during the recent crisis are also included in the analysis.

The approach used in analyzing historical crisis data was to calculate "peak" crisis losses using a flexible horizon; this stands in contrast to the work on the current crisis, which as described above, primarily used a fixed, 10-quarter horizon. For the historical work, the start of the crisis is defined as the first year when each bank incurred a (net) loss and the end of the crisis as the last year when each bank incurred a loss. The loss variable chosen in this analysis is net income after taxes but before distributions. For each bank in the sample, the ratio of cumulative losses to risk-weighted assets (measured in the year before the crisis) is calculated. This provides an estimate of the losses incurred by the bank during the crisis.

The estimates, as shown in Figure 5, suggest that there is quite some variation among crises, partly due to differences in the data used and the differing systemic nature of the crises. However, looking at the more systemic crises (ie Korea FX, recent crisis and the Nordics), the typical losses incurred by banks were about 4-5% of RWAs. This compares with typical losses of 1-3% in the less systemic crises (ie Korea credit card and the US, where the results also include banks that did not incur losses during the crisis and therefore may not accurately represent the "negative tail" with regards to calibrating the size of the buffer) and the Japanese crisis (to the extent that the estimate for this only captures the second phase of the crisis).

We combine the results of the Swedish and Norwegian crisis due to data limitations.

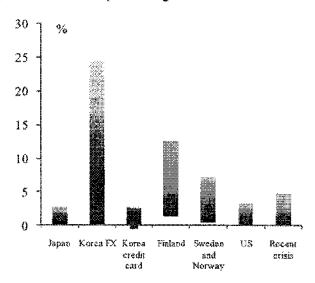


Figure 5

Cumulative peak losses as a percentage of RWAs at the start of the crisis^(a)

(a) Each shaded band shows 5 percentage points of the distribution across banks between the 5th and 95th percentiles. Square shows median. Negative results suggest that the bank made a profit during the period. The countries (and number of banks) included in the "recent crisis" sample are Australia (1), Canada (2), France (3). Germany (4), Japan (4), Korea (3), the Netherlands (4) Switzerland (2), UK (2) and the US (10).

A second set of analysis asked the question of how much capital banks would have required to absorb losses and maintain a reasonable level of lending to the real economy. Subject to important caveats, to withstand losses and maintain a reasonable level of lending growth, the capital needed increases to 7% to 12% of RWA. These estimates are based on loan growth assumptions derived from historical growth rates of GDP, monetary aggregates, and bank lending in each country, along with assumptions about the share of new lending funded by capital. It should be noted that there is considerable room for judgment in making assumptions about lending growth. While a partial reduction in lending growth after excessive growth periods may be necessary or desirable, ideally such reductions should be driven by a reduction in loan demand rather than a contraction in the supply of lending due to bank de-leveraging.

#### II.B.3. Stress Tests

This section summarises the results of recent stress tests conducted by eight member countries. While the various stress tests contain a range of outputs and projections, the analysis focuses on estimates of the impact of the stress scenarios on banks' Tier 1 capital ratio (Tier 1 capital to risk-weighted assets). For each of the participating countries, the results are averages across several large banks; the number of banks represented ranges from 2 to 19, though most figures are for 2 to 5 individual banking companies.

These cross-country comparisons are subject to several important caveats, related primarily to differences in the structure of the stress tests and the way their outputs were reported. These include differences in the type of capital examined in the stress test (Tier 1 vs. "core" Tier 1); whether risk-weighted assets were held fixed or were allowed to vary over the stress test horizon; the length of the stress test horizon (2 years for most of the stress tests, but the range was from 9 months to the full lifetime of the assets); whether the stress impact was cumulative over the entire stress test horizon or a "peak" loss estimate during the horizon;

the severity of the underlying stress scenario; and whether banks or supervisors made the estimates.

Some of these differences undoubtedly have a large impact on the results, though it is difficult in some cases to determine precisely the extent of the impact. In general, however, the impact on Tier 1 capital was more severe (more negative) when supervisors, as opposed to banks, made the estimates; when the impact is measured as "peak to trough" rather than cumulatively; and for longer horizons.

Holding these caveats firmly in mind, Figure 6 presents the basic results. The figure shows the average estimated change in the Tier 1 capital ratio for each of the eight stress tests. Six of the eight stress tests project a net decrease in the Tier 1 capital ratio and two project an increase. The median result is a decrease in the Tier 1 capital ratio of nearly 2%. Focusing just on those results that project a decrease in the capital ratio, the median is just over 2.85%, and the range is between 1.25% and 4%.

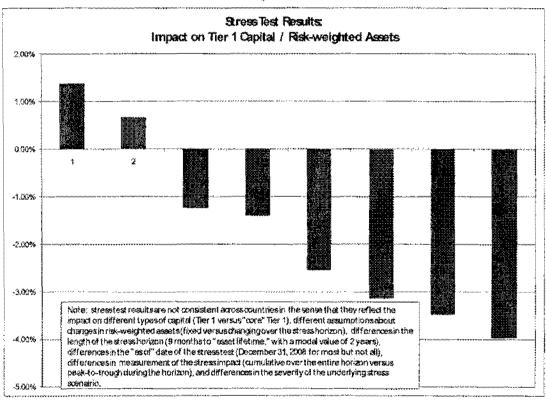


Figure 6

Individual bank results can show considerable variation relative to the overall mean result. As an example, for one country, the weighted average impact on Tier 1 capital equals about 2.5%, but the range was from an increase of 3.5% to a decrease of more than 7% of risk-weighted assets. More than one-quarter of the banks in this country's test had projected proforma Tier 1 capital impacts greater than (negative) 4% of RWA. Results from a second country also suggest considerable variation across firms, especially regarding the "tail", le banks for which results are more severe than is typical for most banks in the exercise. The mean impact on the "core" Tier 1 capital ratio changes by more than a full percentage point – from (negative) 4% to nearly (negative) 5% – depending on whether one bank with

particularly severe results was included or excluded in the mean. Finally, for a third country, individual bank results range between 1.75% and more than 5.0% of RWA.

In interpreting all these results in the context of the supervisory capital buffer, it is important to note that they do not incorporate any losses the banks may have sustained during the early part of the financial crisis, before the "as of" dates of the stress tests (which were generally year-end 2008). This could be an important omission in thinking about the total impact of the financial crisis, as losses were substantial for some (though certainly not all) institutions over this period. For instance, data from one country suggests that including prestress test losses increases the weighted average cumulative loss figure by 2 percentage points, from 2.5% to 4.5% of risk-weighted assets. Overall, more than a third of the banks have an implied decrease greater than 5% of RWA, when pre stress test realised results are included. Because these figures combined projected stress losses and realised actual losses, they should be viewed as peak estimates of the impact of the financial crisis on banks' capital positions.

#### II.C. Leverage ratio

#### II.C.1 Historical leverage ratios

To provide background and reference for calibration of the leverage ratio, data was also collected from 10 member countries on capital and leverage for large banks, for a period generally covering the early to mid-1990s to present. Due to lack of data and data consistency issues, the analysis focused primarily on Tier 1 capital to assets as the measure of leverage. The findings indicate that large banks have been increasing financial leverage over the sample period, with the weighted average Tier 1 leverage ratio declining from 3.5% to 2.5% over the past decade for countries that adopted IFRS in 2005, and from 7.7% to 6.4% in non-IFRS countries.

#### II.C.2 Discriminating between stressed and non-stressed banks

Using data collected from national supervisors, and also a targe commercially available database with international coverage, analysis was undertaken to examine which ratios discriminated between stressed and non-stressed banks prior to the recent crisis, and the level of the ratio that best discriminated between the stressed and non-stressed banks. Differences in mean leverage ratios before the crisis are not directly useful for calibration, but are presented as background information.

To perform this analysis, information was collected on several types of leverage ratios for 88 banks from 14 member countries (Working Group Sample). To augment these data, a second set of data was also collected on the capital ratios for 117 large banks from 19 countries, drawing from a large commercial data base (Broader Sample). Among the banks in these samples, "stressed" banks are those that failed, were acquired under stress, or that received firm-specific government assistance.

The leverage ratios examined were the ratio of Tier 1 capital to assets, the ratio of common equity to assets, the ratio of tangible common equity (TCE) to tangible assets, and the ratio of common equity minus current Tier 1 deductions to assets. Of course, none of these ratios

.

For the Working Group Sample, TCE is defined as total common equity (equal to paid in shares plus retained earnings) minus goodwill and intangibles (where intangibles are defined according to national rules). For the Broader Sample, TCE is defined as the sum of common stock, additional paid in capital, and retained earnings less the sum of treasury shares, intangibles and goodwill.

matches precisely the definitions ultimately adopted by the Basel Committee, as both the definition of capital and the definition of exposures differ (eg off-balance sheet exposures are not included in the calculation of leverage ratios shown in Table 3) so these results are merely indicative.

The results of the difference in means tests are presented in Table 2 for end 2006 data. In all cases, the mean leverage ratio of stressed banks were lower than the mean leverage ratio of non-stressed banks. In many cases, the differences in the means are statistically significant, particularly when the sample excludes banks domiciled in countries that had in place a minimum leverage ratio requirement prior to the financial crisis. Very similar results are obtained using data from 2007.⁷

Table 2

Mean leverage-based capital ratios for groups of stressed and non-stressed banks

(Data is calculated as at end 2006)

	Working Group Sample			Broader Sample					
	Str	essed	(	Other	St	ressed	(	Other	***************************************
Total Capital / Assets	11	6.33%	58	7,92%	19	5.50%	66	6.57%	*
Tier 1 Capital / Assets	11	4.38%	58	5.62%	20	3.89%	69	4.19%	
Common Equity / Assets Tangible Common Equity / Tangible	11	5.49%	58	5.76%	27	4.07%	79	5.12%	
Assets	11	3.08%	58	4.28%	27	2.65%	79	3.81%	**

Excluding countries with leverage ratio requirements

	Stressed		Other		Stressed		Other			
Total Constitution of	۵	4 270/		7.62%	**		4 37%	-,	A 000/	***
Total Capital / Assets	D	4.32%	41	1.02%		14	4.31%	51	6.28%	***
Tier 1 Capital / Assets	6	2.79%	41	5.27%	**	15	3.02%	54	3.65%	*
Common Equity / Assets Tangible Common Equity / Tangible	6	2.69%	41	5.08%	4.	17	2.64%	63	4,48%	***
Assets	6	1.93%	41	4.34%	**	17	2.22%	63	3.62%	***

The symbols ***, **, ** indicate that the difference is statistically significant at the 1%, 5% and 10% levels respectively. The Working Group Sample comprises up to 88 banks supplied by national supervisors from 14 countries. The Broader Sample is drawn from the Bankscope database and includes up to 117 banks from 19 countries.

#### II.C.3 Critical values

The main aim of the analysis of severely stressed and other banks is to identify whether there exists a "critical value" of each ratio that distinguishes "severely stressed" from other banks. That is, for each ratio, the aim is to identify a level of the ratio such that most "severely stressed" banks had ratios below that level, and most other banks had ratios above that level. If such a critical value can be identified, then it may provide a useful benchmark for the regulatory minimum requirement since banks with ratios below that level ultimately experienced significant stress, while banks with ratios above that level experienced less

Using a similar analysis, there is little evidence that risk-based capital ratios were consistently higher for the group of non-stressed banks prior to the crisis. The ratio of tangible common equity (TCE) to RWA is the only risk-based ratio for which severely stressed banks had statistically significantly lower values than non-stressed banks prior to the crisis (and only when using the Broader Sample). In this case, using end 2008 data, the mean TCE/RWA ratio for the sample of 19 stressed banks is 5.75% and 7.66% for the sample of 73 other banks.

stress. While not as direct a calibration approach as the RORWA analysis performed for the risk-based minimum requirement, the critical value analysis provides at least a rough indication of the range of leverage ratios that appear to have separated severely distressed banks before and in the early stages of the financial crisis.

Table 3 summarises cases in which a moderately accurate "critical value" was identified. An ideal "critical value" of the ratio would be one that correctly classified 100% of both severely stressed and other banks. In practice, we do not observe this, so the goal is to find a value of the ratio that produces a relatively high share of correct classifications for both types of banks. The critical values identified are those that correctly classify at least 50% of both severely stressed and other banks. This is an admittedly arbitrary standard and not a particularly stringent one, though a stronger standard is not supported by the data. However, it may provide a helpful way of highlighting and focusing on potential critical values for the various leverage ratios. The critical values for the Tier 1 to total assets measure ranges from 3% to 5%. It should be noted that this range is not comparable to the 3% leverage ratio calibration announced by the Governors and Heads of Supervision on 26 July 2010, as that ratio includes off-balance sheet exposures and a new Tier 1 capital definition. Converting the historical leverage ratios used in this paper to the new definitions introduced by the Basel Committee would produce a lower range.

Table 3
Critical Values of Alternative Leverage Ratios

	Working group sample	Broader sample
Tier 1 Capital / Assets	3.0% - 5.0%	3.0% - 4.0%
Common Equity / Assets		3.0% - 4.0%
Tangible Common Equity / Tangible Assets	2.5% - 4.0%	2.5% - 3.0%
Common Equity minus Tier 1 Deductions / Assets	2.5% - 4.5%	n/a

A critical value is a value of the ratio in question that correctly classifies at least 50% of both severely stressed and other banks. Blank cells indicate that no critical values were identified for that ratio in that sample, "n/a" indicates that the ratio was not calculated for this sample. The Working Group Sample comprises data on 88 banks supplied by national supervisors from 14 countries. The Broader Sample is drawn from a large commercial database provider and includes 117 banks from 19 countries.

## Working group members

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Spain Ms Linette Field

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Mr Daniel Sigrist

United Kingdom Mr Duncan MacKinnon

Mr Sujit Kapadia

United States Mr Francisco Covas

Mr George French Mr David Jones Ms Andrea Plante Mr Mark Levonian

European Commission Mr Andreas Strohm

Secretariat Mr Neil Esho

## Top-tier BRCs that meet tier I minimums under the current and proposed rule Data as of March 31, 2012

#### Current rules (Basel I) >= \$500m and < BHC total asset size \$106 >\$10 b Total Total # top-tier BHCs 877 78 955 Number of BHCs that meet 4% ties 1 minimum today 77 859 936 98% *49*% Avg \$ amount of tier 1 in excess of minimum (\$000s) \$111,428 \$10,479,898 Avg multiple of tier 1 held / tier 1 required 3,8 3,6 Proposed rule (Basel III) >= \$500m and < BHC total asset size \$105 >\$10 b Total Total # top-tier BHCs 877 78 955 Number of BHCs that meet 6% tier 1 minimum as proposed 74 810 884 92% 95% 93% Average \$ amount of tier 1 in excess of minimum (\$000s) \$71,715 \$5,658,259 Average multiple of tier 1 held / fier 1 required 2.1 1.9

# Top-tier BHCs that do not meet tier 1 minimums under the current and proposed rule Data as of March 31, 2012

Current rules (Basel 1)			
	>== \$500m and		
BHC total asset size	< \$10b	>\$106	Total
Total # top-tier BHCs	877	78	955
Number of BHCs that do not meet 4% tier 1 minimum today	18	1	19
*4	2%	1%	2%
Average \$ amount of tier 1 shortfall of minimum (\$000s)	-\$34,766	-\$497,448	
Aggregate \$ amount of tier I shortfall of minimum (\$900s)	-\$625,791	-\$497,448	
Proposed rule (Basel III)			
	>= \$300m and		
BHC total asset size	< \$106	>\$10 b	Total
Total # top-tier BHCs	£77	78	955
Number of BHCs that do not meet 6% tier 1 minimum as proposed	67	å	71
%	85/4	5%	7%
Average \$ amount of tier 1 shortfall of minimum (\$000s)	-\$32.716	-\$658,217	
Aggregate \$ amount of tier 1 shortfall of minimum (\$000s)	-\$2,191,942	-\$2,752,\$68	
Proposed rule (Basel III) excluding those who fall tier I min today	ş		
	>= \$500m and		
BHC total asset size	< \$10b	>\$10 b	Total
Total # wp-tier BHCs	877	78	955
Tie: 1			
Number of BHCs that do not meet 6% tier 1 minimum as proposed	49	3	52
% of total	5%	4%	5%
Average \$ amount of tier 1 shortfall of minimum (\$000s)	~\$17,124	-\$309,260	
Aggregate \$ amount of tier I shortfall of minimum (\$000s)	-\$839,087	-\$927,781	
Common equity tier 1 (CET1)			
Number of BHCs that do not meet 4.5% CET1 minimum as proposed	54	1	55
% of total	6%	1%	5%
Average \$ amount of CET1 4.5% shortfall of minimum (\$0005)	-\$15,355	-\$21.888	
Aggregate \$ amount of CET1 4.5% shortfall of minimum (\$000s)	-\$829,181	-\$21,838	
Number of BHCs that do not meet 7% CET1 minimum as proposed	150	8	158
% of total	17%	10%	17%
Annual Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Co	-\$23,483	-\$752,523	
Average \$ amount of CET1 7% shortfall of minimum (\$000s)	1. No. 70 1. A. C. C. T.	**************************************	

#### Banks that meet tier I minimums under the current and proposed rule Data as of March 31, 2012

#### Current rules (Basel I) Hank total asset size < \$10b >=\$10b Total Total # banks 7,269 107 7,376 Number of banks that meet 4% tier 1 minimum today 7,213 7,320 107 % of total 99% 100% Avg S amount of tier 1 in excess of minimum (\$000s) \$30,110 \$6,055,069 Avg multiple of tier 1 held / tier 1 required 5.7 4.1 Proposed rule (Basel III) Bank total asset size < \$10b >=\$106 Total Total # banks 7,269 107 7,375 Number of banks that meet 6% tier 1 minimum as proposed 7,094 106 7,200 % of total 98% 99% 98% Average S amount of tier 1 in excess of minimum (5000s) \$24,184 54,153,418 Average multiple of tier 1 heki / tier 1 required 3.7 2.4

#### Banks that do not meet fier 1 minimums under the current and proposed rule Data as of March 31, 2012

Current rules (Basel I)			
Bank total asset size	< \$10b	>=\$10b	Total
Total # banks	7,259	107	7,376
Number of banks that do not meet 4% tier 1 minimum today	56	0	56
% of total	I%	0%	1%
Average \$ amount of tier 1 shortfall of minimum (\$000s)	-\$2,344	\$0	
Agricuate 5 amount of tier 1 shortfall of minimum (\$000s)	-\$131,254	<b>\$</b> 0	
	•		
Proposed rule (Basel III)	A		
Bank total asset size	< \$10h	>=\$10h	Tetal
Total # banks	7,269	107	7,376
Number of banks that do not meet 5% tier 1 minimum as proposed	175	<u> </u>	176
% of total	2%	1%	2%
Average \$ amount of tier 1 shortfall of minimum (\$000s)	-\$5,303	-\$105,263	
Aggregate S amount of tier 1 shortfall of minimum (\$000s)	-5928,108	<b>-\$</b> 106,263	
Thomas . B. T. ATG. B TREE . B. 45 . 45 . 4 . 4 . 4 . 4 . 4 . 4 . 4 .			
Proposed rule (Basel III) excluding those who fail tier 1 min today Bank total asset size	- ** **		77 . 1
Total # banks	< \$10b	>=\$10b	Total
10(2) # Danks	7,269	107	7,376
Tier 1			
Number of banks that do not meet 6% tier 1 minimum as proposed	119	1	120
% of total	2%	1%	23∕4
Average S amount of tier 1 shortfall of minimum (\$000s)	<b>-\$4</b> ,273	-\$106,263	
Aggregate \$ amount of tier I shortfall of minimum (5000s)	-\$508,437	-\$106.263	
	2,724,723	41112,200	
Common equity tier 1 (CET1)			
Number of banks that do not meet 4.5% CET1 minimum as proposed	59	0	59
% of total	1%	0%	1%
Average \$ amount of CET1 4.5% shortfall of minimum (\$000s)	-\$6,694	\$0	
Aggregate \$ amount of CET1 4.5% shortfall of minimum (\$600s)	<b>.\$</b> 394 <b>.</b> 934	\$0	
Klumbar of books that do not your 28/ CEPE	10*	7	*90
Number of banks that do not meet 7% CET1 minimum as proposed % of total	187 3%	2%	189 3%
- V W-1 400-1002	238	479	374
Average I amount of CET1 7% shortfall of minimum (\$000s)	-\$6,206	-\$196,296	
Aggregate \$ amount of CET1 7% shortfall of minimum (\$000s)	-\$1,160,524	-\$392,592	

#### Impact Analysis Methodology for Basel 3 NPRs

Staff conducted an analysis to assess the impact of the proposed changes to the definition of capital (Basel III NPR) and to
risk-weighted assets (Standardized Approach NPR) for banks and top-tier bank holding companies using available data, as
of March 31, 2012, from the commercial bank Call Reports and the holding company FR Y-9C reports. Because required
data was not always available, staff made certain assumptions (listed below) to calculate the Basel III requirements.

#### Definition of capital (numerator of risk-based capital ratios)

- With respect to the regulatory deductions from capital, staff made assumptions regarding the amount of:
  - o outstanding DTAs subject to full deduction and the amount subject to the threshold deductions;
  - o investments in the capital of unconsolidated financial institutions subject to the threshold deductions; &
  - common equity tier 1 and tier 1 minority interest based on outstanding Class A minority interest.

#### Standardized approach risk-weighted assets (denominator of risk-based capital ratios)

- To estimate Basel III risk-weighted assets, staff used line items from the Call Report and Y-9C to estimate changes in the
  risk-weighted asset amount for residential mortgage exposures, high-volatility commercial real estate (HVCRE) exposures,
  past-due loans, and securitizations.
- The risk weight for HVCRE exposures (defined as construction, land development, and other land loans for this analysis; available on the regulatory reports) was increased from a risk-weight of 100% to 150%.
- Residential Mortgage Exposures
  - o First-lien residential mortgage exposures as reported on the regulatory reports (currently risk weighted at 50%) were assumed to be category 1 exposures, while junior lien exposures, including home equity lines of credit, (currently risk-weighted at 100%) were assumed to be category 2 exposures.
  - To distribute residential mortgages across the proposed risk weights, which are based on LTV, an LTV distribution for firms' first and second lien mortgage portfolios was estimated using loan LTV data from industry databases (McDash and Corelogic) and then spread across the Category 1 risk weights (35% to 100%) and Category 2 risk weights (100% to 200%), as appropriate.
- Past-due loans (loans past due 90 days or more and nonaccrual loans, excluding residential mortgages and sovereign
  exposures), which currently are risk-weighted at 100%, were assigned to the 150% risk weight.
- For foreign sovereign exposures, used the public cross-border claims and the foreign-office claims on local residents in non-local currency from the FFIEC 009 report to find a distribution of foreign sovereign exposures by country, which was assumed to be representative across all institutions. Assigned risk weights by country: under Basel I, OECD countries received a zero percent risk weight, while all other countries received a 100% risk weight; under Basel III, assigned countries risk weights according to their CRC ratings. Applied country distribution, with associated risk weight, to foreign debt securities line items from the regulatory report.
- Securitization exposures
  - An interagency analysis was conducted using the simplified supervisory formula approach to calculate risk weights on tranches within 60 securitization transactions downloaded from an industry database (Intex) 15 deals each were selected for credit cards, autos, residential mortgages, and commercial mortgages.
  - To calculate average risk weights under Basel I, each tranche of the selected transactions was assigned a risk weight according to the general risk-based capital rules with certain assumptions. As a result, certain exposures were assigned risk weights according to the ratings-based approach, most mezzanine and junior positions were assumed to receive a 1,250% under the gross-up approach, and low-rated senior positions were assigned a 100% risk weight. To calculate average risk weights under Basel III, the SSFA was applied to each tranche of the selected transactions.
  - The current balance of each transaction was used to calculate a weighted average risk weight across each transaction type. These risk weights were then applied to each bank's value of summed items from the regulatory report for RMBS, CMBS, auto, and credit card.

#### 1. Steps for estimating the numerator changes for the capital ratios under the Basel 3 proposal

Staff from an inter-agency work group used both qualitative measures (such as discussions with banks), as well as quantitative measures (such as QIS data) to create the assumptions used to estimate capital as proposed in the Basel 3 NPRs.

The assumptions include:

- 40% of a bank's deferred tax assets (DTAs) are used as a proxy for "carry-forward DTAs,"
   which would be subject to full deduction
- 60% of DTAs are used as a proxy for "temporary differences DTAs," which would be subject to strict limits
- 80% of qualifying non-controlling (minority) interests in consolidated subsidiaries is used as a proxy for qualifying "common equity tier I minority interest"
- 20% of qualifying non-controlling (minority) interests in consolidated subsidiaries is used as a proxy for qualifying "tier 1 minority interest"
- 40% of investments in unconsolidated subsidiaries and associated companies is used as a proxy for "significant investments in unconsolidated financial institutions in the form of common stock"
- Regarding tier 1 deductions resulting from the corresponding deduction approach, trust preferred securities issued by financial institutions are used as a proxy for investments in the capital of unconsolidated financial institutions

#### 1. Basel 3 Common equity tier 1 (CET1) calculation

The following items from the regulatory reports were used in the Basel 3 CET1 numerator calculations:

Item	Banks	BHCs
	(Call Report)	(Y-9C)
Common stock	RCFD3230	BHCK3230
Surplus	RCFD3839	BHCK3240
Retained Earnings	RCFD3632	BHCK3247
AOCI	RCFDb530	BHCKb530
Other equity capital components	RCFDa130	BHCKa130
Qualifying non-controlling (minority) interests in consolidated subsidiaries	RCFDb589	BHCKG214
Goodwill	RCFDb590	BHCKb590
Cumulative change in fair value of all financial	RCFDf264	BHCKf264
liabilities accounted for under a fair value	***************************************	
option that is included in retained earnings and is		
attributable to changes in the bank's own		
creditworthiness		
Purchased credit card relationships and	RCFDb026	BHCKb026
nonmortgage servicing assets		
Net deferred tax assets	RCFD2148	BHCK2148
Investments in unconsolidated subsidiaries and associated companies	RCFD2130	BHCK2130
Mortgage servicing assets	RCFDa590	BHCK6438

#### The Basel 3 CET1 base

The Basel 3 CET1 base used for the 10 and 15% threshold limitations described below is calculated by adding common stock, surplus, retained earnings, AOCI, other equity capital components, and 80% of qualifying non-controlling (minority) interests in consolidated subsidiaries (CET1 minority interest). Subtracted from that value is goodwill, the cumulative change in fair value of financial liabilities, the purchased credit card relationships and nonmortgage servicing assets, and the 40% of DTAs ("carry-forward DTAs").

# The 10 and 15% threshold limitations on MSAs, DTAs, and significant investments in unconsolidated subsidiaries in the form of common stock

The 10% potential deduction for MSAs, "temporary differences DTAs" and significant investments in unconsolidated financial institutions in the form of common stock is calculated using the CET1 base described above.

The 15% limitation for MSAs, "temporary differences DTAs" and significant investments in unconsolidated financial institutions in the form of common stock is equal to 17.65% of the Basel 3 CET1 base, less the sum of the 10% deductions described above.

#### Basel 3 CET1 capital calculation

Basel 3 CET1 is equal to the Basel 3 CET1 base, less deductions resulting from the 10% limitations, less deductions resulting from the 15% limitation described above.

#### 2. Basel 3 Tier 1 capital calculation

The following items from the regulatory reports were used in the Basel 3 tier 1 numerator calculations:

Item	Banks (Call Report)	BHCs (Y-9C)
Perpetual preferred stock and related surplus	RCFD3838	BHCK3283
Non-qualifying perpetual preferred stock	RCFDb588	BHCKb588
Qualifying non-controlling (minority) interests in consolidated subsidiaries	RCFDb589	BHCKG214
Trust preferred securities issued by financial institutions (HTM fair value from HC-B)	RCFDg349	BHCKg349
Trust preferred securities issued by financial institutions (AFS fair value from HC-B)	RCFDg351	BHCKg351
Trust preferred securities issued by financial institutions (consolidated from HC-D)	RCFDg299	BHCKg299

#### Basel 3 tier 1 capital calculation

Basel 3 tier 1 capital is estimated to be equal to the Basel 3 CET1 base plus perpetual preferred stock and related surplus, plus tier 1 minority interest, less non-qualifying perpetual preferred stock and less any amount of investments in the capital of unconsolidated financial institutions above the 10% threshold limitation.

#### 2. Basel 3 Tier 2 and total capital calculation

The following items from the regulatory reports were used in the Basel 3 tier 2 and total capital numerator calculations:

Item	Banks (Call Report)	BHCs (Y-9C)
Qualifying subordinated debt and redeemable preferred stock	RCFD5306	BHCKg217
Cumulative perpetual preferred stock includible in Tier 2 capital	RCFDb593	BHCKg218
Allowance for loan and lease losses includible in Tier 2 capital	RCFD5310	BHCK5310
Qualifying restricted core elements (other than cumulative perpetual preferred stock)		BHCKg215
Unrealized gains on AFS equity securities includable in Tier 2 capital	RCFD2221	BHCK2221
Other Tier 2 capital components	RCFDb594	BHCKb594

#### Basel 3 tier 2 capital calculation

Basel 3 tier 2 is calculated by adding qualifying subordinated debt and redeemable preferred stock, cumulative perpetual preferred stock includible in tier 2 capital, allowance for loan and lease losses includible in tier 2 capital, unrealized gains on available-for-sale securities includable in tier 2 capital, other tier 2 capital components, and qualifying restricted core elements (other than cumulative perpetual preferred stock), which is the value of the trust-preferred securities that were removed from tier 1 capital.

#### Basel 3 total capital calculation

Basel 3 total capital is calculated by adding tier 1 and tier 2 capital as described above.

# II. Steps for estimating the denominator changes for the capital ratios under the Basel 3 proposal (standardized approach)

To determine the impact of the changes to risk-weighted assets under the standardized approach, staff used existing risk-weighted assets (less numerator deductions), and then added the Basel III "impact" for the following categories: foreign sovereign exposures, foreign DI exposures, high volatility commercial real estate (HVCRE), past-due loans, residential mortgage exposures, and securitization exposures.

#### 1. "Base" risk-weighted assets and risk-weighted asset impact by category

The "base" (reported) risk-weighted asset value for each bank was first adjusted to reflect any of the capital deductions described in part I (numerator changes). Staff then estimated a change in risk-weighted assets for each category (foreign sovereign exposures, foreign DI exposures, HVCRE, past-due loans, residential mortgage exposures, and securitization exposures) by pulling line items for each category, and comparing the risk-weighted exposure amount under Basel I versus under Basel III.

#### A. Foreign Sovereign Exposures.

- 1) Sum line items RCFD 1742, RCFD 1744, and RCFD 2081 for each bank, finding one value, "sovereign amount" per bank.
- 2) Sum the exposure amounts from 009 Report line items FCEX C916 and C919 for each country. Find the % by country by dividing total for country over total exposures for all countries for FCEX C916 and C919. Will have one % for each country. This "distribution" will be used for all banks and bank holding companies.

#### For this analysis:

- Removed countries where there were no exposure values
- Removed lines that were regions or sums of countries (ie only included individual country data)
- 3) Find appropriate risk weight under Basel I and Basel III per country as outlined below:

#### Basel I (baseline)

4) Exposures to OECD member countries receive a zero percent risk weight, while exposures to all other countries receive a risk weight of 100 percent. Multiply applicable risk weight (zero or 100) by exposure amount per country. Sum the amounts per country, per bank to find risk-weighted exposure amount by asset size group.

#### Basel III

CRC Ratings	Risk Weight
0-1	0%
2	20%
3	50%
4-6	100%
7	150%
No CRC	100%

4) Use CRC table to find appropriate risk weight per country. Multiply risk weight by the distribution percentage found in step 2; then multiply by exposure amount per bank.

#### B. Foreign DI Exposures.

1) Pull line RCFD B532 for each bank as "foreign DI amount."

- 2) Sum the exposure amounts from 009 Report line items FCEX C915 and C918 for each country. Find the % by country by dividing total for country over total exposures for all countries for FCEX C915 and C918. Will have one % for each country. This "distribution" will be used for all banks and bank holding companies.
- 3) Find appropriate risk weight under Basel I and Basel III per country as outlined below:

#### Basel I (baseline)

4) Foreign DI exposures to OECD member countries receive a 20 percent risk weight, while exposures to all other countries receive a risk weight of 100 percent. Multiply applicable risk weight (20 or 100) by exposure amount per country.

#### Basel III

4) Use CRC table below to find appropriate risk weight per country. Multiply risk weight by the distribution percentage found in step 2; then multiply by exposure amount per bank.

CRC of Sovereign Incorporation	Risk Weight (%)
0-1	20
2	50
3	100
4-7	150
No CRC	100

#### C. High Volatility Commercial Real Estate (HVCRE)

#### Steps for analysis:

1) Pull line item RCONf159 by bank as "HVCRE."

#### Basel I

2) HVCRE under Basel I is 100% risk-weighted.

#### Basel III

2) HVCRE under Basel III is 150% risk-weighted.

#### D. Past-due loans

#### Steps for analysis:

1) Sum line items: rcfdf171 rcfdf170 rcfd5461 rcfd5460 rcfd1256 rcfd1255 rcfd1253 rcfd1252 rconc229 rconc237 rconc239 rcfdf167 rcfd1597 rcfd5391 rcfd5390 rcfd5382 rcfd5381 rcfd5379 rcfd5378 rcon3495 rcon3494 rconf183 rconf181 rconf180 rconf182 rcfnb574 rcfnb573 rcon5400 rcon5399 rcon3501 rcon3500 rcfd1583 rcfdk215 rcfdk214 rcfdk217 rcfdk218 rcfdb577 rcfdb576 rcfd3506 rcfd3507 rconf177 rconf175 rcfdf168 rconf176 rconf174) as "Past Due Loans" per bank.

#### Basel

2) Past Due loans under Basel I are 100% risk-weighted. Basel III

2) Past Due loans under Basel III are 150% risk-weighted.

#### E. Residential Mortgage Exposures.

#### Steps for analysis:

1) Pull line item RCON 5367 (first liens) per bank as "RCON 5367." Sum line items RCON 1797 and RCON 5368 (junior and revolving liens) for each bank as "RCON 1797+RCON 5368."

#### Basel I

2) Multiply "RCON 5367" by 50% (RW); multiply "RCON 1797 +RCON 5368" by 100% (RW). Sum these values by bank to find the risk-weighted exposure amount for residential mortgages.

#### Basel III

2) Distribute "RCON 5367" according to table and multiply that amount by appropriate risk weight, per the table. Sum the values by bank. Note for this analysis, used the original LTV category (per ALH). Distributions for Category 1 and Category 2 loans are based on analysis from Paul Calem (document titled "ltv distributions.txt").

Original LTV Category	80% of First liens are Category 1	Category 1 risk weight	20% of First liens are Category 2	Category 2 risk weight
<≃ 60	32.73	35%	4.02	100%
> 60 and <= 80	60.81	50%	18.04	100%
> 80 and <= 90	2.89	75%	26.44	100%
>90	3.58	100%	51.5	200%

3) Distribute "RCON 1797 +RCON 5368" according to table and multiply that amount by appropriate risk weight, per the table.

LTV Category	Percent of principal balance by category	Category 2 residential mortgage exposure risk weights
< <del></del> 60	22%	190%
> 60 and <= 80	40%	100%
> 80 and <= 90	24%	150%
> 90	14%	200%
Total	100%	

#### F. Securitization Exposures.

Approach: The New York RB and the Philadelphia RB provided a file of anonymized securitization data from large banking organizations across five product types (CLOs, non-agency RMBS, Credit Card, Auto, and CMBS) with the necessary data points including an external rating, attachment point and detachment points, and cumulative loss data. For each of these product types, risk weights were

calculated for 25 securities under the Baseline and the SSFA. The average risk weights under the Baseline and the SSFA for these securities were used as a proxy to estimate the impact.

1. For each product type, provide the weighted average for the Baseline RW and the SSFA risk weight.

Туре	Baseline Ave RW (Basel I treatment)	SSFA Ave RW (Basel III treatment)
Credit Cards	109%	170.4%
Autos	52%	67%
CMBS	164%	239.5%
RMBS*	365%	445%

^{*}to find Basel 1 risk weight for RMBS, using interagency-supplied securitization data:

- 1) Used "current" cycle date data only
- 2) anything with a detachment point of 100 (senior) got 100% risk weight, all else got 1250% as "B1 risk weight"
- 3) used current bal to find a weight per transaction
- 4) multiplied weight by B1 risk weight; summed risk weights to find one weighted average risk weight
- 2. Baseline reporting line items:

Туре	Baseline Call Report Line Items	Baseline BHC Line Items
Credit Cards	RCFD B\$38, RCFD B\$41	BHCK B838, BHCK B841
Autos	RCFD B846, RCFD B849	BHCK B846, BHCK B849
CMBS	RCFD K146 RCFD K149, RCFD K154, RCFD K157	BHCK K146, BHCK K149, BHCK K154, BHCK K157
RMBS	RCFD G308, RCFD G311, RCFD G320, RCFD G323	BHCK G308, BHCK G311, BHCK G320, BHCK G323,

3. For each product type, aggregate and average the Call Report line items and apply the Baseline (Basel 1) risk weights and SSFA risk weights (Basel 3).

#### 3. Calculate impact and Basel III risk-weighted assets

For each category (foreign sovereign exposures, foreign DI exposures, HVCRE, past-due loans, residential mortgage exposures, and securitization exposures), multiplied the line items from the regulatory reports first by the risk weight for Basel I, which represented the risk-weighted assets under Basel I for that category. This step was replicated for Basel III by multiplying the line items from the regulatory reports by the risk weight for Basel III, which represented the risk-weighted assets under Basel III for that category.

The "impact" of Basel III was the Basel III amount per category less the Basel I amount per category, per bank, which represented the increase in risk-weighted assets for that category. The impact amount from each category was added to the "base risk-weighted assets" calculated in step 1 per bank. The sum of the

base risk-weighted assets plus the impacts of each category represented the Basel III risk-weighted asset amount.

#### 4. Additional Notes:

- This analysis was replicated for banks and bank holding companies.
- For the bank holding company analysis, used only top-tier BHCs with more than \$500 million in total assets.
- Instances where tier 1, as reported in the Call Report or Y-9C was negative was left in the analysis, assuming that the reported figures were accurate.

### **Bank Impact Analysis**

### Impact of: Basel 3 with Standardized approach

in thousands			Current Data				itur e	þm	'''''' ######### sted Basef III Cap	mi. tal	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
			r 1 Gapita)			1,0	nnoi faire e	I K	s,t Capital - 🚗 i	10	ai rion Pasca
Bank Size	Count of Banks	(SD	00)	C:	sprat (\$050)	T (e)	~1 C3000	(\$(	(C)	Ca	ptol (SOLD)
greater than \$2508	(	5 \$	493,639,368	\$	615,172,789	\$	483,801,991	\$	484,301,991	S	606,925,348
\$100B - 250B	1:	3 <b>\$</b>	182,216,148	\$	211,616,800	\$	175,318,671	5	175,318,746	\$	204,621,117
\$10 - 1008	8:	3 \$	269,843,538	\$	305,163,612	15	262,137,865	\$	264,856,372	\$	300,202,812
\$1 - 10B	55!	5 \$	145,674,132	\$	157,527,571	\$	143,362,961	\$	144,923,461	\$	156,700,358
\$250m to \$18	1,900	\$ \$	88,907,975	\$	96,142,159	\$	89,506,338	\$	90,226,284	\$	97,385,922
less than \$250m	4,76	7 \$	55,600,188	\$	59,404,342	\$	56,526,743	\$	56,960,126	\$	60,768,936
Grand Total	7,33	) \$	1,235,881,349	\$	1,445,027,273	5	1,210,654,569	\$	1,216,586,980	\$	1,426,604,493

Additional capital required to meet alternative capital standards:

	* * *********								- ·									
in thousands		Minimum r	equire	ed (adequately o	:apitalize	3d):		. v. vete mentevansk fiktim	H-V	Nell Capitalized	XXXII.IXI		6 (S)	- 14 m	ayn	atean maple.	(4)	
				~														
	Commo	on Equity T1			Total R	BC ratio	Cor	mmon Equity T1			To	al R8C ratio	t s	enon Equity	M.	wit RBC 🛫 🕝	i ci	at RBC ratios
Bank Size	RBC (4	4.5%)	Tier	1 RBC (8.0%)	(8.0%)		RBI	C (6.5%)	Tie	r 1 RBC (8.0%)	(10	(0%)		BQ (7.0%)	(8.	526)	(10	5%)
greater than \$2508	\$	∀	\$	7	\$		\$	*	\$	*	\$	*	\$	*	\$	43,426	\$	Ψ
\$100B - 250B	\$	-	S:	#	\$	#	\$	#	\$	257,639	\$	*	\$	w	\$	768,128	\$	*
\$10 - 100B	\$	2,407	\$	76,240	\$	230,110	<b>S</b>	314,104	\$	1,162,912	\$	906,847	\$	412,536	\$	2,009,691	\$	1,727,627
\$1 - 108	8	25,298	\$	28,301	\$	64,113	13	5 <del>6</del> ,659	\$	166,648	\$	417,516	\$	73, <b>90</b> 9	\$	304,808	\$	795.817
\$250m to \$18	\$	90,087	\$	38,575	\$	48,874	\$	154,998	\$	113,225	\$	236,187	\$	179,015	\$	183,454	\$	406,942
less than \$250m	8	42,629	5	37,550	\$	40,868	\$	54,898	\$	50,490	\$	90,776	\$	62,058	\$	63,821	\$	148,719
Grand Total	\$	160,419	\$	180,667	\$	383,965	\$	5 <b>8</b> 0,6 <b>5</b> 9	\$	1,750,915	\$	1.851,326	\$	727,518	\$	3,373,330	\$	3,080,105

Count of banks that fail to meet following capital standards:*

	Minimum i	equired (adequately o	:apitalized):		Well Capitalized		. Mink		
Bank Size	CET1 RBC (4.5%)	Tier 1 RBC (6.0%)	Total RBC ratio (8.0%)	CET1 RBC (5.6%)	Tier 1 RBC (8.0%)	Total RBC ratio			
greater than \$250B	1 ,			-	-	-		1	-
\$1008 - 2508			*	-	*[			1	. 1
\$10 - 100B	1	1	2		2 5	5	2	7	12
\$1 - 108	2	2	3	2	2 9	25	3	16	42
\$250m to \$1B	7	5	7 :	1:	23	62	17	41	107
less than \$250m	7	5	6	14	21	83	21	45	159
Grand Total	17	13	18	3(	59	175	43	111	320

#### Abbrevaitions:

RBC = Risk Based Capital

CCB = Capital conservation buffer

CET1 = Common Equity Tier 1

B = billions

M = millions

Source: Call report data (3.31.12) and FDIC estimates
* Count of banks that fail to meet the Basel III and Standardized Approach capital standards do not include approximately 233 banks that do not meet the current RBC standards.

#### FDIC Methodology for Estimating the Impact of the Basel III and Standardized Approach NPRs on US Banks

FDIC staff analyzed the impact of the proposed changes contained in the Basel III and Standardized Approach NPRs using Call Report data and the assumptions provided below.

#### Basel III (Numerator of risk-based capital ratios)

The chart below summarizes the approach and assumptions used to estimate common equity tier 1, tier 1 and total capital.

		Call Report	Call Report	
ļ 	Capital component	Line	Field	Notes and assumptions
+	Common Stock	RC-24	RCFD3230	
+	Surplus	RC-25	RCFD3839	:
-	Retained Farnings	RC-26 a.	RCFD3632	
	AOCI	RC-26 b.	RCFDH530	
<b>+</b>	Other Equity Capital Components	RC-26 c.	PCFDA130	
-	Goodwill & Other Intangible Assets	RC-R-7 a	RCFDB590	
- "	Change in FV of Financial Liabilities	RC-R-7 b	RCFDF264	Deduct gains; add back losses
-	PCCR and Non-Mortgage Servicing Assets	RC-M-25	BCFDE026	
-	Net deferred tax assets	RC-F-2	RCFD2148	Calculation / Assumed 40% deducted as 'oarry forward' DTAs
+	Minority Interest	RC-R-6	RCFDB589	Calculation / Assumed 40% included in CET1 sapital
Dedu	ctions for components exceeding 10%/15% threshold lim	itations		
<b>-</b>	Deferred Tax Assets not previously deducted	RC-F-2	RCFD2148	Calculation / Assumed 60% of DTAs related to temporary differences
-	Investments in financial institutions	RC-8	RCFD2110	Calculation / Assumed 40% of investments in Fts would be in the form of common stock
-	Mortgage servicing assets	RC-M-2.a(1)	RCFDA590	
Cour	men Equity Tie Et Capital			
÷	Perpetual Preferred Stock & Surplus	RC-25	RCFD3838	, , , , , , , , , , , , , , , , , , ,
*	Non-Qualifying Perpetual Preferred	RC-R+5	RCFDB593	· · · · · · · · · · · · · · · · · · ·
	Investments in unconsolidated financial institutions over	RC-B 6.a. Col. B	RCF1X(349	
*	threshold limits	RC-BM6.s. Cot D RC-D3.a	RCFDXG51 RCFDX299	
 ÷	Qualifying minority interests in consolidated subs	RC-R-6	RCTDD589	Calculation / Assumed 80% included in Tier 1
nce				
*	Qualifying subordinated debt and redeemable preferred	RC-R 12	RCTD5306	
	stock Non-Qualifying Perpetual Preferred	RC-R-S	RCFOh588	
+	Allowance for loan and lease losses includible in Tier 2	RC-R 14	RCPD5310	
÷	capital			
4	Other Tier 2 capital components	RC-R 16	RCFDB594	
Intel	Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contain the Contai			

#### Standardized Approach (Denominator of risk-based capital ratios)

To estimate the effects of the Standardized Approach, FDIC staff started with each bank's current risk-weighted assets (RWA), as reported on the Call Report, and adjusted RWAs for asset categories where risk weights would change under the proposed rule. The chart below shows the asset categories and assumed change in risk-weights proposed under the Standardized Approach. Following the chart is a description the assumptions used in the analysis.

Asset category	Current: Appendix A RW	Projected: Standardized RW
1-4 Family Residential Loans	50%	75%
High Volatility Commercial Real Estate (HVCRE) loans	100%	150%
Non-accruing & 90 days or more past due loans	100%	150%
Intangibles (MSA, DTA not deducted in defcap)	100%	250%
Securitizations	50%	75%
Derivatives	0%/ 20%/ 50%	0%/4%/10%
Fed Funds Sold and Securities Purchased to Resell	0%/ 20%/ 100%	0%/8%/40%
Securities Lent	0%/ 20%/ 50%/ 100%	0%/8%/20%/40%

#### Assumptions:

- <u>1-4 Family Mortgages</u>: FDIC staff used data from Lender Processing Services (LPS) to estimate the risk-weight on the stock
  of residential mortgage loans in the banking industry. LPS collects data on mortgage originations, including some mortgage
  loan characteristics such as loan-to-value ratios.
- High-Volatility Commercial Real Estate (HVCRE) loans: HVCRE loans are a sub-set of commercial and land development
  (C&D) loans, which are reported on regulatory reports. FDIC staff estimated the amount of C&D loans classified as HVCRE
  by comparing Call Report and FFIEC 101 data.
- Non-Accruing and 90 day past due loans: FDIC staff used existing Call Report data on non-accruing and past due loans to assess the impact of a 150% risk weight.
- Intangibles: FDIC staff used existing Call Report data on intangible assets.
- <u>Securitizations</u>: FDIC staff assumed a 50% increase in the risk weight of securitization exposures based on Call Report data
  and discussions with bank examiners. FDIC staff assumed that the average risk weight for securitizations would increase
  because banks, particularly community banks, typically invest in senior tranches, whose risk-weight is less affected by the
  SSFA. In addition, the Standardized Approach includes the gross-up treatment which represents no change from current
  rules.
- Derivatives and Repo style transactions: FDIC staff estimates there will be a significant reduction in risk-weights for certain
  exposure under the collateral haircut approach and from the expansion of assets that would be recognized as eligible
  collateral under the proposal.

MSA Mortgage Servicing Assets

NPR Notice of Proposed Rulemaking

NRSRO Nationally Recognized Statistical

NGR Net-to-Gross Ratio

AOCI Accumulated Other Comprehensive Income BCBS Basel Committee on Banking Supervision BHC Bank Holding Company BIS Bank for International Settlements CAMELS Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk CCF Credit Conversion Factor CCP Central Counterparty CD.C. Community Development Corporation CDFI Community Development Financial Institution CDO Collateralized Debt Obligation CDS Credit Default Swap CDSind Index Credit Default Swap CBIO Credit-Enhancing Interest-Only Strip **CF** Conversion Factor CFR Code of Federal Regulations CFTC Commodity Futures Trading Commission CMBS Commercial Mortgage Backed Security CPSS Committee on Payment and Settlement Systems CRC Country Risk Classifications CRAM Country Risk Assessment Model CRM Credit Risk Mitigation CUSIP Committee on Uniform Securities Identification Procedures D.C.O Derivatives Clearing Organizations DFA Dodd-Frank Act DI Depository Institution DPC Debts Previously Contracted DTA Deferred Tax Asset DTL Deferred Tax Liability DVA Debit Valuation Adjustment DvP Delivery-versus-Payment E Measure of Effectiveness EAD Exposure at Default ECL Expected Credit Loss **RE** Expected Exposure E.O. Executive Order **EPE** Expected Positive Exposure FASB Financial Accounting Standards Board FDIC Federal Deposit Insurance Corporation FFIEC Federal Financial Institutions Examination Council FHLMC Federal Home Loan Mortgage Corporation FMU Financial Market Utility FNMA Federal National Mortgage Association FR Federal Register GAAP Generally Accepted Accounting Principles GDP Gross Domestic Product GLBA Gramm-Leach-Bliley Act GSE Government-Sponsored Entity HAMP Home Affordable Mortgage Program HELOG Home Equity Line of Credit HOLA Home Owners' Loan Act HVCRE High-Volatility Commercial Real Estate IFRS International Reporting Standards IMM Internal Models Methodology I/O Interest-Only IOSCO International Organization of Securities Commissions LTV Loan-to-Value Ratio M Effective Maturity

MDB Multilateral Development Banks

Rating Organization OCC Office of the Comptroller of the Currency OEGD Organization for Reonomic Cooperation and Development OIRA Office of Information and Regulatory Affairs OMB Office of Management and Budget OTC Over-the-Counter PCA Prompt Corrective Action PCCR Purchased Credit Card Receivables PFE Potential Future Exposure PMI Private Mortgage Insurance PSE Public Sector Entities PvPPayment-versus-Payment QCCP Qualifying Central Counterparty RBA Ratings-Based Approach REIT Real Estate Investment Trust RFA Regulatory Flexibility Act RMBS Residential Mortgage Backed Security RTCRRI Act Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 RVC Ratio of Value Change RWA Risk-Weighted Asset Securities and Exchange Commission Supervisory Formula Approach SFA SPT Securities Financing Transactions SBLF Small Business Lending Facility SLHC Savings and Loan Holding Company SPE Special Purpose Entity SPV Special Purpose Vehicle SR Supervision and Regulation Letter SRWA Simple Risk-Weight Approach SSFA Simplified Supervisory Formula

#### VIII. Regulatory Flexibility Act

Approach

U.S. United States

VaR Value-at-Risk

U.S.C. United States Code

1995

The Regulatory Flexibility Act, 5 U.S.C. 601 et seq. (RFA) requires an agency to provide an initial regulatory flexibility analysis with a proposed rule or to certify that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banking entities with assets less than or equal to \$175 million) and publish its certification and a short, explanatory statement in the Federal Register along with the proposed rule.

UMRA Unfunded Mandates Reform Act of

The agencies are separately publishing initial regulatory flexibility analyses for the proposals as set forth in this NPR.

#### Board

A. Statement of the Objectives of the Proposal; Legal Basis

As discussed previously in the Supplementary Information, the Board is proposing in this NPR to revise its capital requirements to promote safe

and sound banking practices. implement Basel III, and codify its capital requirements. The proposals also satisfy certain requirements under the Dodd-Frank Act by imposing new or revised minimum capital requirements on certain depository institution holding companies. 90 Under section 38(c)(1) of the Federal Deposit Insurance Act, the agencies may prescribe capital standards for depository institutions that they regulate. 91 In addition, among other authorities, the Board may establish capital requirements for state member banks under the Federal Reserve Act, 92 for state member banks and bank holding companies under the International Lending Supervision Act and Bank Holding Company Act,93 and for savings and loan holding companies under the Home Owners Loan Act. 94

#### B. Small Entities Potentially Affected by the Proposal

Under regulations issued by the Small Business Administration, ⁹⁵ a small entity includes a depository institution or bank holding company with total assets of \$175 million or less (a small banking organization). As of March 31, 2012 there were 373 small state member banks. As of December 31, 2011, there were approximately 128 small savings and loan holding companies and 2,385 small bank holding companies. ⁹⁵

The proposal would not apply to small bank holding companies that are not engaged in significant nonbanking activities, do not conduct significant off-balance sheet activities, and do not have a material amount of debt or equity securities outstanding that are registered with the SEC. These small bank holding companies remain subject to the Board's Small Bank Holding Company Policy Statement (Policy Statement). 97

Small state member banks and small savings and loan holding companies (covered small banking organizations) would be subject to the proposals in this NPR.

⁹⁹ See 12 U.S.C. 5371.

⁹¹ See 12 U.S.C. 1831n(c)(1).

^{*7} See 12 CFR 205.43.

⁹⁵ Sec 12 U.S.C. 3907; 12 U.S.C. 1844.

⁹⁴ See 12 U.S.C. 1467a(g)(1).

¹⁵ Sec 13 CFR 121,201.

⁹⁶ The December 31, 2011 data are the most recent available data on small savings and loan holding companies and small bank holding companies.

^{**} See 12 CFR part 225, appendix C. Section 171 of the Dodd-Frank provides an exemption from its requirements for bank holding companies subject to the Policy Statement (as in effect on May 19, 2010). Section 171 does not provide a similar exemption for small savings and loon holding companies and they are therefore subject to the proposals. 12 U.S.C. 5271(b)(5)(C).

C. Impact on Covered Small Banking
Organizations

The proposals may impact covered small banking organizations in several ways. The proposals would affect covered small banking organizations' regulatory capital requirements. They would change the qualifying criteria for regulatory capital, including required deductions and adjustments, and modify the risk weight treatment for some exposures. They also would require covered small banking organizations to meet new minimum common equity tier 1 to risk-weighted assets ratio of 4.5 percent and an increased minimum tier 1 capital to risk-weighted assets risk-based capital ratio of 6 percent. Under the proposals, all banking organizations would remain subject to a 4 percent minimum tier 1 leverage ratio.98

In addition, as described above, the proposals would impose limitations on capital distributions and discretionary bonus payments for covered small banking organizations that do not hold a buffer of common equity tier 1 capital above the minimum ratios. As a result of these new requirements, some covered small banking organizations may have to alter their capital structure (including by raising new capital or increasing retention of earnings) in order to achieve compliance.

Most small state member banks already hold capital in excess of the proposed minimum risk-based regulatory ratios. Therefore, the proposed requirements are not expected to significantly impact the capital structure of most covered small state member banks. Comparing the capital requirements proposed in this NPR and the Standardized Approach NPR on a fully phased-in basis to minimum requirements of the current rules, the capital ratios of approximately 1~2 percent of small state member banks would fall below at least one of the proposed minimum risk-based capital requirements. Thus, the Board believes that the proposals in this NPR and the Standardized NPR would affect an insubstantial number of small state member banks.

Because the Board has not fully implemented reporting requirements for savings and loan holding companies, it is unable to determine the impact of the

proposed requirements on small savings and loan holding companies. The Board seeks comment on the potential impact of the proposed requirements on small sevings and loan holding companies.

Covered small banking organizations that would have to raise additional capital to comply with the requirements of the proposals may incur certain costs, including costs associated with issuance of regulatory capital instruments. The Board has sought to minimize the burden of raising additional capital by providing for transitional arrangements that phase-in the new capital requirements over several years, allowing banking organizations time to accumulate additional capital through retained earnings as well as raising capital in the market. While the proposals would establish a narrower definition of capital, a minimum common equity tier 1 capital ratio and a minimum tier 1 capital ratio that is higher than under the general risk-based capital rules, the majority of capital instruments currently held by small covered banking organizations under existing capital rules, such as common stock and noncumulative perpetual preferred stock, would remain eligible as regulatory capital instruments under the proposed requirements.

As discussed above, the proposals would modify criteria for regulatory capital, deductions and adjustments to capital, and risk weights for exposures, as well as calculation of the leverage ratio. Accordingly, covered small banking organizations would be required to change their internal reporting processes to comply with these changes. These changes may require some additional personnel training and expenses related to new systems (or modification of existing systems) for calculating regulatory capital ratios.

For small savings and loan holding companies, the compliance burdens described above may be greater than for those of other covered small banking organizations. Small savings and loan holding companies previously were not subject to regulatory capital requirements and reporting requirements tied regulatory capital requirements. Small savings and loan holding companies may therefore need to invest additional resources in establishing internal systems fincluding purchasing software or hiring personnel) or raising capital to come into compliance with the proposed requirements.

D. Transitional Arrangements To Ease Compliance Burden

For those covered small banking organizations that would not immediately meet the proposed minimum requirements, this NPR provides transitional arrangements for banking organizations to make adjustments and to come into compliance. Small covered banking organizations would be required to meet the proposed minimum capital ratio requirements beginning on January 1. 2013 thorough to December 31, 2014. On January 1, 2015, small covered banking organizations would be required to comply with the proposed minimum capital ratio requirements.

E. Identification of Duplicative. Overlapping, or Conflicting Federal Rules

The Board is unaware of any duplicative, overlapping, or conflicting federal rules. As noted above, the Board anticipates issuing a separate proposal to implement reporting requirements that are tied to (but do not overlap or duplicate) the proposed requirements. The Board seeks comments and information regarding any such rules that are duplicative, overlapping, or otherwise in conflict with the proposed requirements.

F. Discussion of Significant Alternatives

The Board has sought to incorporate flexibility and provide alternative treatments in this NPR and the Standardized NPR to lessen burden and complexity for smaller banking organizations wherever possible, consistent with safety and soundness and applicable law, including the Dodd-Frank Act. These alternatives and flexibility features include the following:

- Covered small banking organizations would not be subject to the proposed enhanced disclosure requirements.
- Covered small banking organizations would not be subject to possible increases in the capital conservation buffer through the countercyclical buffer.
- Covered small banking organizations would not be subject to the new supplementary leverage ratio.
- Covered small institutions that have issued capital instruments to the U.S.
   Treasury through the Small Business
   Lending Fund (a program for banking organizations with less than \$10 billion in consolidated assets) or under the
   Emergency Economic Stabilization Act of 2008 prior to October 4, 2010, would be able to continue to include those

na Benking organizations subject to the advanced approaches rules also would be required in 2018 to achieve a minimum tier 1 capital to total leverage exposure ratio (the supplementary leverage ratio) of 3 percent. Advanced approaches banking organizations should refer to section 10 of subpart B of the proposed rule and section 110 of the preamble for a more detailed discussion of the applicable minimum capital ratios.

instruments in tier 1 or tier 2 capital (as applicable) even if not all criteria for inclusion under the proposed requirements are met.

• Covered small banking organizations that issued capital instruments that could no longer be included in tier 1 capital or tier 2 capital under the proposed requirements would have a longer transition period for removing the instruments from tier 1 or tier 2 capital (as applicable).

The Board welcomes comment on any significant alternatives to the proposed requirements applicable to covered small banking organizations that would minimize their impact on those entitles, as well as on all other aspects of its analysis. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public comment period.

#### OCC

In accordance with section 3(a) of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) (RFA), the OCC is publishing this summary of its Initial Regulatory Flexibility Analysis (IRFA) for this NPR. The RFA requires an agency to publish in the Federal Register its IRFA or a summary of its IRFA at the time of the publication of its general notice of proposed rulemaking 99 or to certify that the proposed rule will not have a significant economic impact on a substantial number of small entities. 200 For its IRFA, the OCC analyzed the potential economic impact of this NPR on the small entities that it regulates.

The OCC welcomes comment on all aspects of the summary of its IRFA. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public comment period.

A. Reasons Why the Proposed Rule Is Being Considered by the Agencies; Statement of the Objectives of the Proposed Rule; and Legal Basis

As discussed in the Supplementary Information section above, the agencies are proposing to revise their capital requirements to promote safe and sound banking practices, implement Basel III, and harmonize capital requirements across charter type. Federal law authorizes each of the agencies to prescribe capital standards for the banking organizations that it regulates.¹⁰¹

B. Small Entities Affected by the Proposal

Under regulations issued by the Small Business Administration, ¹⁰² a small entity includes a depository institution or bank holding company with total assets of \$175 million or less (a small banking organization). As of March 31, 2012, there were approximately 599 small national banks and 284 small federally chartered savings associations.

C. Projected Reporting, Recordkeeping, and Other Compliance Requirements

This NPR includes changes to the general risk-based capital requirements that affect small banking organizations. Under this NPR, the changes to minimum capital requirements that would impact small national banks and federal savings associations include a more conservative definition of regulatory capital, a new common equity tier 1 capital ratio, a higher minimum tier 1 capital ratio, new thresholds for prompt corrective action purposes, and a new capital conservation buffer. To estimate the impact of this NPR on national banks' and federal savings associations' capital needs, the OCC estimated the amount of capital the banks will need to raise to meet the new minimum standards relative to the amount of capital they currently hold. To estimate new capital ratios and requirements, the OCC used currently available data from banks' quarterly Consolidated Report of Condition and Income (Call Reports) to approximate capital under the proposed rule, which shows that most banks have raised their capital levels well above the existing minimum requirements. After comparing existing levels with the proposed new requirements, the OCC has determined that 28 small institutions that it regulates would fall short of the proposed increased capital requirements. Together, those institutions would need to raise approximately \$82 million in regulatory capital to meet the proposed minimum requirements. The OCC estimates that the cost of lost tax benefits associated with increasing total capital by \$82 million will be approximately \$0.5 million per year. Averaged across the 28 affected institutions, the cost is approximately \$18,000 per institution per year.

To determine if a proposed rule has a significant economic impact on small entities, we compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each small entity. Based on this analysis, the OCC has concluded for purposes of this IRFA that the changes described in this NPR, when considered without regard to other changes to the capital requirements that the agencies simultaneously are proposing, would not result in a significant economic impact on a substantial number of small entities.

However, as discussed in the Supplementary Information section above, the changes proposed in this NPR also should be considered together with changes proposed in the separate Standardized Approach NPR also published in today's Federal Register. The changes described in the Standardized NPR include:

- Changing the denominator of the risk-based capital ratios by revising the asset risk weights;
- Revising the treatment of counterparty credit risk;
- Replacing references to credit ratings with alternative measures of creditworthiness;
- 4. Providing more comprehensive recognition of collateral and guarantees; and
- 5. Providing a more favorable capital treatment for transactions cleared through qualifying central counterparties.

These changes are designed to enhance the risk-sensitivity of the calculation of risk-weighted assets. Therefore, capital requirements may go down for some assets and up for others. For those assets with a higher risk weight under this NPR, however, that increase may be large in some instances, e.g., requiring the equivalent of a dollar-for-dollar capital charge for some securitization exposures.

The Basel Committee on Banking Supervision has been conducting periodic reviews of the potential quantitative impact of the Base! III framework.103 Although these reviews monitor the impact of implementing the Hasel III framework rather than the proposed rule, the OCC is using estimates consistent with the Basel Committee's analysis, including a conservative estimate of a 20 percent increase in risk-weighted assets, to gauge the impact of the Standardized Approach NPR on risk-weighted assets. Using this assumption, the OCC estimates that a total of 56 small national banks and federally chartered savings associations will need to raise additional capital to meet their regulatory minimums. The OCC

^{** 5} U.S.C. 603(a).

^{100 5} U.S.C. 605(b).

¹⁹² See, e.g., 12 U.S.C. 1467a(g)(1); 12 U.S.C. 1831o(c)(1); 12 U.S.C. 1844; 12 U.S.C. 3907; and 12 U.S.C. 3971.

¹⁰² See 13 CFR 121.201.

¹⁶² See, "Update on Basel III Implementation Monitoring," Quantitative Impact Study Working Group, (January 28, 2012).

estimates that this total projected shortfall will be \$143 million and that the cost of lost tax benefits associated with increasing total capital by \$143 million will be approximately \$0.8 million per year. Averaged across the 56 affected institutions, the cost is approximately \$14,000 per institution per year.

To comply with the proposed rules in the Standardized Approach NPR, covered small banking organizations would be required to change their internal reporting processes. These changes would require some additional personnel training and expenses related to new systems (or modification of existing systems) for calculating

regulatory capital ratios.

Additionally, covered small banking organizations that hold certain exposures would be required to obtain additional information under the proposed rules in order to determine the applicable risk weights. Covered small banking organizations that hold exposures to sovereign entities other than the United States, foreign depository institutions, or foreign public sector entities would have to acquire Country Risk Classification ratings produced by the OECD to determine the applicable risk weights. Covered small banking organizations that hold residential mortgage exposures would need to have and maintain information about certain underwriting features of the mortgage as well as the LTV ratio in order to determine the applicable risk weight. Generally, covered small banking organizations that hold securitization exposures would need to obtain sufficient information about the underlying exposures to satisfy due diligence requirements and apply either the simplified supervisory formula or the gross-up approach described in section __.43 of the Standardized Approach NPR to calculate the appropriate risk weight, or be required to assign a 1,250 percent risk weight to the exposure.

Covered small banking organizations typically do not hold significant exposures to foreign entities or securitization exposures, and the agencies expect any additional burden related to calculating risk weights for these exposures, or holding capital against these exposures, would be relatively modest. The OCC estimates that, for small national banks and federal savings associations, the cost of implementing the alternative measures of creditworthiness will be approximately \$36,125 per institution.

Some covered small banking organizations may hold significant residential mortgage exposures.

However, if the small banking organization originated the exposure, it should have sufficient information to determine the applicable risk weight under the proposed rule. If the small banking organization acquired the exposure from another institution, the information it would need to determine the applicable risk weight is consistent with information that it should normally collect for portfolio monitoring purposes and internal risk management.

Covered small banking organizations would not be subject to the disclosure requirements in subpart D of the proposed rule. However, the agencies expect to modify regulatory reporting requirements that apply to covered small banking organizations to reflect the changes made to the agencies' capital requirements in the proposed rules. The agencies expect to propose these changes to the relevant reporting

forms in a separate notice.

To determine if a proposed rule has a significant economic impact on small entities the OCC compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each small entity. If the estimated annual cost was greater than or equal to 2.5 percent of total noninterest expense or 5 percent of annual salaries and employee benefits the OCC classified the impact as significant. As noted above, the OCC has concluded for purposes of this IRFA that the proposed rules in this NPR, when considered without regard to changes in the Standardized NPR, would not exceed these thresholds and therefore would not result in a significant economic impact on a substantial number of small entities. However, the OCC has concluded that the proposed rules in the Standardized Approach NPR would have a significant impact on a substantial number of small entities. The OCC estimates that together, the changes proposed in this NPR and the Standardized Approach NPR will exceed these thresholds for 500 small national banks and 253 small federally chartered private savings institutions. Accordingly, when considered together, this NPR and the Standardized Approach NPR appear to have a significant economic impact on a substantial number of small entities.

D. Identification of Duplicative, Overlapping, or Conflicting Federal Rules

The OCC is unaware of any duplicative, overlapping, or conflicting federal rules. As noted previously, the OCC anticipates issuing a separate proposal to implement reporting

requirements that are tied to (but do not overlap or duplicate) the requirements of the proposed rules. The OCC seeks comments and information regarding any such federal rules that are duplicative, overlapping, or otherwise in conflict with the proposed rule.

E. Discussion of Significant Alternatives to the Proposed Rule

The agencies have sought to incorporate flexibility into the proposed rule and lessen burden and complexity for smaller banking organizations wherever possible, consistent with safety and soundness and applicable law, including the Dodd-Frank Act. The agencies are requesting comment on potential options for simplifying the rule and reducing burden, including whether to permit certain small banking organizations to continue using portions of the current general risk-based capital rules to calculate risk-weighted assets. Additionally, the agencies proposed the following alternatives and flexibility features:

· Covered small banking organizations are not subject to the enhanced disclosure requirements of the proposed rules.

 Covered small banking organizations would continue to apply a 100 percent risk weight to corporate exposures (as described in section of the Standardized Approach NPR).

 Covered small banking organizations may choose to apply the simpler gross-up method for securitization exposures rather than the Simplified Supervisory Formula Approach (SSFA) (as described in section __.43 of the Standardized Approach NPR).

 The proposed rule offers covered small banking organizations a choice between a simpler and more complex methods of risk weighting equity exposures to investment funds (as described in section ___.53 of the Standardized Approach NPR).

The agencies welcome comment on any significant alternatives to the proposed rules applicable to covered small banking organizations that would minimize their impact on those entities.

FDIC

Regulatory Flexibility Act

Summary of the FDIC's Initial Regulatory Flexibility Analysis (IRFA)

In accordance with section 3(a) of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) (RFA), the FDIC is publishing this summary of the IRFA for this NPR The RFA requires an agency to publish in the Federal Register an IRFA or a summary of its IRFA at the time of the

publication of its general notice of proposed rulemaking 104 or to certify that the proposed rule will not have a significant economic impact on a substantial number of small entities. 106 For purposes of this IRFA, the FDIC analyzed the potential economic impact of this NPR on the small entities that it regulates

The FDIC welcomes comment on all aspects of the summary of its IRFA. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public

comment period.

A. Reesons Why the Proposed Rule Is Being Considered by the Agencies: Statement of the Objectives of the Proposed Rule; and Legal Basis

As discussed in the Supplementary Information section above, the agencies are proposing to revise their capital requirements to promote safe and sound banking practices, implement Basel III and certain aspects of the Dodd-Frank Act, and harmonize capital requirements across charter type. Federal law authorizes each of the agencies to prescribe capital standards for the banking organizations that it regulates. 108

#### B. Small Entities Affected by the Proposal

Under regulations issued by the Small Business Administration, 107 a small entity includes a depository institution or bank holding company with total assets of \$175 million or less (a small banking organization). As of March 31, 2012, there were approximately 2,433 small state nonmember banks, 115 small state savings banks, and 45 small state savings associations (collectively, small banks and savings associations).

#### C. Projected Reporting, Recordkeeping, and Other Compliance Requirements

This NPR includes changes to the general risk-based capital requirements that affect small banking organizations. Under this NPR, the changes to minimum capital requirements that would impact small banks and savings associations include a more conservative definition of regulatory capital, a new common equity tier 1 capital ratio, a higher minimum tier 1 capital ratio, new thresholds for prompt corrective action purposes, and a new capital conservation buffer. To estimate the impact of this NPR on the capital

needs of small banks and savings associations, the FDIC estimated the amount of capital such institutions will need to raise to meet the new minimum standards relative to the amount of capital they currently hold. To estimate new capital ratios and requirements, the FDIC used currently available data from the quarterly Consolidated Report of Condition and Income (Call Reports) filed by small banks and savings associations to approximate capital under the proposed rule. The Call Reports show that most small banks and savings associations have raised their capital to levels well above the existing minimum requirements. After comparing existing levels with the proposed new requirements, the FDIC has determined that 62 small banks and savings associations that it regulates would fall short of the proposed increased capital requirements. Together, those institutions would need to raise approximately \$164 million in regulatory capital to meet the proposed minimum requirements. The FDIC estimates that the cost of lost tax benefits associated with increasing total capital by \$164 million will be approximately \$0.9 million per year. Averaged across the 62 affected institutions, the cost is approximately \$15,000 per institution per year.

To determine if the proposed rule has a significant economic impact on small entities we compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each small entity. Based on this analysis, the FDIC has concluded for purposes of this IRFA that the changes described in this NPR, when considered wilhout regard to other changes to the capital requirements that the agencies simultaneously are proposing, would not result in a significant economic impact on a substantial number of small entities.

However, as discussed in the Supplementary Information section above, the changes proposed in this NPR also should be considered together with changes proposed in the separate Standardized Approach NPR also published in today's Federal Register. The changes described in the Standardized NPR include:

- 1. Changing the denominator of the risk-based capital ratios by revising the asset risk weights:
- 2. Revising the treatment of counterparty credit risk;
- 3. Replacing references to credit ratings with alternative measures of creditworthiness;

- 4. Providing more comprehensive recognition of collateral and guarantees;
- 5. Providing a more favorable capital treatment for transactions cleared through qualifying central counterparties.

These changes are designed to enhance the risk-sensitivity of the calculation of risk-weighted assets. Therefore, capital requirements may go down for some assets and up for others. For those assets with a higher risk weight under this NPR, however, that increase may be large in some instances. for example, the equivalent of a dollarfor-dollar capital charge for some securitization exposures.

In order to estimate the impact of the Standardized Approach NPR on small banks and savings associations, the FDIC used currently available data from the quarterly Consolidated Report of Condition and Income (Call Reports) filed by small banks and savings associations to approximate the change in capital under the proposed rule. After comparing the existing risk-based capital rules with the proposed rule, the FDIC estimates that risk-weighted assets may increase by 10 percent under the proposed rule. Using this assumption, the FDIC estimates that a total of 76 small national banks and federally chartered savings associations will need to raise additional capital to meet their regulatory minimums. The FDIC estimates that this total projected shortfall will be \$34 million and that the cost of lost tax benefits associated with increasing total capital by \$34 million will be approximately \$0.2 million per year. Averaged across the 76 affected institutions, the cost is approximately \$2,500 per institution per year.

To comply with the proposed rules in the Standardized Approach NPR, covered small banking organizations would be required to change their internal reporting processes. These changes would require some additional personnel training and expenses related to new systems (or modification of existing systems) for calculating

regulatory capital ratios. Additionally, small banks and savings associations that hold certain exposures would be required to obtain additional information under the proposed rules in order to determine the applicable risk weights. For example, small banks and savings associations that hold exposures to sovereign entities other than the United States, foreign depository institutions, or foreign public sector entities would have to acquire Country Risk Classification ratings produced by the OECD to determine the applicable risk weights. Small banks and savings

¹⁰⁴ S U.S.C. 603(a).

^{10% 5} U.S.C. 605(b).

^{10%} See, e.g., 12 U.S.C. 1467algK1]; 12 U.S.C. 1#310(c)(1); 12 U.S.C. 1844; 12 U.S.C. 3907; and 12 U.S.C. 5371.

¹⁰⁷ See 13 CPR 121.201.

associations that hold residential mortgage exposures would need to have and maintain information about certain underwriting features of the mortgage as well as the LTV ratio to determine the applicable risk weight. Generally, small banks and savings associations that hold securitization exposures would need to obtain sufficient information about the underlying exposures to satisfy due diligence requirements and apply either the simplified supervisory formula or the gross-up approach described in section __.43 of the Standardized Approach NPR to calculate the appropriate risk weight, or be required to assign a 1,250 percent risk weight to the exposure.

Small banks and savings associations typically do not hold significant exposures to foreign entities or securitization exposures, and the agencies expect any additional burden related to calculating risk weights for these exposures, or holding capital against these exposures, would be relatively modest. The FDIC estimates that, for small banks and savings associations, the cost of implementing the alternative measures of creditworthiness will be approximately \$39,000 per institution.

Small banks and savings associations may hold significant residential mortgage exposures. If the institution originated the exposure, it should have sufficient information to determine the applicable risk weight under the proposed rule. However, if the exposure is acquired from another institution, the information that would be needed to determine the applicable risk weight is

consistent with information that should normally be collected for portfolio monitoring purposes and internal risk

management.

Small banks and savings associations would not be subject to the disclosure requirements in subpart D of the proposed rule. However, the agencies expect to modify regulatory reporting requirements that apply to such institutions to reflect the changes made to the agencies' capital requirements in the proposed rules. The agencies expect to propose these changes to the relevant reporting forms in a separate notice.

To determine if a proposed rule has a significant economic impact on small entities the FDIG compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each small bank and savings association. If the estimated annual cost was greater than or equal to 2.5 percent of total noninterest expense or 5 percent of annual salaries and employee benefits the FDIC classified the impact as

significant. As noted above, the FDIC has concluded for purposes of this IRFA that the proposed rules in this NPR, when considered without regard to changes in the Standardized NPR, would not exceed these thresholds and therefore would not result in a significant economic impact on a substantial number of small banks and savings associations. However, the FDIC has concluded that the proposed rules in the Standardized Approach NPR would have a significant impact on a substantial number of small banks and savings associations. The FDIC estimates that together, the changes proposed in this NPR and the Standardized Approach NPR will exceed these thresholds for 2,413 small state nonmember banks, 114 small savings banks, and 45 small savings associations. Accordingly, when considered together, this NPR and the Standardized Approach NPR appear to have a significant economic impact on a substantial number of small entities.

### D. Identification of Duplicative, Overlapping, or Conflicting Federal

The FDIC is unaware of any duplicative, overlapping, or conflicting federal rules. As noted previously, the FDIC anticipates issuing a separate proposal to implement reporting requirements that are tied to (but do not overlap or duplicate) the requirements of the proposed rules. The FDIC seeks comments and information regarding any such federal rules that are duplicative, overlapping, or otherwise in conflict with the proposed rule.

#### E. Discussion of Significant Alternatives to the Proposed Rule

The agencies have sought to incorporate flexibility into the proposed rule and lessen burden and complexity for small bank and savings associations wherever possible, consistent with safety and soundness and applicable law, including the Dodd-Frank Act. The agencies are requesting comment on potential options for simplifying the rule and reducing burden, including whether to permit certain small banking organizations to continue using portions of the current general risk-based capital rules to calculate risk-weighted assets. Additionally, the agencies proposed the following alternatives and flexibility features:

- Small banks and savings associations are not subject to the enhanced disclosure requirements of the proposed rules.
- Small banks and savings associations would continue to apply a 100 percent risk weight to corporate

exposures (as described in section of the Standardized Approach NPR).

 Small banks and savings associations may choose to apply the simpler gross-up method for securitization exposures rather than the SSFA (as described in section the Standardized Approach NPR).

 The proposed rule offers small banks and savings associations a choice between a simpler and more complex methods of risk weighting equity exposures to investment funds (as described in section ___.53 of the Standardized Approach NPR).

The agencies welcome comment on any significant alternatives to the proposed rules applicable to small banks and savings associations that would minimize their impact on those

#### IX. Paperwork Reduction Act Paperwork Reduction Act

A. Request for Comment on Proposed Information Collection

In accordance with the requirements of the Paperwork Reduction Act (PRA) of 1995, the agencies may not conduct or sponsor, and the respondent is not required to respond to, an information collection unless it displays a currently valid Office of Management and Budget (OMB) control number. The agencies are requesting comment on a proposed information collection.

The information collection requirements contained in this joint notice of proposed rulemaking (NPR) have been submitted by the OCC and FDIC to OMB for review under the PRA. under OMB Control Nos. 1557-0234 and 3064–0153. In accordance with the PRA (44 U.S.C. 3506; 5 CFR part 1320, Appendix A.1), the Board has reviewed the NPR under the authority delegated by OMB. The Board's OMB Control No. is 7100-0313. The requirements are found in §§ __.2.

The agencies have published two other NPRs in this issue of the Federal Register. Please see the NPRs entitled "Regulatory Capital Rules: Standardized Approach for Risk-Weighted Assets; Market Discipline and Disclosure Requirements" and "Regulatory Capital Rules: Advanced Approaches Riskbased Capital Rules; Market Risk Capital Rule." While the three NPRs together comprise an integrated capital framework, the PRA burden has been divided among the three NPRs and a PRA statement has been provided in

Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the Agencies' functions, including whether the information has practical utility;

(b) The accuracy of the estimates of the burden of the information collection, including the validity of the methodology and assumptions used;

 (c) Ways to enhance the quality, utility, and clarity of the information to be collected;

(d) Ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology; and

(e) Estimates of capital or start up costs and costs of operation, maintenance, and purchase of services to provide information.

All comments will become a matter of public record. Comments should be addressed to:

OCC: Communications Division, Office of the Comptroller of the Currency, Public Information Room, Mail Stop 1–5, Attention: 1557–0234, 250 E Street SW., Washington, DC 20219. In addition, comments may be sent by fax to (202) 874–4448, or by electronic mail to

regs.comments@occ.treas.gov. You can inspect and photocopy the comments at the OCC's Public Information Room, 250 E Street, SW., Washington, DC 20219. You can make an appointment to inspect the comments by calling (202) 874–5043.

Board: You may submit comments, identified by R-1442, by any of the following methods:

* Agency Web Site: http:// www.federalreserve.gov. Follow the instructions for submitting comments on the http://www.federalreserve.gov/ generalinfo/foia/ProposedRegs.cfm.

• Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

• Email:

regs.comments@federalreserve.gov. Include docket number in the subject line of the message.

- Fax: 202-45Ž-3819 or 202-452-3102.
- Mail: Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW., Washington, DC 20551. All public comments are available from the Board's Web site at <a href="http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm">http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm</a> as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper in Room MP—500 of the Board's Martin Building (20th)

and C Streets NW.) between 9 a.m. and 5 p.m. on weekdays.

FDIC: You may submit written comments, which should refer to RIN 3064-AD95 Implementation of Basel III 0153, by any of the following methods:

- Agency Web Site: http:// www.fdic.gov/regulations/laws/federal/ propose.html. Follow the instructions for submitting comments on the FDIC Web site.
- Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.
  - Email: Comments@FĎIC.gov.
- Mail: Robert E. Feldman, Executive Secretary, Attention: Comments, FDIC, 550 17th Street NW., Washington, DC 20429.
- Hand Delivery/Conrier: Guard station at the rear of the 550 17th Street Building (located on F Street) on business days between 7 a.m. and 5 p.m.

Public Inspection: All comments received will be posted without change to http://www.fdic.gov/regulations/laws/federal/propose/html including any personal information provided.
Comments may be inspected at the FDIC Public Information Center, Room 100, 801 17th Street NW., Washington, DC, between 9 a.m., and 4:30 p.m. on business days.

B. Proposed Information Collection

Title of Information Collection: Basel III.

Frequency of Response: On occasion. Affected Public:

OCC: National banks and federally chartered savings associations.

Board: State member banks, bank holding companies, and savings and loan holding companies.

FDIC: Insured state nonmember banks, state savings associations, and certain subsidiaries of these entities.

Abstract: Section ____2 allows the use of a conservative estimate of the amount of a bank's investment in the capital of unconsolidated financial institutions held through the index security with prior approval by the appropriate agency. It also provides for termination and close-out netting across multiple types of transactions or agreements if the bank obtains a written legal opinion verifying the validity and enforceability of the agreement under certain circumstances and maintains sufficient written documentation of this legal review.

Estimated Burden: The burden estimates below exclude any regulatory reporting burden associated with changes to the Consolidated Reports of Income and Condition for banks (FFIEC 031 and FFIEC 041; OMB Nos. 7100—0036, 3064—0052, 1557—0081), the

Financial Statements for Bank Holding Companies (FR Y-9; OMB No. 7100-0128), and the Capital Assessments and Stress Testing information collection (FR Y-14A/Q/M; OMB No. 7100-0341). The agencies are still considering whether to revise these information collections or to implement a new information collection for the regulatory reporting requirements. In either case, a separate notice would be published for comment on the regulatory reporting requirements.

#### OCC

Estimated Number of Respondents: Independent national banks, 172; federally chartered savings banks, 603. Estimated Burden per Respondent: 16 hours.

Total Estimated Annual Burden: 12.400 hours.

#### Board

Estimated Number of Respondents: SMBs, 831; BHCs, 933; SLHCs, 438, Estimated Burden per Respondent: 16 hours

Total Estimated Annual Burden: 35,232 hours.

#### FDIC

Estimated Number of Respondents: 4,571.

Estimated Burden per Respondent: 18 hours.

Total Estimated Annual Burden: 73,136 hours.

#### X. Plain Language

Section 722 of the Gramm-Leach-Bliley Act requires the Federal banking agencies to use plain language in all proposed and final rules published after January 1, 2000. The agencies have sought to present the proposed rule in a simple and straightforward manner, and invite comment on the use of plain language.

#### XL OCC Unfunded Mandates Reform Act of 1995 Determinations

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) (2 U.S.C. 1532 et seq.) requires that an agency prepare a written statement before promulgating a rule that includes a Federal mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of \$100 million or more (adjusted annually for inflation) in any one year. If a written statement is required, the UMRA (2 U.S.C. 1535) also requires an agency to identify and consider a reasonable number of regulatory alternatives before promulgating a rule and from those alternatives, either select the least

costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule, or provide a statement with the rule explaining why such an option was not chosen.

Under this NPR, the changes to minimum capital requirements include a new common equity tier 1 capital ratio, a higher minimum tier 1 capital ratio, a supplementary leverage ratio for advanced approaches banks, new thresholds for prompt corrective action purposes, a new capital conservation buffer, and a new countercyclical capital buffer for advanced approaches banks. To estimate the impact of this NPR on bank capital needs, the OCC estimated the amount of capital banks will need to raise to meet the new minimum standards relative to the amount of capital they currently hold. To estimate new capital ratios and requirements, the OCC used currently available data from banks' quarterly Consolidated Report of Condition and Income (Call Reports) to approximate capital under the proposed rule. Most banks have raised their capital levels well above the existing minimum requirements and, after comparing existing levels with the proposed new requirements, the OCC has determined that its proposed rule will not result in expenditures by State, local, and Tribal governments, or by the private sector, of \$100 million or more. Accordingly, the UMRA does not require that a written statement accompany this NPR.

# Addendum 1: Summary of This NPR for Community Banking Organizations

#### Overview

The agencies are issuing a notice of proposed rulemaking (NPR, proposal, or proposed rule) to revise the general risk-based capital rules to incorporate certain revisions by the Basel Committee on Banking Supervision to the Basel capital framework (Basel HI). The proposed rule would:

- Revise the definition of regulatory capital components and related calculations;
- Add a new regulatory capital component: common equity tier 1 capital;

- Increase the minimum tier 1 capital ratio requirement;
- Impose different limitations to qualifying minority interest in regulatory capital than those currently applied;
- Incorporate the new and revised regulatory capital requirements into the Prompt Corrective Action (PGA) capital categories;
- Implement a new capital conservation buffer framework that would limit payment of capital distributions and certain discretionary bonus payments to executive officers and key risk takers if the banking organization does not hold certain amounts of common equity tier 1 capital in addition to those needed to meet its minimum riskbased capital requirements; and
- Provide for a transition period for several aspects of the proposed rule, including a phase-out period for certain non-qualifying capital instruments, the new minimum capital ratio requirements, the capital conservation buffer, and the regulatory capital adjustments and deductions.

This addendum presents a summary of the proposed rule that is more relevant for smaller, non-complex banking organizations that are not subject to the market risk rule or the advanced approaches capital rule. The agencies intend for this addendum to act as a guide for these banking organizations, helping them to navigate the proposed rule and identify the changes most relevant to them. The addendum does not, however, by itself provide a complete understanding of the proposed rules and the agencies expect and encourage all institutions to review the proposed rule in its entirety.

# 1. Revisions to the Minimum Capital Requirements

The NPR proposes definitions of common equity tier 1 capital, additional tier 1 capital, and total capital. These proposed definitions would alter the existing definition of capital by imposing, among other requirements, additional constraints on including minority interests, mortgage servicing assets (MSAs). deferred tax assets (DTAs) and certain investments in unconsolidated financial institutions in regulatory capital. In addition, the NPR would require that most regulatory capital deductions be made from common equity tier 1 capital. The NPR would also require that most of a banking organization's accumulated other comprehensive income [AOCI] be included in regulatory capital.

Under the NPR, a banking organization would maintain the following minimum capital requirements:

- (1) A ratio of common equity tier 1capital to total risk-weighted assets of 4.5 percent.
- (2) A ratio of tier 1 capital to total riskweighted assets of 6 percent.
- (3) A ratio of total capital to total riskweighted assets of 8 percent.
- (4) A ratio of tier 1 capital to adjusted everage total assets of 4 percent. 108

The new minimum capital requirements would be implemented over a transition period, as outlined in the proposed rule. For a summery of the transition period, refer to section 7 of this Addendum. As noted in the NPR, banking organizations are generally expected, as a prudential matter, to operate well above these minimum regulatory ratios, with capital commensurate with the level and nature of the risks they hold.

#### 2. Capital Conservation Buffer

In addition to these minimum capital requirements, the NPR would establish a capital conservation buffer. Specifically, banking organizations would need to hold common equity tier 1 capital in excess of their minimum risk-based capital ratios by at least 2.5 percent of risk-weighted assets in order to avoid limits on capital distributions (including dividend payments, discretionary payments on tier 1 instruments, and share buybacks) and certain discretionary bonus payments to executive officers, including heads of major business lines and similar employees.

Under the NPR, a banking organization's capital conservation buffer would be the smallest of the following ratios: a) its common equity tier 1 capital ratio (in percent) minus 4.5 percent; b) its tier 1 capital ratio (in percent) minus 6 percent; or c) its total capital ratio (in percent) minus 8 percent.

To the extent a banking organization's capital conservation buffer falls short of 2.5 percent of risk-weighted assets, the banking organization's maximum payout amount for capital distributions and discretionary bonus payments (calculated as the maximum payout ratio multiplied by the sum of eligible retained income, as defined in the NPR) would decline. The following table shows the maximum payout ratio, depending on the banking organization's capital conservation buffer.

#### TABLE 1—CAPITAL CONSERVATION BUFFER

Capital Conservation Buffer (as a percentage of risk-weighted assets)	Maximum payout ratio (as a percentage or eligible retained income)
Greater than 2.5 percent  Less than or equal to 2.5 percent and greater than 1.675 percent  Less than or equal to 1.875 percent and greater than 1.25 percent  Less than or equal to 1.25 percent and greater than 0.625 percent  Less than or equal to 0.625 percent	60 percent. 40 cercent.

ATTACHMENT C

PMI

PSE

Private Mortgage Insurance

QCCP Qualifying Central Counterparty REIT Real Estate Investment Trust

Public Sector Entities

PvP Payment-versus-payment

RFA Regulatory Flexibility Act

CPSS Committee on Payment and Settlement Systems CRC Country Risk Classifications CRAM Country Risk Assessment Model CRM Credit Risk Mitigation CUSIP Committee on Uniform Securities **Identification Procedures** DAC Deferred Acquisition Costs DCO Derivatives Clearing Organizations DFA Dodd-Frank Act DI Depository Institution DPC Debts Previously Contracted DTA Deferred Tax Asset DTL Deferred Tax Liability DVA Debit Valuation Adjustment DvP Delivery-versus-Payment E Measure of Effectiveness EAD Exposure at Default ECL Expected Credit Loss EE Expected Exposure B.O. Executive Order EPE Expected Positive Exposure FASB Finencial Accounting Standards Board FDIC Federal Deposit insurance Corporation FFIEC Federal Financial Institutions **Examination Council** FHLMC Federal Home Loan Mortgage Corporation PMU Financial Market Utility FNMA Federal National Mortgage Association FR Federal Register GAAP Generally Accepted Accounting Principles GDP Gross Domestic Product GLBA Gramm-Leach-Bliley Act GSE Government-Sponsored Entity HAMP Home Affordable Mortgage Program HELOC Home Equity Line of Credit HOLA Home Owners' Loan Act HVCRE High-Volatility Commercial Real Estate IAA Internal Assessment Approach IFRS International Reporting Standards IMM Internal Models Methodology I/O Interest-Only IOSCO International Organization of Securities Commissions LTV Loan-to-Value Ratio M Effective Maturity MDB Multilateral Development Banks MSA Mortgage Servicing Assets NGR Net-to-Gross Ratio NPR Notice of Proposed Rulemaking NRSRO Nationally Recognized Statistical Rating Organization OCC Office of the Comptroller of the OEGD Organization for Economic Cooperation and Development OIRA Office of Information and Regulatory Affairs OMB Office of Management and Budget OTC Over-the-Counter OTTI Other Than Temporary Impairment PCA Prompt Corrective Action PCCR Purchased Credit Card Relationships PFE Potential Future Exposure

RMBS Residential Mortgage Backed Security RTCRRI Act Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 RVC^{*} Ratio of Value Change RWA Risk-Weighted Asset SEC Securities and Exchange Commission SFA Supervisory Formula Approach SFTSecurities Financing Transactions SLHC Savings and Loan Holding Company SPE Special Purpose Entity SPV Special Purpose Vehicle SR Supervision and Regulation Letter SRWA Simple Risk-Weight Approach SSPA Simplified Supervisory Formula Approach UMRA Unfunded Mandates Reform Act of

UMRA Unfunded Mandates Reform Act of 1995

U.S. United States
U.S.C. United States Code
VaR Value-at-Risk
VOBA Value of Business Acquired

#### VI. Regulatory Flexibility Act

The Regulatory Flexibility Act, 5 U.S.C. 601 et seq. (RFA) requires an agency to provide an initial regulatory flexibility analysis with a proposed rule or to certify that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banking entities with assets less than or equal to \$175 million) and publish its certification and a short, explanatory statement in the Federal Register along with the proposed rule.

The agencies are separately publishing initial regulatory flexibility analyses for the proposals as set forth in this NPR.

#### Board

A. Statement of the Objectives of the Proposal; Legal Basis

As discussed in the Supplementary Information above, the Board is proposing to revise its capital requirements to promote safe and sound banking practices, implement Basel III and other aspects of the Basel capital framework, and codify its capital requirements.

The proposals in this NPR and the Basel III NPR would implement provisions consistent with certain requirements of the Dodd-Frank Act because they would (1) revise regulatory capital requirements to remove all references to, and requirements of reliance on, credit ratings, 77 and (2) impose new or revised minimum capital requirements on certain depository institution holding companies. 28

Additionally, under section 38(c)(1) of the Federal Deposit Insurance Act, the agencies may prescribe capital standards for depository institutions that they regulate. To In addition, among other authorities, the Board may establish capital requirements for state member banks under the Federal Reserve Act, To for state member banks and bank holding companies under the International Lending Supervision Act and Bank Holding Company Act, Tand for savings and loan holding companies under the Home Owners Loan Act.

B. Small Entities Potentially Affected by the Proposal

Under regulations issued by the Small Business Administration.⁸³ a small entity includes a depository institution, bank holding company, or savings and loan holding company with iotal assets of \$175 million or less (a small banking organization). As of March 31, 2012 there were 373 small state member banks. As of December 31, 2011, there were approximately 128 small savings and loan holding companies and 2,385 small bank holding companies.⁸⁴

The proposed requirements would not apply to small bank holding companies that are not engaged in significant nonbanking activities, do not conduct significant off-balance sheet activities, and do not have a material amount of debt or equity securities outstanding that are registered with the SEC. These small bank holding companies remain subject to the Board's Small Bank Holding Company Policy Statement (Policy Statement).⁸⁵

Small state member banks and small savings and loan holding companies (covered small banking organizations) would be subject to the proposals in this NPR.

C. Impact on Covered Small Banking Organizations

The proposed requirements in the Basel III NPR and this NPR may impact covered small banking organizations in several ways, including both recordkeeping and compliance requirements. As explained in the Basel III NPR, the proposals therein would change the minimum capital ratios and

⁷⁷ See 15 U.S.C. 720-7, note.

⁷⁶ Sec 12 U.S.C. 5371.

^{**} See 12 U.S.C. 1831o(c).

⁶⁶ See 12 U.S.C. 321-338,

⁵¹ See 12 U.S.C. 3907; 12 U.S.C. 1844.

^{** 5}ee 12 U.S.C. 1467a(g)(1).

⁸³ See 13 CFR 121 201.

⁴⁴ The December 31, 2011 data are the most recent available data on small savings and loan holding companies and small bank holding companies.

see 12 CFR part 225, appendix C. Section 171 of the Dodd-Frank provides an exemption from its requirements for bank holding companies subject to the Policy Statement (as in effect on May 19, 2010). Section 171 does not provide a similar exemption for small savings and losn holding companies and they are therefore subject to the proposed rules, 12 U.S.C. 5371(b)(5)(C).

qualifying criteria for regulatory capital, including required deductions and adjustments. The proposals in this NPR would modify the risk weight treatment

for some exposures.

Most small state member banks already hold capital in excess of the proposed minimum risk-based regulatory ratios. Therefore, the proposed requirements are not expected to significantly impact the capital structure of most covered small state member banks. Comparing the capital requirements proposed in this NPR and the Basel III NPR on a fully phased-in basis to minimum requirements of the current rules, the capital ratios of approximately 1-2 percent of small state member banks would fall below at least one of the proposed minimum riskbased capital requirements. Thus, the Board believes that the proposals in this NPR and the Basel III NPR would affect an insubstantial number of small state member banks.

Because the Board has not fully implemented reporting requirements for savings and loan holding companies, it is unable to determine the impact of the proposed requirements on small savings and loan holding companies. The Board seeks comment on the potential impact of the proposed requirements on small savings and loan holding companies.

Covered small banking organizations that would have to raise additional capital to comply with the requirements of the proposal may incur certain costs, including costs associated with issuance of regulatory capital instruments. The Board has sought to minimize the burden of raising additional capital by providing for transitional arrangements that phase-in the new capital requirements over several years, allowing banking organizations time to accumulate additional capital through retained earnings as well as raising capital in the market.

As discussed above, the proposed requirements would modify risk weights for exposures, as well as calculation of the leverage ratio. Accordingly, covered small banking organizations would be required to change their internal reporting processes to comply with these changes. These changes may require some additional personnel training and expenses related to new systems (or modification of existing systems) for calculating regulatory capital ratios.

Additionally, covered small banking organizations that hold certain exposures would be required to obtain additional information under the proposed rules in order to determine the applicable risk weights. Covered small banking organizations that hold

exposures to sovereign entities other than the United States, foreign depository institutions, or foreign public sector entities would have to acquire Country Risk Classification ratings produced by the OECD to determine the applicable risk weights. Covered small banking organizations that held residential mortgage exposures would need to have and maintain information about certain underwriting features of the mortgage as well as the LTV ratio in order to determine the applicable risk weight Generally, covered small banking organizations that hold securitization exposures would need to obtain sufficient information about the underlying exposures to satisfy due diligence requirements and apply the simplified supervisory formula described above to calculate the appropriate risk weight, or be required to assign a 1,250 percent risk weight to the exposure.

Covered small banking organizations typically do not hold significant exposures to foreign entities or securitization exposures, and the Board expects any additional burden related to calculating risk weights for these exposures, or holding capital against these exposures, would be modest. Some covered small banking organizations may hold significant residential mortgage exposures. However, if the small banking organization originated the exposure, it should have sufficient information to determine the applicable risk weight under the proposal. If the small banking organization acquired the exposure from another institution, the information it would need to determine the applicable risk weight is consistent with information that it should normally collect for portfolio monitoring purposes and internal risk management.

Covered small banking organizations would not be subject to the disclosure requirements in subpart D of the proposal. However, the Board expects to modify regulatory reporting requirements that apply to covered small banking organizations to reflect the changes made to the Board's capital requirements in the proposal. The Board expects to propose these changes to the relevant reporting forms in a separate notice.

For small savings and loan holding companies, the compliance burdens described above may be greater than for those of other covered small banking organizations. Small savings and loan holding companies previously were not subject to regulatory capital requirements and reporting requirements tied regulatory capital requirements. Small savings and loan

holding companies may therefore need to invest additional resources in establishing internal systems (including purchasing software or hiring personnel) or raising capital to come into compliance with the proposed rules.

#### D. Transitional Arrangements To Ease Compliance Burden

For those covered small banking organizations that would not immediately meet the proposed minimum requirements, the NPR provides transitional arrangements for banking organizations to make adjustments and to come into compliance. Small covered banking organizations would be required to meet the proposed minimum capital ratio requirements beginning on January 1, 2013 thorough to December 31, 2014. On January 1, 2015, small covered banking organizations would be required to comply with the new Prompt Corrective Action capital ratio requirements proposed in the Basel III NPR. January 1, 2015 is also the proposed effective date for small covered companies to begin calculating risk-weighted assets according to the methodologies in this NPR.

#### E. Identification of Duplicative, Overlapping, or Conflicting Federal Rules

The Board is unaware of any duplicative, overlapping, or conflicting federal rules. As noted above, the Board anticipates issuing a separate proposal to implement reporting requirements that are tied to (but do not overlap or duplicate) the requirements of the proposed rules. The Board seeks comments and information regarding any such tules that are duplicative, overlapping, or otherwise in conflict with the proposed rules.

#### F. Discussion of Significant Alternatives

The Board has sought to incorporate flexibility into the proposals in this NPR and provide alternative treatments to lessen burden and complexity for smaller banking organizations wherever possible, consistent with safety and soundness and applicable law, including the Dodd-Frank Act. These alternatives and flexibility features include the following:

- Covered small banking organizations would not be subject to the enhanced disclosure requirements of the proposed rules.
- Covered small banking organizations could choose to apply the gross-up approach for securitization exposures rather than the SSFA.

The proposal also offers covered small B. Small Entities Affected by the banking organizations a choice between a simpler and more complex methods of risk weighting equity exposures to investment funds.

The Board welcomes comment on any significant alternatives to the proposed rules applicable to covered small banking organizations that would minimize their impact on those entities, as well as on all other aspects of its analysis. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public comment period.

OCC

In accordance with section 3(a) of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.] (RFA), the OCC is publishing this summary of its Initial Regulatory Flexibility Analysis (IRFA) for this NPR. The RFA requires an agency to publish in the Federal Register its IRFA or a summary of its IRFA at the time of the publication of its general notice of proposed rulemaking as or to certify that the proposed rule will not have a significant economic impact on a substantial number of small entities.67 For its IRFA, the OCC analyzed the potential economic impact of this NPR on the small entities that it regulates.

The OCC welcomes comment on all aspects of the summary of its IRFA. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public comment period.

A. Reasons Why the Proposed Rule is Being Considered by the Agencies; Statement of the Objectives of the Proposed Rule; and Legal Busis

As discussed in the Supplementary Information section above, the agencies are proposing to revise their capital requirements to promote safe and sound banking practices, implement Basel III. and harmonize capital requirements across charter type. This NPR also satisfies certain requirements under the Dodd-Frank Act by revising regulatory capital requirements to remove all references to, and requirements of reliance on, credit ralings. Federal law authorizes each of the agencies to prescribe capital standards for the banking organizations it regulates.⁸⁸

Proposal

Under regulations issued by the Small Business Administration, as a small entity includes a depository institution or bank holding company with total assets of \$175 million or less (a small banking organization). As of March 31, 2012, there were approximately 599 small national banks and 284 small federally chartered savings associations.

C. Projected Reporting, Recordkeeping, and Other Compliance Requirements

This NPR includes changes to the general risk-based capital requirements that address the calculation of riskweighted assets and affect small banking organizations. The proposed rules in this NPR that would affect small banking organizations include:

 Changing the denominator of the risk-based capital ratios by revising the asset risk weights:

2. Revising the treatment of

counterparty credit risk;

3. Replacing references to credit ratings with alternative measures of creditworthiness;

4. Providing more comprehensive recognition of collateral and guarantees; and

5. Providing a more favorable capital treatment for transactions cleared through qualifying central counterparties.

These changes are designed to enhance the risk-sensitivity of the calculation of risk-weighted assets. Therefore, capital requirements may go down for some assets and up for others. For those assets with a higher risk weight under this NPR, however, that increase may be large in some instances, e.g., requiring the equivalent of a dollarfor-dollar capital charge for some securitization exposures.

The Basel Committee on Banking Supervision has been conducting periodic reviews of the potential quantitative impact of the Basel III framework.90 Although these reviews monitor the impact of implementing the Basel III framework rather than the proposed rule, the OCC is using estimates consistent with the Basel Committee's analysis, including a conservative estimate of a 20 percent increase in risk-weighted assets, to gauge the impact of this NPR on riskweighted assets. Using this assumption, the OCC estimates that a total of 56 small national banks and federally chartered savings associations will need

to raise additional capital to meet their regulatory minimums. The OCC estimates that this total projected shortfall will be \$143 million and that the cost of lost tax benefits associated with increasing total capital by \$143 million will be approximately \$0.8 million per year. Averaged across the 56 affected institutions, the cost is approximately \$14,000 per institution

per year.
To comply with the proposed rules in this NPR, covered small banking organizations would be required to change their internal reporting processes. These changes would require some additional personnel training and expenses related to new systems (or modification of existing systems) for calculating regulatory capital ratios.

Additionally, covered small banking organizations that hold certain exposures would be required to obtain additional information under the proposed rules in order to determine the applicable risk weights. Covered small banking organizations that hold exposures to sovereign entities other than the United States, foreign depository institutions, or foreign public sector entities would have to acquire Country Risk Classification ratings produced by the OECD to determine the applicable risk weights. Covered small banking organizations that hold residential mortgage exposures would need to have and maintain information about certain underwriting features of the mortgage as well as the LTV ratio in order to determine the applicable risk weight. Generally, covered small banking organizations that hold securitization exposures would need to obtain sufficient information about the underlying exposures to satisfy due diligence requirements and apply either the simplified supervisory formula or the gross-up approach described in section .43 of this NPR to calculate the appropriate risk weight, or be required to assign a 1,250 percent risk weight to the exposure.

Covered smail banking organizations typically do not hold significant exposures to foreign entities or securitization exposures, and the agencies expect any additional burden related to calculating risk weights for these exposures, or holding capital against these exposures, would be relatively modest. The OCC estimates that, for small national banks and federal savings associations, the cost of implementing the alternative measures of creditworthiness will be approximately \$36,125 per institution.

Some covered small banking organizations may hold significant residential mortgage exposures.

^{88 5} U.S.C. 603(a).

⁸⁷ 5 U.S.G. 605(b).

⁸⁸ Sec. e.g., 12 U.S.C. 1487a(g)(1); 12 U.S.C. 1831o(c)(1); 12 U.S.C. 1844; 12 U.S.C. 3907; and 12 U.S.C. 5371.

⁸⁹ See 13 CFR 121.201,

⁹⁰ See, "Update on Basel III implementation Monitoring." Quantitative Impact Study Working Group, January 28, 2012.

However, if the small banking organization originated the exposure, it should have sufficient information to determine the applicable risk weight under the proposed rule. If the small banking organization acquired the exposure from another institution, the information it would need to determine the applicable risk weight is consistent with information that it should normally collect for portfolio monitoring purposes and internal risk management.

Covered small banking organizations would not be subject to the disclosure requirements in subpart D of the proposed rule. However, the agencies expect to modify regulatory reporting requirements that apply to covered small banking organizations to reflect the changes made to the agencies' capital requirements in the proposed rules. The agencies expect to propose these changes to the relevant reporting forms in a separate notice.

To determine if a proposed rule has a significant economic impact on small entities we compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each small entity. If the estimated annual cost was greater than or equal to 2.5 percent of total noninterest expense or 5 percent of annual salaries and employee benefits we classified the impact as significant

annual salaries and employee benefits we classified the impact as significant. The OCC has concluded that the proposals included in this NPR would exceed this threshold for 500 small national banks and 253 small federally chartered private savings institutions. Accordingly, for the purposes of this IRFA, the OCC has concluded that the changes proposed in this NPR, when considered without regard to other changes to the capital requirements that the agencies simultaneously are proposing, would have a significant economic impact on a substantial

number of small entities. Additionally, as discussed in the Supplementary Information section above, the changes proposed in this NPR should be considered together with changes proposed in the separate Basel III NPR also published in today's Federal Register. The changes described in the Basel III NPR include changes to minimum capital requirements that would impact small national banks and federal savings associations. These include a more conservative definition of regulatory capital, a new common equity tier 1 capital ratio, a higher minimum tier 1 capital ratio, new thresholds for prompt corrective action purposes, and a new capital conservation buffer. To estimate the impact of the Basel III NPR on national

banks' and federal savings' association capital needs, the OCC estimated the amount of capital the banks will need to raise to meet the new minimum standards relative to the amount of capital they currently hold. To estimate new capital ratios and requirements, the OCC used currently available data from banks' quarterly Consolidated Report of Condition and Income (Call Reports) to approximate capital under the proposed rule, which shows that most banks have raised their capital levels well above the existing minimum requirements. After comparing existing levels with the proposed new requirements, the OCC determined that 28 small institutions that it regulates would fall short of the proposed increased capital requirements. Together, those institutions would need to raise approximately \$82 million in regulatory capital to meet the proposed minimum requirements set forth in the Basel III NPR. The OCC estimates that the cost of lost tax benefits associated with increasing total capital by \$82 million will be approximately \$0.5 million per year. Averaged across the 28 affected institutions, the cost attributed to the Basel III NPR is approximately \$18,000 per institution per year. The OCC concluded for purposes of its IRFA for the Basel III NPR that the changes described in the Basel III NPR, when considered without regard to changes in this NPR, would not result in a significant economic impact on a substantial number of small entities. However, the OCC has concluded that the proposed changes in this NPR would result in a significant economic impact on a substantial number of small entities. Therefore, considered together, this NPR and the Basel III NPR would have a significant economic impact on a substantial number of small entities.

D. Identification of Duplicative, Overlapping, or Conflicting Federal Rules

The OCC is unaware of any duplicative, overlapping, or conflicting federal rules. As noted previously, the OCC anticipates issuing a separate proposal to implement reporting requirements that are tied to (but do not overlap or duplicate) the requirements of the proposed rules. The OCC seeks comments and information regarding any such federal rules that are duplicative, overlapping, or otherwise in conflict with the proposed rule.

E. Discussion of Significant Alternatives to the Proposed Rule

The agencies have sought to incorporate flexibility into the proposed rule and lessen burden and complexity

for smaller banking organizations wherever possible, consistent with safety and soundness and applicable law, including the Dodd-Frank Act. The agencies are requesting comment on potential options for simplifying the rule and reducing burden, including whether to permit certain small banking organizations to continue using portions of the current general risk-based capital rules to calculate risk-weighted assets. Additionally, the agencies proposed the following alternatives and flexibility features:

- Covered small banking organizations are not subject to the enhanced disclosure requirements of the proposed rules.
- Covered small banking organizations may choose to apply the simpler gross-up method for securitization exposures rather than the Simplified Supervisory Formula Approach (SSFA) (as described in section .43 of this NPR).
- The proposed rule offers covered small banking organizations a choice between a simpler and more complex methods of risk weighting equity exposures to investment funds (as described in section _____.53 of this NPR).

The agencies welcome comment on any significant alternatives to the proposed rules applicable to covered small banking organizations that would minimize their impact on those entities.

### VII. Paperwork Reduction Act

A. Request for Comment on Proposed Information Collection

In accordance with the requirements of the Paperwork Reduction Act (PRA) of 1995, the Agencies may not conduct or sponsor, and the respondent is not required to respond to, an information collection unless it displays a currently valid Office of Management and Budget (OMB) control number. The Agencies are requesting comment on a proposed information collection.

The information collection requirements contained in this joint notice of proposed rulemaking (NPRs) have been submitted by the OCC and FDIC to OMB for review under the PRA, under OMB Control Nos. 1557–0234 and 3064–0153. In accordance with the PRA [44 U.S.C. 3506; 5 CFR part 1320, Appendix A.1], the Board has reviewed the NPR under the authority delegated by OMB. The Board's OMB Control No. is 7100–0313. The requirements are

found in §§ ....35, .....37, .....41, ......42. .......62. and ....63. The Agencies have published two

The Agencies have published two other NPRs in this issue of the Federal Register. Please see the NPRs entitled "Regulatory Capital Rules: Regulatory Capital, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions" and "Regulatory Capital Rules: Advanced Approaches Riskbased Capital Rules; Market Risk Capital Rule." While the three NPRs together comprise an integrated capital framework, the PRA burden has been divided among the three NPRs and a PRA statement has been provided in each.

Comments are invited on:

(a) Whether the collection of information is necessary for the proper performance of the Agencies' functions, including whether the information has practical utility;

(b) The accuracy of the estimates of the burden of the information collection, including the validity of the methodology and assumptions used;

(c) Ways to enhance the quality, utility, and clarity of the information to be collected:

(d) Ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology:

and

(e) Estimates of capital or start up costs and costs of operation, maintenance, and purchase of services to provide information.

All comments will become a matter of

public record.

Comments should be addressed to:
OCC: Communications Division,
Office of the Comptroller of the
Currency, Public Information Room,
Mail stop 1–5, Attention: 1557–0234,
250 E Street SW., Washington, DC
20219. In addition, comments may be
sent by fax to 202–874–4448, or by
electronic mail to

regs.comments@occ.treas.gov. You can inspect and photocopy the comments at the OCC's Public Information Room, 250 E Street SW., Washington, DC 20219. You can make an appointment to inspect the comments by calling 202–874–5043.

Board: You may submit comments. identified by R-14441255, by any of the

following methods:

* Agency Web Site: http:// www.federalreserve.gov. Follow the instructions for submitting comments on the http://www.federalreserve.gov/ generalinfo/foia/ProposedRegs.cfm.

 Federal eRulemaking Portal: http:// www.regulations.gov. Follow the instructions for submitting comments. * Email:

regs.comments@federalreserve.gov. Include docket number in the subject line of the message.

Fax: 202-452-3819 or 202-452-3102.

 Mail: Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW., Washington, DC 20551.

All public comments are available from the Board's Web site at http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper in Room MP-500 of the Board's Martin Building (20th and C Streets NW.) between 9 a.m. and 5 p.m. on weekdays.

FDIC: You may submit written comments, which should refer to RIN 3064-AD96 Standardized Approach for Risk-weighted Assets; Market Discipline and Disclosure Requirements 0153, by any of the following methods:

 Agency Web Site: http:// www.fdic.gov/regulations/laws/federal/ propose.html. Follow the instructions for submitting comments on the FDIC Web site.

 Federal eRulemaking Portal: http:// www.regulations.gov. Follow the instructions for submitting comments.

• Email: Comments@FDIC.gov.

 Mail: Robert E. Feldman, Executive Secretary, Attention: Comments, FDIC, 550 17th Street NW., Washington, DC 20429.

• Hand Delivery/Courier: Guard station at the rear of the 550 17th Street Building (located on F Street) on business days between 7 a.m. and 5 p.m.

Public Inspection: All comments received will be posted without change to http://www.fdic.gov/regulations/laws/federal/propose/html including any personal information provided.
Comments may be inspected at the FDIC Public Information Center, Room 100, 801 17th Street NW., Washington, DC., between 9 a.m. and 4:30 p.m. on business days.

B. Proposed Information Collection

Title of Information Collection: Basel III, Part II.

Frequency of Response: On occasion and quarterly.

Affected Public:

*ÓCC*: National banks and federally chartered savings associations.

Board: State member banks, bank holding companies, and savings and loan holding companies. FDIC: Insured state nonmember banks, state savings associations, and certain subsidiaries of these entities.

Estimated Burden: The burden estimates below exclude any regulatory reporting burden associated with changes to the Consolidated Reports of Income and Condition for banks (FFIEC 031 and FFIEC 0431; OMB Nos. 7100–0036, 3064–0052, 1557–0081), and the Financial Statements for Bank Holding Companies (FR Y–9; OMB No. 7100–0128), and the Capital Assessments and Stress Testing information collection (FR Y–14A/Q/M; OMB No. 7100–0341).

The agencies are still considering whether to revise these information collections or to implement a new information collection for the regulatory reporting requirements. In either case, a separate notice would be published for comment on the regulatory reporting requirements.

#### OCC

Estimated Number of Respondents: Independent national banks, 172; federally chartered savings banks, 603.

Estimated Burden per Respondent: One-time recordkeeping, 122 hours; ongoing recordkeeping, 20 hours; onetime disclosures, 226.25 hours; ongoing disclosures, 131.25 hours.

Total Estimated Annual Burden: 112,303.75 hours.

### Rnard

Estimated Number of Respondents: SMBs, 831; BHCs, 933; SLHCs, 438.

Estimated Burden per Respondent: One-time recordkeeping, 122 hours; ongoing recordkeeping, 20 hours; onetime disclosures, 226.25 hours; ongoing disclosures, 131.25 hours.

Total Estimated Annual Burden: Onetime recordkeeping and disclosures, 279,277.75 hours; ongoing recordkeeping and disclosures 68,715.

### FDIC

Estimated Number of Respondents: 4.571.

Estimated Burden per Respondent: One-time recordkeeping, 122 hours; ongoing recordkeeping, 20 hours; onetime disclosures, 226.25 hours; ongoing disclosures, 131.25 hours.

Total Estimated Annual Burden: 652,087 hours (558,567 one-time recordkeeping and disclosures; 93,520 ongoing recordkeeping and disclosures).

Abstract:

The recordkeeping requirements are found in sections _.35, _.37, _ and .41. The disclosure requirements are found in sections _.42, _.62, and _.63. These recordkeeping and disclosure requirements are necessary for the agencies' assessment and monitoring of

the risk-sensitivity of the calculation of a banking organization's total riskweighted assets and for general safety and soundness purposes.

Section-by-section Analysis Recordkeeping

Section .35 sets forth requirements for cleared transactions. Section .35(b)(3)(i)(A) would require for a cleared transaction with a qualified central counterparty (QCCP) that a client bank apply a risk weight of 2 percent, provided that the collateral posted by the bank to the QCCP is subject to certain arrangements and the client bank has conducted a sufficient legal review (and maintains sufficient written documentation of the legal review) to conclude with a wellfounded basis that the arrangements, in the event of a legal challenge, would be found to be legal, valid, binding and enforceable under the law of the relevant jurisdictions. The agencies estimate that respondents would take on average 2 hours to reprogram and update systems with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 2 hours annually to maintain their internal systems.

Section _.37 addresses requirements for collateralized transactions. Section .37(c)(4)(i)(E) would require that a bank have policies and procedures describing how it determines the period of significant financial stress used to calculate its own internal estimates for haircuts and be able to provide empirical support for the period used. The agencies estimate that respondents would take on average 80 hours (two business weeks) to reprogram and update systems with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 16 hours annually to maintain their internal systems.

Section _.41 addresses operational requirements for securitization exposures. Section _.41(b)(3) would allow for synthetic securitizations a bank's recognition, for risk-based capital purposes, of a credit risk mitigant to hedge underlying exposures if certain conditions are met, including the bank's having obtained a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions. Section _.41(c)(2)(i) would require that a bank support a demonstration of its comprehensive understanding of a securitization exposure by conducting and

documenting an analysis of the risk characteristics of each securitization exposure prior to its acquisition, taking into account a number of specified considerations. The agencies estimate that respondents would take on average 40 hours (one business week) to reprogram and update systems with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 2 hours annually to maintain their internal systems.

### Disclosures

Section _.42 addresses risk-weighted assets for securitization exposures. Section _42(e)(2) would require that a bank publicly disclose that is has provided implicit support to the securitization and the risk-based capital impact to the bank of providing such

implicit support.

Section .62 sets forth disclosure requirements related to a bank's capital requirements. Section _.62(a) specifies a quarterly frequency for the disclosure of information in the applicable tables set out in section 63 and, if a significant change occurs, such that the most recent reported amounts are no longer reflective of the bank's capital adequacy and risk profile, section _.62(a) also would require the bank to disclose as soon as practicable thereafter, a brief discussion of the change and its likely impact. Section 62(a) would allow for annual disclosure of qualitative information that typically does not change each quarter, provided that any significant changes are disclosed in the interim. Section_.62(b) would require that a bank have a formal disclosure policy approved by the board of directors that addresses its approach for determining the disclosures it makes. The policy would be required to address the associated internal controls and disclosure controls and procedures. Section 62(c) would require a bank with total consolidated assets of \$50 billion or more that is not an advanced approaches bank, if it concludes that specific commercial or financial information required to be disclosed under section .62 would be exempt from disclosure by the agency under the Freedom of Information Act (5 U.S.C. 552), to disclose more general information about the subject matter of the requirement and the reason the specific items of information have not been disclosed,

Section _.63 sets forth disclosure requirements for banks with total consolidated assets of \$50 billion or more that are not advanced approaches banks. Section .63(a) would require a bank to make the disclosures in Tables

14.1 through 14.10 and in section .63(h) for each of the last three years beginning on the effective date of the rule. Section .63(b) would require quarterly disclosure of a bank's common equity tier 1 capital, additional tier 1 capital, tier 2 capital, tier 1 and total capital ratios, including the regulatory capital elements and all the regulatory adjustments and deductions needed to calculate the numerator of such ratios: total risk-weighted assets, including the different regulatory adjustments and deductions needed to calculate total risk-weighted assets; regulatory capital ratios during any transition periods, including a description of all the regulatory capital elements and all regulatory adjustments and deductions needed to calculate the numerator and denominator of each capital ratio during any transition period; and a reconciliation of regulatory capital elements as they relate to its balance sheet in any audited consolidated financial statements. Table 14.1 sets forth scope of application qualitative and quantilative disclosure requirements; Table 14.2 sets forth capital structure qualitative and quantitative disclosure requirements; Table 14.3 sets forth capital adequacy qualitative and quantitative disclosure requirements; Table 14.4 sets forth capital conservation buffer qualitative and quantitative disclosure requirements: Table 14.5 sets forth general qualitative and quantitative disclosure requirements for credit risk; Table 14.6 sets forth general qualitative and quantitative disclosure requirements for counterparty credit risk-related exposures; Table 14.7 sets forth qualitative and quantitative disclosure requirements for credit risk mitigation; Table 14.8 sets forth qualitative and quantitative disclosure requirements for securitizations; Table 14.9 sets forth qualitative and quantitative disclosure requirements for equities not subject to Subpart P of the rule; and Table 14.10 sets forth qualitative and quantitative disclosure requirements for interest rate risk for non-trading activities.

The agencies estimate that respondents would take on average 226.25 hours to reprogram and update systems with the requirements outlined in these sections. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 131.25 hours annually to maintain their internal systems.

# VIII. Plain Language

Section 722 of the Gramm-Leach-Bliley Act requires the Federal banking agoncies to use plain language in all

proposed and final rules published after January 1, 2000. The agencies invited comment on whether the proposed rule was written plainly and clearly or whether there were ways the agencies could make the rule easier to understand. The agencies received no comments on these matters and believe that the final rule is written plainly and clearly in conjunction with the agencies' risk-based capital rules.

### IX. OCC Unfunded Mandates Reform Act of 1995 Determination

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) (2 U.S.C. 1532 et seq.) requires that an agency prepare a written statement before promulgating a rule that includes a Federal mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of \$100 million or more (adjusted annually for inflation) in any one year. If a written statement is required, the UMRA (2 U.S.C. 1535) also requires an agency to identify and consider a reasonable number of regulatory alternatives before promulgating a rule and from those alternatives, either select the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule, or provide a statement with the rule explaining why such an option was not chosen.

Under this NPR, the OCC is proposing changes to their minimum capital requirements that address the calculation of risk-weighted assets. The

proposed rule would:

1. Change denominator of the riskbased capital ratios by revising the methodologies for calculating risk weights;

Revise the treatment of counterparty credit risk;

 Replace references to credit ratings with alternative measures of creditworthiness;

4. Provide more comprehensive recognition of collateral and guarantees;

5. Provide a more favorable capital treatment for transactions cleared through qualifying central counterparties; and

6. Introduce disclosure requirements for banking organizations with assets of \$50 billion or more.

To estimate the impact of this NPR on national banks and federal savings associations, the OCC estimated the amount of capital banks will need to raise to meet the new minimum standards relative to the amount of capital they currently hold, as well as the compliance costs associated with establishing the infrastructure to determine correct risk weights using the

new alternative measures of creditworthiness and the compliance costs associated with new disclosure requirements. The OCC has determined that its NPR will not result in expenditures by State, local, and Tribal governments, or by the private sector, of \$100 million or more (adjusted annually for inflation). Accordingly, the UMRA does not require that a written statement accompany this NPR.

### Addendum 1: Summary of this NPR for Community Banking Organizations Overview

The agencies are issuing a notice of proposed rulemaking (NPR, proposal, or proposed rule) to harmonize and address shortcomings in the measurement of riskweighted assets that became apparent during the recent financial crisis, in part by implementing in the United States changes made by the Basel Committee on Banking Supervision (BCBS) to international regulatory capital standards and by implementing aspects of the Dodd-Frank Act. Among other things, the proposed rule would:

- Revise risk weights for residential mortgages based on loan-to-value ratios and certain product and underwriting features;
- Increase capital requirements for pastdue loans, high volatility commercial real estate exposures, and certain short-term loan commitments;
- Expand the recognition of colleteral and guaranters in determining risk-weighted assets:
- Remove references to credit ratings; and
   Establish due diligence requirements for securitization exposures.

This addendum presents a summary of the proposal in this NPR that is most relevant for smaller, less complex banking organizations that are not subject to the market risk capital rule or the advanced approaches capital rule, and that have under \$50 billion in total assets. The agencies intend for this addendum to act as a guide for these banking organizations, helping them to navigate the proposed rule and identify the changes most relevant to them. The addendum does not, however, by itself provide a complete understanding of the proposed rules and the agencies expect and encourage all institutions to review the proposed rule in its entirety.

### A. Zero Percent Risk-weighted Items

The following exposures would receive a zero percent risk weight under the proposal:

- Cash;
- · Certain gold bullion;
- Direct and unconditional claims on the U.S. government, its central bank, or a U.S. government agency;
- * Exposures unconditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency;
- Claims on certain supranational entities (such as the International Monetary Fund) and certain multilateral development banking organizations; and
- Claims on and exposures unconditionally guaranteed by sovereign

entities that meet certain criteria (as discussed below).

For more information, please refer to sections 32(a) and 37(b)(3)(iii) of the proposal. For exposures to foreign governments and their central banks, see section L below.

### B. 20 Percent Risk Weighted Items

The following exposures would receive a twenty percent risk weight under the proposal:

- · Cash items in the process of collection:
- Exposures conditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency;
- Claims on government-spansored entities (GSEs);
- Claims on U.S. depository institutions and National Credit Union Administration (NCUA)-insured credit unions;
- General obligation claims on, and claims guaranteed by the full faith and credit of state and local governments (and any other public sector entity, as defined in the proposal) in the United States; and
- Claims on and exposures gueranteed by foreign banks and public sector entities if the sovereign of incorporation of the foreign bank or public sector entity meets certain criteria (as described below).

A conditional guarantee is one that requires the satisfaction of certain conditions, for example servicing requirements.

For more information, please refer to sections 32(a) through 32(e), and section 32(l) of the proposal. For exposures to foreign banks and public sector entities, see section L below.

# C. 50 Percent Risk-weighted Exposures

The following exposures would receive a 50 percent risk weight under the proposal:

- "Statutory" multifamily mortgage loans meeting certain criteria;
- Presold residential construction loans meeting certain criteria;
- Revenue bonds issued by state and local governments in the United States; and
- Claims on and exposures guaranteed by sovereign entities, foreign banks, and foreign public sector entities that meet certain criteria (as described below).

The criteria for multifamily loans and presold residential construction loans are generally the same as in the existing general risk-based capital rules. These criteria are required under federal law.91 Consistent with the general risk-based capital rules and requirements of the statute, the proposal would assign a 100 percent risk weight to pre-sold construction loans where the contract is cancelled.

For more information, please refer to sections 32(e), 32(h), and 32(i) of the proposal. Also refer to section 2 of the proposal for relevant definitions:

- -Pre-sold construction loan
- -Revenue obligation.
- --- Statutory multifamily mortgage.

at See sections 618(s)(1) or (2) and 618(b)(1) of the Resolution Trust Corporation Refinancing. Restructuring, and Improvement Act of 1991.

ATTACHMENT C

meets the aforementioned thresholds, if the agency deems it necessary or appropriate for safe and sound banking practices.

As a general matter, savings associations and savings and loan holding companies do not engage in trading activity to a substantial degree. However, the agencies believe that any savings association or savings and loan holding company whose trading activity grows to the extent that it meets the thresholds should hold capital commensurate with the risk of the trading activity and should have in place the prudential risk management systems and processes required under the market risk capital rule. Therefore, the agencies believe it would be necessary and appropriate to expand the scope of the market risk rule to apply to savings associations and savings and loan holding companies.

Application of the market risk capital rule to all banking organizations with material exposure to market risk would be particularly important because of banking organizations' increased exposure to traded credit products, such as credit default swaps, asset-backed securities and other structured products, as well as other less liquid products. In fact, many of the revisions to the final market risk capital rule were made in response to concerns that arose during the financial crisis when certain trading assets suffered substantial losses. causing banking organizations holding those assets to suffer substantial losses. For example, in addition to a market risk capital requirement to account for general market risk, the revised rules apply more conservative standardized specific risk capital requirements to most securitization positions. implement an additional incremental risk capital requirement for a banking organization that models specific risk for one or more portfolios of debt or, if applicable, equity positions. Additionally, to address concerns about the appropriate treatment of traded positions that have limited price transparency, a banking organization subject to the market risk capital rule must have a well-defined valuation process for all covered positions.

Question 18: The agencies request comment on the application of the market risk rule to savings associations and savings and loan holding companies.

### IV. List of Acronyms

ABCP Asset-Backed Commercial Paper ABS Asset-Backed Security AVC Asset Value Correlation BCBS Basel Committee on Banking Supervision

CCP Central Counterparty CDO Collateralized Debt Obligation CDS Credit Default Swap CDS_{ind} Index Credit Default Swap CEIO Credit-Enhancing Interest-Only Strip CPSS Committee on Payment and Settlement Systems CVA Credit Valuation Adjustment DFA Dodd-Frank Act DvP Delivery-versus-Payment E Measure of Effectiveness EAD Exposure-at-Default EE Expected Exposure Expected Operational Loss (EQL) EPE Expected Positive Exposure FDIC Federal Deposit Insurance Corporation FFIEC Federal Financial Institutions **Examination Council** FR Federal Register GAAP Generally Accepted Accounting Principles HVCRE High-Volatility Commercial Real Estate Internal Assessment Approach TAA. ΪMΑ Internal Models Approach IMM Internal Models Methodology I/O Interest-Only IOSCO International Organization of Securities Commissions IRB Internal Ratings-Based Loss Given Default (LGD) M Effective Maturity NGR Net-to-Gross Ratio NPR Notice of Proposed Rulemaking NRSRO Nationally Recognized Statistical Rating Organization OCC Office of the Comptroller of the Currency OTC Over-the-Counter PD Probability of Default PFE Potential Future Exposure Payment-versus-Payment QCCP Qualifying Central Counterparty QRE Qualified Retail Exposure RBA Ratings-Based Approach RVC Ratio of Value Change SFA Supervisory Formula Approach SSFA Simplified Supervisory Formula Approach U.S.C. United States Code

# V. Regulatory Flexibility Act Analysis

VaR Value-nt-Risk

The Regulatory Flexibility Act, 5 U.S.C. 601 et seq. (RFA) requires an agency to provide an initial regulatory flexibility analysis with a proposed rule or to certify that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banks with assets less than or equal to \$175 million) and publish its certification and a short, explanatory statement in the Federal Register along with the proposed rule.

The Board is providing an initial regulatory flexibility analysis with respect to this NPR. The OCC and FDIC are certifying that the proposals in this NPR will not have a significant economic impact on a substantial number of small entities.

### Board

Under regulations issued by the Small Business Administration, ¹⁶ a small entity includes a depository institution or bank holding company with total assets of \$175 million or less (a small banking organization). As of March 31, 2012 there were 373 small state member banks. As of December 31, 2011, there were approximately 128 small savings and loan holding companies and 2,385 small bank holding companies. ¹⁹

As discussed previously in the Supplementary Information, the Board is proposing to revise its capital requirements to promote safe and sound banking practices, implement Basel III, and other aspects of the Basel capital framework, and codify its capital

requirements.

The proposals also satisfy certain requirements under the Dodd-Frank Act by imposing new or revised minimum capital requirements on certain depository institution holding companies.20 Additionally, under section 38(c)(1) of the Federal Deposit Insurance Act, the agencies may prescribe capital standards for depository institutions that they regulate.Zi In addition, among other authorities, the Board may establish capital requirements for state member banks under the Federal Reserve Act,22 for state member banks and bank holding companies under the International Lending Supervision Act and Bank Holding Company Act,23 and for savings and loan holding companies under the Home Owners' Loan Act.24

The proposed requirements in this NPR generally would not apply to small bank holding companies that are not engaged in significant nonbanking activities, do not conduct significant off-balance sheet activities, and do not have a material amount of debt or equity securities outstanding that are registered with the SEC. These small bank holding companies remain subject to the Board's Small Bank Holding Company Policy Statement (Policy Statement).²³

¹³ See 13 CFR 121,201.

¹⁸ The December 31, 2011, data are the most recent available data on small savings and loan holding companies and small bank holding companies.

²⁰ See 12 U.S.C. 5371.

²¹ See 12 U.S.C. 1831n(c)(1).

²² Sec 12 CFR 208.43.

²² See 12 U.S.C. 3907; 12 U.S.C. 1844.

²⁴ See 12 U.S.C. 1467a(g)(1).

²⁵ See 12 CFR part 225, appendix C; see also 12 U.S.C. 5371(b)(5)(C). Section 171 of the Dodd-Frank provides an exemption from its requirements for bank holding companies subject to the Policy Statement (as in effect on May 12, 2010). Section 171 does not provide a similar exemption for small savings and loss holding companies and they are therefore subject to the proposed rules.

The proposals in this NPR would generally not apply to other small banking organizations. Those small banking organizations that would be subject to the proposed modifications to the advanced approaches rules would only be subject to those requirements because they are a subsidiary of a large banking organization that meets the criteria for advanced approaches. The Board expects that all such entities would rely on the systems developed by their parent banking organizations and would have no additional compliance costs. The Board also expects that the parent banking organization would remedy any capital shortfalls at such a subsidiary that would occur due to the proposals in this NPR.

The Board welcomes comment on all aspects of its analysis. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public comment period.

### OCC

Pursuant to section 605(b) of the Regulatory Flexibility Act, (RFA), the regulatory flexibility analysis otherwise required under section 604 of the RFA is not required if an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banks with assets less than or equal to \$175 million) and publishes its certification and a short, explanatory statement in the Federal Register along with its rule.

As of March 31, 2012, there were approximately 599 small national banks and 284 small federally chartered savings associations. The proposed changes to OCC's minimum risk-based capital requirements included in this NPR would impact only those small national banks and federal savings associations that are subsidiaries of large internationally active banking organizations that use the advanced approaches risk-based capital rules, and those small federal savings associations that meet the threshold criteria for application of the market risk rule. Only six small institutions would be subject to the advanced approaches risk-based capital rules, and no small federal savings associations satisfy the threshold criteria for application of the market risk rule. Therefore, the OCC does not believe that the proposed rule will result in a significant economic impact on a substantial number of small

FDIC Regulatory Flexibility Act Analysis

Pursuant to section 505(b) of the Regulatory Flexibility Act, (RFA), the

regulatory flexibility analysis otherwise required under section 604 of the RFA is not required if an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banks with assets less than or equal to \$175 million) and publishes its certification and a short, explanatory statement in the Federal Register along with its rule.

As of March 31, 2012, there were approximately 2,433 small state nonmember banks, 115 small state savings banks, and 45 small state savings associations (collectively, small banks and savings associations). The proposed changes to FDIC's minimum risk-based capital requirements included in this NPR would impact only those small banks and savings associations that are subsidiaries of large, internationally-active banking organizations that use the advanced approaches risk-based capital rules, and those small state savings associations that meet the threshold criteria for application of the market risk rule. There are no small banks and savings associations subject to the advanced approaches risk-based capital rules, and no small state savings associations satisfy the threshold criteria for application of the market risk rule. Therefore, the FDIC does not believe that the proposed rule will result in a significant economic impact on a substantial number of small entities.

### VI. Paperwork Reduction Act

Request for Comment on Proposed Information Collection

In accordance with the requirements of the Paperwork Reduction Act (PRA) of 1995, the Agencies may not conduct or sponsor, and the respondent is not required to respond to, an information collection unless it displays a currently valid Office of Management and Budget (OMB) control number. The Agencies are requesting comment on a proposed information collection.

The information collection requirements contained Subpart E of this joint notice of proposed rulemaking (NPR) have been submitted by the OCC and FDIC to OMB for review under the PRA, under OMB Control Nos. 1557-0234 and 3064-0153. The information collection requirements contained in Subpart F of this NPR have been submitted by the OCC and FDIC to OMB for review under the PRA. In accordance with the PRA (44 U.S.C. 3506: 5 CFR part 1320, Appendix A.1), the Board has reviewed the NPR under the authority delegated by OMB. The Board's OMB Control Number for the information

collection requirements contained Subpart E of this NPR is 7100–0313 and for the information collection requirements contained Subpart F of this NPR is 7100–0314. The requirements in Subpart E are found in proposed sections __121, __122, __123, __124, __132, __141, __142, __152, __173. The requirements in Subpart F are found in proposed sections __203, __204, __205, __206, __207, __208, __209, __210, and __212.

The Agencies have published two other NPRs in this issue of the Federal Register. Please see the NPRs entitled "Regulatory Capital Rules: Regulatory Capital, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions" and "Regulatory Capital Rules: Standardized Approach for Risk-Weighted Assets; Market Discipline and Disclosure Requirements." While the three NPRs together comprise an integrated capital framework, the PRA burden has been divided among the three NPRs and a PRA statement has been provided in each.

Comments are invited on:
(a) Whether the collection of information is necessary for the proper performance of the Agencies' functions, including whether the information has practical utility:

(b) The accuracy of the estimates of the burden of the information collection, including the validity of the methodology and assumptions used;

(c) Ways to enhance the quality, utility, and clarity of the information to be collected;

(d) Ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology;

(e) Estimates of capital or start up costs and costs of operation, maintenance, and purchase of services to provide information.

All comments will become a matter of public record.

Comments should be addressed to: OCC: Communications Division, Office of the Comptroller of the Currency, Public Information Room, Mail stop 1-5, Attention: 1557-0234, 250 E Street SW., Washington, DC 20219. In addition, comments may be sent by fax to 202-874-4448, or by electronic mail to regs.comments@occ.treas.gov. You can inspect and photocopy the comments at the OCC's Public Information Room, 250 E Street SW., Washington, DC 20219. You can make an appointment to inspect the comments by calling 202-874-5043.

Board: You may submit comments, identified by R-1443, by any of the following methods:

- * Agency Web Site: http:// www.federalreserve.gov. Follow the instructions for submitting comments on the http://www.federalreserve.gov/ generalinfo/foia/ProposedRegs.cfm.
- Federal eRulemaking Portal: http:// www.regulations.gov. Follow the instructions for submitting comments.
- Email: regs.comments@federalreserve.gov. Include docket number in the subject line of the message.
- Fax: 202-452-3819 or 202-452-3102.
- Mail: Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW, Washington, DC 20551.

All public comments are available from the Board's Web site at http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper in Room MP-500 of the Board's Martin Building (20th and C Streets NW.) between 9 a.m. and 3 p.m. on weekdays.

FDIC: You may submit written comments, which should refer to RIN 3064—AD97 Advanced Approaches Risk-based Capital Rule (3064—0153); Market Risk Capital Rule (NEW), by any of the following methods:

- Agency Web Site: http:// www.fdic.gov/regulations/laws/federal/ propose.html. Fallow the instructions for submitting comments on the FDIC Web site.
- Federal effulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.
  - Email: Comments@FDIC.gov.
- Mail: Robert E. Feldman, Executive Secretary, Attention: Comments, FDIC, 550 17th Street NW., Washington, DC 20429.
- Hand Delivery/Courier: Guard station at the rear of the 550 17th Street Building (located on F Street) on business days between 7 a.m. and 5 p.m.

Public Inspection: All comments received will be posted without change to http://www.fdic.gov/regulations/laws/federal/propose/html including any personal information provided.
Comments may be inspected at the FDIC Public information Center, Room 100, 801 17th Street NW., Washington, DC, between 9 a.m. and 4:30 p.m. on business days.

Proposed Information Collection

Title of Information Collection: Regulatory Capital Rules (Part 3): Advanced Approaches Risk-based Capital Rules (Basel III, Part 3).

Frequency of Response: Quarterly and

annually.

Affected Public:

OCC: National banks and federally chartered savings associations.

Board: State member banks (SMBs), bank holding companies (BHCs), and savings and loan holding companies (SLHCs).

FDIC: Insured state nonmember banks, certain subsidiaries of these entities, and state chartered savings associations.

Estimated Burden: The burden estimates below exclude any regulatory reporting burden associated with changes to the Consolidated Reports of Income and Condition for banks (FFIEC 031 and FFIEC 041; OMB Nos. 7100~ 0036, 3064-0052, 1557-0081), Advanced Capital Adequacy Framework Regulatory Reporting Requirements (FFIEC 101; OMB Nos. 7100-0319, 3064-0159, 1557-0239), the Financial Statements for Bank Holding Companies (FR Y-9; OMB No. 7100-0128), and the Capital Assessments and Stress Testing information collection (FR Y-14A/Q/M; OMB No. 7100-0341). The agencies are still considering whether to revise these information collections or to implement a new information collection for the regulatory reporting requirements. In either case, a separate notice would be published for comment on the regulatory reporting requirements.

OCC

Estimated Number of Respondents: 45.

Estimated Burden per Respondent: One-time recordkeeping, 460 hours; ongoing recordkeeping, 176 hours; onetime disclosures, 280 hours; ongoing disclosures, 140 hours.

Total Estimated Annual Burden: 47,520 hours.

## Board

Estimated Number of Respondents: SMBs, 4: BHCs, 20; SLHCs, 13.

Estimated Burden per Respondent: One-time recordkeeping, 460 hours; ongoing recordkeeping, 176 hours; onetime disclosures, 280 hours; ongoing disclosures, 140 hours.

Total Estimated Annual Burden: 39,072 hours.

### FDIC

Estimated Number of Respondents: 8.
Estimated Burden per Respondent:
One-time recordkeeping, 460 hours;
ongoing recordkeeping, 176 hours; one-

time disclosures. 280 hours; ongoing disclosures, 140 hours.

Total Estimated Annual Burden: 8,448 hours.

Abstract

The PRA burden associated with reporting, recordkeeping, and disclosure requirements of Subpart E that are found in proposed sections .121.

.122, .123, .124, .132(b)(2)(iii), .132(b)(3), .132 (d)(1), .132(d)(1)(iii),

collections (IGs).

Section-by-Section Analysis

## Recordkeeping Requirements

Under proposed section .132(b)(2)(iii)(A), counterparty credit risk of repo-style transactions. eligible margin loans, and OTC derivative contracts. Own internal estimates for haircuts. With the prior written approval of the [AGENCY], a [BANK] may calculate haircuts (Hs and Hfx) using its own internal estimates of the volatilities of market prices and foreign exchange rates. To receive [AGENCY] approval to use its own internal estimates, a [BANK] must satisfy the minimum quantitative standards outlined in this section. The agencies estimate that respondents would take on average 80 hours (two business weeks) to reprogram and update systems with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 16 hours annually to maintain their internal systems.

Under proposed section

132(d)(2)(iv), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts, Risk-weighted assets using IMM—Under the IMM, a [BANK] uses an internal model to estimate the expected exposure (EE) for a netting set and then calculates EAD based on that EE. A [BANK] must calculate two EEs and two EADs (one stressed and one unstressed) for each netting as outlined

in this section. The agencies estimate that respondents would take on average 80 hours (two business weeks) to update their current model with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to maintain their internal model.

Under proposed section .132(d)(3)(vi), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. To obtain [AGENCY] approval to calculate the distributions of exposures upon which the EAD calculation is based, the [BANK] must demonstrate to the satisfaction of the [AGENCY] that it has been using for at least one year an internal model that broadly meets the minimum standards. with which the [BANK] must maintain compliance. The [BANK] must have procedures to identify, monitor, and control wrong-way risk throughout the life of an exposure. The procedures must include stress testing and scenario analysis. The agencies estimate that

respondents would take on average 80

requirements outlined in this section.

implement a model with the Under proposed section

hours (two business weeks) to

.132(d)(3)(viii), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. When estimating model parameters based on a stress period, the [BANK] must use at least three years of historical data that include a period of stress to the credit default spreads of the (BANK)'s counterparties. The [BANK] must review the data set and update the data as necessary, particularly for any material changes in its counterparties. The [BANK] must demonstrate at least quarterly that the stress period coincides with increased CDS or other credit spreads of the [BANK]'s counterparties. The [BANK] must have procedures to evaluate the effectiveness of its stress calibration that include a process for using benchmark portfolios that are vulnerable to the same risk factors as the [BANK]'s portfolio. The [AGENCY] may require the [BANK] to modify its stress calibration to better reflect actual historic losses of the portfolio. The agencies estimate that respondents would take on average 80 hours (two business weeks) to implement procedures with the requirements outlined in this section. Under proposed section

.132(d)(3)(ix), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. A [BANK] must subject its internal model to an initial validation and annual model review process. The model review should consider whether the inputs and risk factors, as well as the model outputs, are appropriate. As part of the model review process, the [BANK] must have a backtesting program for its model that includes a process by which unacceptable model performance will be determined and remedied. The agencies estimate that respondents would take on average 40 hours (one business week) to implement a model with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to maintain their internal model.

Under proposed section

.132(d)(3)(x), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. A [BANK] must have policies for the measurement, management and control of collateral and margin amounts. The agencies estimate that respondents would take on average 20 hours to implement policies with the requirements outlined in this section.

Under proposed section .132(d)(3)(xi), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. A [BANK] must have a comprehensive stress testing program that captures all credit exposures to counterparties, and incorporates stress testing of principal market risk factors and creditworthiness of counterparties. The agencies estimate that respondents would take on average 40 hours (one business week) to implement a program with the requirements outlined in this

section. In addition, the agencies estimate that, on a continuing basis. respondents would take on average 40 hours annually to maintain their program.

Under proposed sections

 $141(\hat{c})(\hat{2})(i)$  and (ii), operational criteria for recognizing the transfer of risk. A [BANK] must demonstrate its comprehensive understanding of a securitization exposure under section 141(c)(1), for each securitization exposure by conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure and document such analysis within three business days after acquiring the exposure. On an on-going basis (no less frequently than quarterly), evaluate, review, and update as appropriate the analysis required under this section for each securitization exposure. The agencies estimate that respondents would take on average 40 hours (one business week) to implement a program with the

requirements outlined in this section. The agencies estimate that, on a continuing basis, respondents would take on average 10 hours quarterly to evaluate, review, and update the program requirements.

Disclosure Requirements

Under proposed section ___ disclosures by banks that are advanced approaches banks that have successfully completed parallel run. A [BANK] that is an advanced approaches bank must make the disclosures described in Tables 11.1 through 11.12, The [BANK] must make these disclosures publicly available for each of the last three years (that is, twelve quarters) or such shorter period beginning on the effective date of this subpart E.

Under proposed table 11.4—Capital Conservation and Countercyclical Buffers. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 80 hours (two business weeks) to comply with the disclosure requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually comply with the disclosure requirements outlined in this table.

Under proposed table 11.5—Credit Risk: General Disclosures. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 80 hours (two business weeks) to comply with the disclosure requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to comply with the disclosure requirements outlined in this table.

Under proposed table 11.9-Securitization. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 60 hours to comply with the disclosure requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 30 hours annually comply with the disclosure requirements outlined in this table.

Under proposed Table 11.12—Interest Rate Risk for Non-trading Activities. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 60 hours to comply with the disclosure

requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 30 hours annually comply with the disclosure requirements outlined in this table.

### Proposed Information Collection

Title of Information Collection: Regulatory Capital Rules (Part 3): Market Risk Capital Rule (Basel III, Part 3).

Frequency of Response: Quarterly and annually.

Affected Public:

Estimated Burden:

*OCC*: National banks and federally chartered savings associations.

Board: Savings associations and saving and loan holding companies. FDIC: Insured state nonmember banks, state savings associations, and certain subsidiaries of these entities.

#### OCC

Estimated Number of Respondents: 45.

Estimated Burden per Respondent: 1.964 hours.

Total Estimated Annual Burden: 99.180 hours.

### Board

Estimated Number of Respondents: 30.

Estimated Burden per Respondent: 2,204 hours.

Total Estimated Annual Burden: 66,120 hours.

### **FDIC**

Estimated Number of Respondents: 2. Estimated Burden per Respondent: 1,964 hours.

Total Estimated Annual Burden: 3.928 hours.

### Abstract

The PRA burden associated with reporting, recordkeeping, and disclosure requirements of Subpart F that are found in proposed sections ______.203,

204, 205, 206, 207, 208, 209, 210, and 212. They would enhance risk sensitivity and introduce requirements for public disclosure of certain qualitative and quantitative information about a savings association's or a savings and loan holding company's market risk. The collection of information is necessary to ensure capital adequacy according to the level of market risk.

## Section-by-Section Analysis

### Section

__lowbarm; __lowbarm; 203 sets forth the requirements for applying the market risk framework. Section ______203(a)(1) requires clearly defined policies and procedures for determining which trading assets and trading liabilities are trading positions, which of its trading positions are correlation trading positions, and specifies what must be taken into account. Section

_____203(a)(2) requires a clearly defined trading and hedging strategy for trading positions approved by senior management and specifies what each strategy must articulate. Section

Section ____204(b) requires quarterly backtesting. Section _____205(a)(5) requires institutions to demonstrate to the agencies the appropriateness of proxies used to capture risks within value-at-risk models. Section

controls supporting market risk

measurement systems.

_____.205(c) requires institutions to retain value-at-risk and profit and loss information on sub-portfolios for two years. Section _____.206(b)(3) requires policies and procedures for stressed value-at-risk models and prior approvals on determining periods of significant financial stress.

Section _____.207(b)(1) specifies what internal models for specific risk must include and address. Section 208(a) requires prior written approval for incremental risk. Section _____209(a) requires prior approval for comprehensive risk models. Section

_____209(c)(2) requires retaining and making available the results of supervisory stress testing on a quarterly basis. Section ______210(f) requires documentation quarterly for analysis of risk characteristics of each securitization position it holds. Section

212 requires quarterly quantitative disclosures, annual qualitative disclosures, and a formal disclosure policy approved by the board of directors that addresses the bank's approach for determining the market risk disclosures it makes.

### VII. Plain Language

Section 722 of the Gramm-Leach-Bliley Act requires the Federal banking agencies to use plain language in all proposed and final rules published after January 1, 2000. The agencies have sought to present the proposed rule in a simple and straightforward manner, and invite comment on the use of plain language.

### VIII. OCC Unfunded Mandates Reform Act of 1995 Determination

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) (2 U.S.C. 1532 et seq.) requires that an agency prepare a written statement before promulgating a rule that includes a Federal mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of \$100 million or more (adjusted annually for inflation) in any one year. If a written statement is required, the UMRA (2 U.S.C. 1535) also requires an agency to identify and consider a reasonable number of regulatory alternatives before promulgating a rule and from those alternatives, either select the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule, or provide a statement with the rule explaining why such an option was not chosen.

This NPR would incorporate revisions to the Basel Committee's capital framework into the banking agencies' advanced approaches risk-based capital rules and remove references to credit ratings consistent with section 939A of the Dodd-Frank Act. This NPR would modify various elements of the advanced approached risk-based capital rules regarding the determination of risk-weighted assets. These changes would (1) Modify treatment of counterparty credit risk, (2) remove references to credit ratings, (3) modify the treatment of securitization exposures, and (4) modify the treatment of exposures subject to deduction from capital. The NPR also would enhance disclosure requirements, especially with regard to securitizations, and would amend the advanced approaches so that capital requirements using the internal models methodology take into consideration stress in calibration data. stress testing, initial validation. collateral management, and annual model review. The NPR rule also would require national banks and federal savings associations subject to the advanced approaches risk-based capital rules to identify, monitor, and control wrong-way risk.

Finally, the NPR would expand the scope of the agencies' market risk capital rule to savings associations that meet certain thresholds.

To estimate the impact of this NPR on national banks and federal savings associations, the OCC estimated the amount of capital banks will need to raise to meet the new requirements relative to the amount of capital they currently hold, as well as the compliance costs associated with establishing the infrastructure to determine correct risk weights using the revised methods for calculating riskweighted assets and the compliance costs associated with new disclosure requirements. The OCC has determined that its proposed rule will not result in expenditures by State, local, and Tribal governments, or by the private sector, of \$100 million or more. Accordingly, the UMRA does not require that a written statement accompany this NPR.

## Text of the Proposed Common Rule [All Agencies

The text of the proposed common rule appears below:

#### PART **CAPITAL ADEQUACY OF** [BANK]S

### Subpart E-Risk-Weighted Assets-Internal Ratings-Based and Advanced Measurement Approaches

.100 Purpose, applicability, and principle of conservatism.

.101 Definitions.

#### QUALIFICATION

- .121 Qualification process.
- .122 Qualification requirements.
- Ongoing qualification. .123
- .124 Merger and acquisition transitional arrangements.

### RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

- .131 Mechanics for calculating total wholesale and retail risk-weighted Baseia.
- .132 Counterparty credit risk of repostyle transactions, eligible margin loans, and OTC derivative contracts.
  - .133 Cleared transactions.
- .134 Guarantees and credit derivatives: PD substitution and LGD adjustment approaches.
- .135 Guarantees and credit derivatives: Double default treatment.
- .136 Unsettled transactions.

### RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

- .141 Operational criteria for recognizing the transfer of risk. .142 Risk-based capital requirement for
- securitization exposures. .143 Supervisory formula approach
- (SFA). .144 Simplified supervisory formula approach (SSFA).
- .145 Recognition of credit risk mitigants for securitization exposures.

### RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

- .151 Introduction and exposure measurement.
- .152 Simple risk weight approach (SRWA).
- .153 Internal models approach (IMA).

- .154 Equity exposures to investment funds.
- A55 Equity derivative contracts.

### RISK-WEIGHTED ASSETS FOR OPERATIONAL RISK

.161 Qualification requirements for incorporation of operational risk mitigants.

.162 Mechanics of risk-weighted asset calculation.

#### DISCLOSURES

- .171 Purpose and scope.
- approaches [BANKS].

### Subpart F-Risk-weighted Assets-Market Risk

- reservation of authority.
  - .202 Definitions.
- .203 Requirements for application of this subpart F.
- Measure for market risk. .204
- VaR-based measure. .205
- .206Stressed VaR-based measure.
- .207 Specific risk.
- .208 Incremental risk. 200
- Comprehensive risk.
- Standardized measurement .210 method for specific risk.
- .211 Simplified supervisory formula approach (SSFA).
- .212 Market risk disclosures.

## Subpart E-Risk Weighted Assets-Internal Ratings-Based and Advanced **Measurement Approaches**

### .100 Purpose, applicability, and principle of conservatism.

- (a) Purpose. This subpart E establishes:
- (1) Minimum qualifying criteria for [BANK]s using [BANK]-specific internal risk measurement and management processes for calculating risk-based capital requirements; and

(2) Methodologies for such [BANK]s to calculate their total risk-weighted

(b) Applicability. (1) This subpart applies to a [BANK] that:

(i) Has consolidated total assets, as reported on the most recent year-end [Regulatory Reports] equal to \$250 billion or more;

(ii) Has consolidated total on-balance sheet foreign exposure at the most recent year-end equal to \$10 billion or more (where total on-balance sheet foreign exposure equals total crossborder claims less claims with a head office or guaranter located in another country plus redistributed guaranteed amounts to the country of head office or guarantor plus local country claims on local residents plus revaluation gains on foreign exchange and derivative products, calculated in accordance with the Federal Financial Institutions

Examination Council (FFIEC) 009 Country Exposure Reportl:

(iii) Is a subsidiary of a depository institution that uses the advanced approaches pursuant to subpart E of 12 CFR part 3 (OCC), 12 CFR part 217 (Board), or 12 CFR part 325 (FDIC) to calculate its total risk-weighted assets;

(iv) Is a subsidiary of a bank holding company or savings and loan holding company that uses the advanced approaches pursuant to 12 CFR part 217 to calculate its total risk-weighted

(v) Elects to use this subpart to calculate its total risk-weighted assets.

(2) A bank that is subject to this subpart shall remain subject to this subpart unless the [AGENCY] determines in writing that application of this subpart is not appropriate in light of the [BANK]'s asset size, level of complexity, risk profile, or scope of operations. In making a determination under this paragraph, the [AGENCY] will apply notice and response procedures in the same manner and to the same extent as the notice and response procedures in 12 CFR 3.12 (OCC), 12 CFR 263.202 (Board), and 12 CFR 325.6(c) (FDIC).

(3) A market risk [BANK] must exclude from its calculation of riskweighted assets under this subpart the risk-weighted asset amounts of all covered positions, as defined in subpart F of this part (except foreign exchange positions that are not trading positions, over-the-counter derivative positions, cleared transactions, and unsettled transactions).

(c) Principle of Conservatism. Notwithstanding the requirements of this subpart, a [BANK] may choose not to apply a provision of this subpart to one or more exposures provided that:

(1) The [BANK] can demonstrate on an ongoing basis to the satisfaction of the [AGENCY] that not applying the provision would, in all circumstances. unambiguously generate a risk-based capital requirement for each such exposure greater than that which would otherwise be required under this subpart;

(2) The [BANK] appropriately manages the risk of each such exposure;

- (3) The [BANK] notifies the (AGENCY) in writing prior to applying this principle to each such exposure:
- (4) The exposures to which the [BANK] applies this principle are not, in the aggregate, material to the [BANK].

### . 101 Definitions.

(a) Terms set forth in § used in this subpart have the definitions assigned thereto in § ____.2.

ATTACHMENT C

number of small entities. For purposes of the IRFA, a small entity includes a banking organization with total assets of \$175 million or less.

As provided in the Standardized Approach NPR, the agencies are separately publishing their respective IRFA. Accordingly, the FDIC is seeking comment on the IRFA provided in this Federal Register document, which describes the economic impact of the Standardized Approach NPR, in accordance with the requirements of the RFA. Comments received in connection with this IRFA will be considered for purposes of the development of any final rule to implement the Standardized Approach NPR. A summary of the FDIC's iRFA for the Standardized Approach NPR is set forth below.

### Summary of the FDIC's IRFA

In accordance with the requirements of the RFA, the FDIC is publishing this summary of the IRFA for the Standardized Approach NPR.* For purposes of this IRFA, the FDIC analyzed the potential economic impact of the Standardized Approach NPR on the small entities that it regulates.

The FDIC welcomes comment on all aspects of the summary of its IRFA. Comments received in response to this IRFA will be considered by the FDIC for purposes of any final rule implementing the Standardized Approach NPR. The FDIC will conduct a final regulatory flexibility analysis after consideration of comments received during the public comment period.

A. Reasons Why the Proposed Rule Is Being Cansidered by the Agencies; Statement of the Objectives of the Proposed Rule; and Legal Basis

As discussed in the Standardized Approach NPR, the agencies are proposing to revise their capital requirements to promote safe and sound banking practices, implement Basel II (as later revised), and harmonize capital requirements across charler type. The NPR also proposes alternatives to the use of credit ratings consistent with section 939A of the Dodd-Frank Act by revising regulatory capital requirements to remove all references to, and requirements of reliance on, credit ratings. Federal law authorizes each of the agencies to prescribe capital standards for the banking organizations it regulates.

Under regulations issued by the Small Business Administration,⁵ a small entity includes a depository institution or bank holding company with total assets of \$175 million or less. As of March 31, 2012, the FDIC was the primary Federal regulator for approximately 2,433 small state nonmember banks, 115 small savings banks, and 45 small state savings associations (collectively, small banks and savings associations).

C. Projected Reporting, Recordkeeping, and Other Compliance Requirements

The Standardized Approach NPR includes changes to the general risk-based capital requirements that address the calculation of risk-weighted assets and affect small banks and savings associations. The Proposed Rule would affect small banks and savings associations, including:

- Changing the denominator of the risk-based capital ratios by revising the asset risk weights;
- Revising the treatment of counterparty credit risk;
- Replacing references to credit ratings with alternative measures of creditworthiness;
- Providing more comprehensive recognition of collateral and guarantees; and
- Providing a more favorable capital treatment for transactions cleared through qualifying central counterparties.

These changes are designed to enhance the risk-sensitivity of the calculation of risk-weighted assets. Therefore, capital requirements may go down for some assets and up for others. For those assets with a higher risk weight under the NPR, that increase may be large in some instances, for example, the equivalent of a dollar-fordollar capital charge for some securitization exposures.

in order to estimate the impact of the Standardized Approach NPR on small banks and savings associations, the FDIC used currently available data from the quarterly Consolidated Report of Condition and Income (Call Reports) filed by small banks and savings associations to approximate the change in capital under the proposed rule. After comparing the existing risk-based capital rules with the proposed rule, the FDIC estimates that risk-weighted assets may increase by 10 percent under the proposed rule. Using this assumption, the FDIC estimates that a total of 76 small banks and savings associations

To comply with the requirements of the Proposed Rule, small banks and savings associations would be required to change their internal reporting processes. These changes would require some additional personnel training and expenses related to new systems (or modification of existing systems) for calculating regulatory capital ratios.

Additionally, small banks and savings associations that hold certain exposures would be required to obtain additional information under the proposed rules in order to determine the applicable risk weights. For example, small banks and savings associations that hold exposures to sovereign entities other than the United States, foreign depository institutions, or foreign public sector entities would have to acquire Country Risk Classification ratings produced by the Organization for Economic Co-Operation and Development (OECD) to determine the applicable risk weights. Small banks and savings associations that hold residential mortgage exposures would be required to have and maintain information about certain underwriting features of the mortgage as well as the loan-to-value (LTV) ratio in order to determine the applicable risk weight. Generally, small banks and savings associations that hold securitization exposures would need to obtain sufficient information about the underlying exposures to satisfy due diligence requirements and apply either the simplified supervisory formula approach (SSFA) or the gross-up approach described in section 43 of the Proposed Rule to calculate the appropriate risk weight, or be required to assign a 1,250 percent risk weight to the exposure.

Small banks and savings associations typicelly do not hold significant exposures to foreign entities or securitization exposures, and the agencies expect any additional burden related to calculating risk weights for these exposures, or holding capital against these exposures, would be relatively modest. The FDIC estimates that, for small banks and savings associations, the cost of implementing the alternative measures of creditworthiness will be approximately \$39,000 per institution.

B. Small Entities Affected by the Proposal

will need to raise additional capital to meet their regulatory minimums. The FDIC estimates that this total projected shortfall will be \$34 million and that the cost of lost tax benefits associated with increasing total capital by \$34 million will be approximately \$0.2 million per year. Averaged across the 76 affected institutions, the cost is approximately \$2.500 per institution per year.

^{*77} FR 52888.

⁵ See 13 CFR 121.201.

Some small banks and savings associations may hold significant residential mortgage exposures. If a small bank or savings association originates the exposure, it should have sufficient information to determine the applicable risk weight under the proposed rule. However, if the exposure is acquired from another institution, the information needed to determine the applicable risk weight should normally be collected for portfolio monitoring purposes and internal risk management.

Small banks and savings associations would not be subject to the disclosure requirements in the Proposed Rule. However, the agencies expect to modify regulatory reporting requirements that apply to small banks and savings associations to reflect the changes made to the agencies' capital requirements in the Proposed Rule. The agencies expect to propose these changes to the relevant reporting forms in a separate notice.

To determine if the Proposed Rule has a significant economic impact on small banks and savings associations we compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each institution. If the estimated annual cost was greater than or equal to 2.5 percent of total noninterest expense or 5 percent of annual salaries and employee benefits we classified the impact as significant. The FDIC has concluded that the proposals included in the NPR would exceed this threshold for 2,413 small state nonmember banks, 114 small savings banks, and 45 small state savings institutions. Accordingly, for the purposes of this IRFA, the FDIC has concluded that the changes proposed in the Standardized Approach NPR, when considered without regard to other changes to the capital requirements that the agencies simultaneously are proposing, would have a significant economic impact on a substantial number of small banks and savings associations.

Additionally, it may be informative to consider the changes proposed in the Standardized Approach NPR together with changes proposed in the separate notice of proposed rulemaking published jointly by the agencies in the Federal Register on August 30, 2012, titled, "Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Action; Proposed Rule" (Basel III NPR).6 The changes described in the Basel III NPR include changes to minimum capital requirements that would impact

small banks and savings associations. These include a more conservative definition of regulatory capital, a new common equity tier 1 capital ratio, a higher minimum tier 1 capital ratio, new thresholds for prompt corrective action purposes, and a new capital conservation buffer.

To estimate the impact of the Basel III NPR on the capital needs of small banks and savings associations, the FDIC estimated the amount of capital such institutions will need to raise to meet the new minimum standards relative to the amount of capital they currently hold. To estimate new capital ratios and requirements, the FDIC used currently available data from the quarterly Call Report submitted by small banks and savings associations to approximate capital under the Basel III NPR. The Call Reports show that most small banks and savings associations have capital levels well above the existing minimum requirements.

After comparing existing levels with the proposed new requirements under the Basel III NPR, the PDIC determined that 62 small banks and savings associations that it regulates would fall short of the proposed increased capital requirements. Together, those institutions would need to raise approximately \$164 million in regulatory capital to meet the proposed minimum requirements set forth in the Basel III NPR. The FDIC estimates that the cost of lost tax benefits associated with increasing total capital by \$164 million will be approximately \$0.9 million per year. Averaged across such institutions, the cost attributed to the Basel III NPR is approximately \$15,000 per institution per year.

The FDIC concluded for purposes of its IRFA for the Basel III NPR? that the changes described in the Basel III NPR, when considered without regard to changes in this NPR, would not result in a significant economic impact on a substantial number of small banks and savings associations, given the nominal compliance requirements that likely would result from the future adoption by the agencies of the Basel III NPR.

As noted above, the FDIC has concluded that the proposed changes in the Standardized Approach NPR would result in a significant economic impact on a substantial number of small banks and savings associations. Further, if both the Standardized Approach NPR and the Basel III NPR were adopted, there would be a significant economic impact on a substantial number of small banks and savings associations.

D. Identification of Duplicative, Overlapping, or Conflicting Federal Bules

The FDIC is unaware of any duplicative, overlapping, or conflicting federal rules. As noted previously, the FDIC anticipates issuing a separate proposal to implement reporting requirements that are tied to (but do not overlap or duplicate) the requirements of the proposed rules. The FDIC seeks comments and information regarding any such federal rules that are duplicative, overlapping, or otherwise in conflict with the Proposed Rule.

# E. Discussion of Significant Alternatives to the Proposed Rule

The agencies have sought to incorporate flexibility into the Proposed Rule and lessen burden and complexity for small banks and savings associations wherever possible, consistent with safety and soundness and applicable law, including the Dodd-Frank Act. The agencies are requesting comment on potential options for simplifying the Proposed Rule and reducing burden, including whether to permit certain small banks and savings associations to continue using portions of the current general risk-based capital rules to calculate risk-weighted assets. Additionally, the agencies proposed the following alternatives and flexibility

- Small banks and sayings associations are not subject to the enhanced disclosure requirements of the Proposed Rule.
- Small banks and savings
  associations may choose to apply the
  simpler gross-up method for
  securitization exposures rather than the
  SSFA (as described in section __.43 of
  the Proposed Rule).
- The proposed rule offers small banks and savings associations a choice between a simpler and more complex methods of risk weighting equity exposures to investment funds (as described in section __.53 of the Proposed Rule).

The FDIC welcomes comment on any significant alternatives to the Standardized Approach NPR applicable to small banks and savings associations that would minimize their impact on those entities.

Dated at Washington, DC, this 12th day of October, 2012.

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# **MEMORANDUM**

Comptroller of the Currency Administrator of National Banks

Washington, DC 20219

To: Carl Kaminski, Legislative and Regulatory Activities

Thru: Gary Whalen, Director, Policy Analysis Division

From: Douglas Robertson, Senior Financial Economist, Policy Analysis Division

Date: May 30, 2012

Subject: Impact Assessment for the Basel III Rule: General Capital Rules, NPR1

This memorandum provides our assessment of the economic impact of the proposed rules that would implement the Basel III framework developed by the Basel committee on Banking Supervision. The Basel III framework would revise current general risk-based capital rules and would be applicable to all banking organizations. The federal banking agencies are implementing Basel III through three separate rules. The first rule would apply Basel III minimum capital requirements to all banking organizations (NPR1). The second rule would implement new alternative measures of creditworthiness for general banking organizations (NPR2). The third rule would apply Basel III enhancements to institutions subject to the advanced approaches capital rules (NPR3). Advanced approaches banking organizations are those institutions with total assets of at least \$250 billion or foreign exposures of at least \$10 billion, or institutions that have elected to adopt the advanced approaches.

### 1) Basel III NPR (NPR1)

This will include the changes to the numerator of the risk-based capital ratio, the new ratio requirements (common equity Tier 1 and the higher minimums), as well as the conservation and countercyclical buffers. It also will include the changes to the treatment of mortgage servicing assets and deferred tax assets (DTAs).

### 2) Standardized Approach NPR (NPR2)

This will include the changes to the calculation of risk-weighted assets (the denominator of the risk-based capital ratio), except for the treatment of mortgage servicing assets and DTAs discussed in the Basel III NPR).

## 3) Advanced Approaches NPR (NPR3)

The advanced approaches NPR will introduce enhancements to the advanced approaches rule, and it will include a proposal to expand the scope of the market risk rule to include thrifts.

We estimate that the first-year cost associated with higher minimum capital requirements in NPR1 will be approximately \$5.1 million. We estimate that the first-year cost associated with changes in risk-weighted assets and implementation of alternative measures of creditworthiness in NPR2 will be approximately \$93.2 million. We estimate that the first-year cost associated with changes in risk-weighted assets and simultaneously meeting new market risk capital requirements in NPR3 will be approximately \$46.8 million. Together, we estimate that the overall cost of the three Basel III rules will be approximately \$145.1 million in the first year. After introducing new systems for determining risk weighted assets in the first year, we estimate that the overall cost of Basel III in subsequent years will decrease to approximately \$98.6 million per year.

## I. The Proposed Rule: Minimum Regulatory Capital Ratios (NPR1)

The proposed rule would implement Basel III and has the following major elements. The proposed rule would:

- 1. Introduce a new common equity Tier 1 capital ratio
- 2. Introduce a higher minimum Tier I capital ratio
- 3. Introduce a supplementary leverage ratio for advanced approaches banks
- 4. Introduce new capital conservation buffer
- 5. Introduce a countercyclical capital buffer for advanced approaches banks
- 6. Prompt Corrective Action thresholds: Introduce common equity Tier 1 thresholds and increase Tier 1 thresholds
- Apply the proposed capital rules to savings and loan holding companies on a consolidated basis

The proposed rule also contains a reservation of authority that authorizes a banking organization's primary federal supervisor to require the banking organization to hold additional capital relative to what would be required under the proposed rule.

## Section 1. Minimum Capital Requirements

Under the proposed rule, changes to minimum capital requirements include a new common equity Tier 1 capital ratio, a higher minimum Tier 1 capital ratio, a supplemental leverage ratio for advanced approaches banks, new thresholds for prompt corrective action purposes, a new capital conservation buffer, and a new countercyclical capital buffer for advanced approaches banks. All banking organizations would transition to the new minimum capital requirements between January 1, 2013, and January 1, 2019. Table 1 shows the transition table for minimum capital requirements under the proposed rule.

Although the proposed rule would also increase several prompt corrective action (PCA) thresholds, with the exception of the leverage ratio, the minimum capital conservation buffer in the proposal effectively requires all banking organizations in the United States to be well capitalized for PCA purposes by 2019. Adding the capital conservation buffer to minimum required capital ratios elevates the capital ratios above PCA well-capitalized thresholds beginning January 1, 2019.

Table 1.- Transition Schedule for Minimum Capital Requirements

	Jan. 1, 2013	Jan. 1,	Jan. I,	Jan. 1,	Jan. 1,	Jan, 1,	Jan. I,	P	CA.
		2014	2015	2016	2017	2018	2019	Adq.	Well
Common Equity to Risk-Weighted Assets	3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	6.5%
Tier I to Risk- Weighted Assets	4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%	6%	8%
Total Capital to Risk-Weighted Assets	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8%	10%
Conservation Buffer to Risk- Weighted Assets				0.625%	1.25%	1.875%	2.5%	***************************************	
Maximum Advanced Approaches Countercyclical Buffer				0.625%	1.25%	1.875%	2.5%		
Minimum Common Equity + Conservation Buffer	3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%		
Minimum Tier 1 + Conservation Buffer	4.5%	5.5%	6.0%	6.625%	7.25%	7.875%	8.5%		
Minimum Total Capital + Conservation Buffer	8.0%	8.0%	8.0%	8.625%	9.125%	9.875%	10.5%	***************************************	
Leverage Ratio	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4%	5%
Advanced Approaches Supplemental Leverage Ratio			Start to Report			3.0%	3.0%		

# Section 2. Eligibility Requirements for Regulatory Capital Instruments

In addition to changing minimum required capital ratios, the proposed rule would also change what counts as capital. For instance, the proposed rule would increase deductions from regulatory capital for deferred tax assets, it would limit the inclusion of minority interests in

capital, and unrealized gains and losses on all available-for-sale securities would flow through to common equity tier one capital.

# A. Common Equity Tier 1 Capital Ratio

The proposed rule would require banking organizations to maintain a minimum 4.5 percent ratio of common equity Tier 1 capital to total risk-weighted assets. To be a well-capitalized institution under Prompt Corrective Action (PCA) regulations, banking organizations would need to maintain a minimum ratio of 6.5 percent.

Under the proposed rule, common equity Tier 1 capital would equal the sum of common stock and related surplus (net of any Treasury stock), retained earnings, accumulated other comprehensive income (AOCI), and common equity Tier 1 minority interest subject to limits minus regulatory adjustments and deductions. Qualifying common stock instruments would have to satisfy certain criteria. The banking agencies expect that the vast majority of existing common stock will fully satisfy these criteria.

New deductions from common equity Tier 1 capital include the following:

- a. Mortgage Servicing Assets (MSAs)
- b. Deferred tax assets (DTAs)
- c. Investments in the capital of an unconsolidated financial institution above a threshold
- d. Changes in accumulated other comprehensive income (AOCI) without adjustments for gains and losses in available-for-sale debt securities
- e. Investments in hedge funds and private equity funds consistent with the Volcker Rule¹

# B. Tier I Capital: Additional Tier I

Under the proposed rule, total Tier 1 capital would equal the sum of common equity Tier 1 capital and additional Tier 1 capital. Additional Tier 1 capital equals the sum of noncumulative perpetual preferred, related surplus, other Tier 1 minority interest, and various SBLF and EESA qualifying instruments less certain adjustments and deductions. Trust preferred securities would no longer be eligible for inclusion in Tier 1 capital. Additional Tier 1 capital instruments must also satisfy certain criteria. In essence, these instruments must be subordinated, have fully discretionary non-cumulative dividends, have no maturity date, have no incentives to redeem, and must be able to absorb losses. Instruments currently included in Tier 1 capital that do not meet the new criteria will be phased out of the Tier 1 regulatory capital calculation beginning in January 1, 2014 and will be 100 percent phased out beginning January 1, 2018, except for trust-preferred securities, which must be phased out according to a different timeline set forth in section 171 of the Dodd-Frank Act.

¹ This deduction is consistent with the proposed Volcker Rule. In our impact assessment for that rule, we estimated that banking organizations could invest in hedge funds and private equity funds up to as much as three percent of Tier 1 capital. As this deduction depends on the still pending final Volcker Rule, we defer assessment of the cost of this deduction until we conduct our economic impact analysis of the final Volcker Rule.

# C. Tier 2 Capital

The proposed rule will also adjust Tier 2 capital elements. Tier 2 capital instruments must satisfy eligibility criteria as well. In particular, the instrument must have an original maturity of at least 5 years. Under the proposed rule, banking organizations may include limited amounts of common equity of a consolidated depository institution subsidiary.

# D. Leverage Ratio

The proposed rule would require advanced approaches banks to maintain a three percent minimum Basel 3 leverage ratio in addition to the current U.S. leverage ratio. The Basel 3 leverage ratio is defined as a ratio of Tier 1 capital to a sum of on-balance sheet and certain off-balance sheet assets. The Basel 3 leverage ratio would supplement the current U.S. leverage ratio, which only includes on-balance sheet items in the ratio's denominator.

# E. Capital Conservation and Countercyclical Buffers

The proposed rule would require all banking organizations to hold common equity Tier 1 capital in the form of a capital conservation buffer. The capital conservation buffer would begin to phase-in on January 1, 2016 and be fully phased-in at 2.5 percent of risk-weighted assets on January 1, 2019. Combined with other minimum capital requirements, the capital conservation buffer effectively requires banks to maintain a 7 percent common equity Tier 1 ratio, an 8.5 percent Tier 1 ratio, and a 10.5 percent total risk-based capital ratio.

The proposed rule would also require advanced approaches banking organizations to hold additional common equity Tier 1 capital in a countercyclical buffer, which would range between zero and 2.5 percent of risk-weighted assets. The countercyclical buffer would apply when the primary federal regulator determines (using various guide variables) that a period of excessive credit growth is contributing to an increase in systemic risk. The regulator would generally announce the level of the buffer 12 months in advance of its implementation, but may give shorter notice if necessary.

Institutions that do not meet the capital conservation buffer or the countercyclical capital buffer requirements would be subject to limitations on capital distributions and incentive compensation payments proportional to the shortfall in the buffer. A banking organization that operates in multiple jurisdictions would have to calculate its countercyclical capital buffer as the weighted average of the countercyclical capital buffer for each jurisdiction.

## II. Institutions Affected By the Proposed Rule

The proposed minimum capital requirements will apply to all banking organizations. According to December 31, 2011 Call Report data, there are 7,432 FDIC-insured institutions. After aggregating to the highest holding company, there are 6,744 bank holding companies, of which,

1,213 are national banking organizations.² Excluding several thrifts that are included as subsidiaries of national banking organizations, the proposed rule would also apply to 612 federally chartered private savings institutions. Thus, the proposed rule would apply to 1,825 financial institutions regulated by the OCC.

## III. Estimated Costs and Benefits of the Proposed Rule

The various elements of the proposed rule will affect costs in three ways: (1) the cost of capital institutions will need to meet the higher minimum capital ratios and the new eligibility standards for capital, (2) compliance costs associated with establishing the infrastructure to determine correct risk weights using the new alternative measures of creditworthiness, and (3) compliance costs associated with new disclosure requirements. Some institutions will also incur costs associated with new capital requirements for exposures to central counterparties and changes to recognized collateral and eligible guarantors, but we subsume these expenses into our general cost of capital estimates. In this analysis of the proposed rule covering minimum capital requirements, we only estimate the cost of capital necessary to make up any projected shortfall between current capital levels and the proposed rule's new minimum capital requirements.

# Benefits of the Proposed Rule

The proposed rule would produce the following benefits:

- 1. Improves the quality of regulatory capital by introducing a common equity Tier 1 regulatory capital requirement and tightening the standards for including non-common equity instruments in regulatory capital
- 2. Increases risk sensitivity of capital requirements and risk-weighted assets
- 3. Improves loss absorbency of regulatory capital
- 4. Improve transparency and market discipline through disclosure requirements.
- 5. Enhanced supervisory review process through the establishment of Pillar 2-based expectations for banking organizations
- 6. Enhances counterparty credit risk capital requirements that proved inadequate during the financial crisis

## Costs of the Proposed Rule

To estimate the impact of the proposed rule on bank capital needs, we estimate the amount of capital banks will need to amass to meet the new minimum standards relative to the amount of capital they currently hold. To estimate new capital ratios and requirements, we use currently available data from banks' quarterly Consolidated Report of Condition and Income (Call Reports) to approximate capital under the proposed rule. We arrive at our estimates of the new numerators of the capital ratios by combining various Call Report items to reflect definitional

² A national banking organization is any bank holding company with a subsidiary national bank. Two of the 16 organizations also include a federally chartered private savings institution, but both of these organizations also contain a national bank and are included in the 16 national banking organizations.

changes to common equity capital, Tier 1 capital, and total capital as described in the proposed rule. The capital ratio denominator, risk-weighted assets, will also change under the proposed rule. However, because the idiosyncratic nature of each institution's asset portfolio will cause the direction and extent of the change in the denominator to vary from institution to institution, we are unable to estimate risk-weighted assets under the proposed rule. Instead, we use the current definition of risk-weighted assets and thus the amount reported by institutions in their most recent Call Report.

Using our estimates of the proposed capital ratio numerators and holding these capital levels constant through 2019, we estimate the capital shortfall each institution would encounter as the new capital ratios come into effect according to the schedule shown in table 1. Table 2 shows our estimates of the number of institutions that would not meet the transition schedule for minimum capital requirements using data as of December 31, 2011. Table 3 shows our estimates of the aggregate amount of capital shortfall over the transition period ending in 2019. While institutions must simultaneously meet all of the minimum capital requirements, the largest shortfall amount in any given year shows the most binding minimum capital requirement. The number of institutions and the capital shortfall amounts shown in the 2016 column reflect those institutions that show a shortfall with regard to the new PCA standards relative to current capital levels.

As shown in table 3, our estimate of the largest capital shortfall would be a \$1,111 million shortfall in total capital plus the capital conservation buffer in 2019. However, a slightly smaller shortfall of \$1,088 million arrives four years earlier when the new Tier 1 PCA standard for well-capitalized institutions takes effect on January 1, 2015. We view this new PCA Tier 1 standard as the earliest significant capital constraint in the proposed rule.

Because banks confronting a capital shortfall under the proposed rule will need to gradually increase their capital levels to meet the proposed transition schedule, the aggregate cost of increasing capital will be spread out over several years. We estimate that the largest shortfall for any given year will be approximately \$900 million to meet the new PCA Tier I standard for well-capitalized institutions when it takes effect in 2015. This estimate combines the capital needs for national banking organizations and federally chartered private savings institutions (together, OCC institutions).

To estimate the cost to banks of the new capital requirement, we examine the effect of this requirement on capital structure and the overall cost of capital. The cost of financing a bank or any firm is the weighted average cost of its various financing sources, which amounts to a weighted average cost of capital reflecting many different types of debt and equity financing. Because interest payments on debt are tax deductible, a more leveraged capital structure reduces corporate taxes, thereby lowering funding costs, and the weighted average cost of financing tends to decline as leverage increases. Thus, an increase in required equity capital would force a bank to deleverage and – all else equal – would increase the cost of capital for that bank.

³ See Merton H. Miller, (1995), "Do the M & M propositions apply to banks?" *Journal of Banking & Finance*, Vol. 19, pp. 483-489.

This increased cost would be tax benefits foregone: the capital requirement (\$900 million), multiplied by the interest rate on the debt displaced and by the effective marginal tax rate for the banks affected by the proposed rule. The effective marginal corporate tax rate is affected not only by the statutory federal and state rates, but also by the probability of positive earnings (since there is no tax benefit when earnings are negative), and for the offsetting effects of personal taxes on required bond yields. Graham (2000) considers these factors and estimates a median marginal tax benefit of \$9.40 per \$100 of interest. So, using an estimated interest rate on debt of 6 percent, we estimate that the annual tax benefits foregone on \$900 million of capital switching from debt to equity is approximately \$900 million * 0.06 (interest rate) * 0.094 (median marginal tax savings) = \$5.1 million per year.⁴

The banking agencies will also incur some modest costs associated with macro-prudential monitoring. Under the proposed rule, the agencies would need to monitor credit growth through the use of various guide variables such as credit default swap spreads, funding spreads, and asset prices. We estimate that this macro-prudential monitoring will involve approximately 192 hours per year per agency. This estimate assumes that the monitoring and reporting will involve two individuals for eight hours a month  $(2 \times 8 \times 12 = 192)$ . Applying our wage estimate of \$85 per hour, we estimate that the total cost of macro-prudential monitoring and reporting will be approximately \$48,960 per year for all three banking agencies (\$85 x 192 x 3 = \$48,960).

Our overall estimate for this segment of the Basel III proposal is \$5.1 million per year.

⁴ See John R. Graham, (2000), <u>How Big Are the Tax Benefits of Debt?</u>, Journal of Finance, Vol. 55, No. 5, pp. 1901-1941. Graham points out that ignoring the offsetting effects of personal taxes would increase the median marginal tax rate to \$31.5 per \$100 of interest.

Table 2. — Cumulative Number of OCC-Regulated Banking Organizations Short of the Transition Schedule for Minimum Capital Requirements, December 31, 2011

		Dec. 31, 2011	Jan. I, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. 1. 2018	Jan. 1, 2019
Common Equity	NBOs	5	8	12	13	25			
to Risk-Weighted	FCPSIs	7	12	12	12	18			
Assets	Total	12	20	24	25	43			
	NBOs	10	10	12	16	30			
Tier 1 to Risk- Weighted Assets	FCPSIs	10	11	13	16	21	-		
Meignied Assers	Total	20	21	25	32	51			
Minimum Total	NBOs	22				27	27	31	39
Capital +	FCPSls	17				18	22	27	28
Conservation Buffer	Total	39				45	49	58	67
Advanced	NBOs								0
Approaches	FCPSIs								0
Countercyclical Buffer	Total								0
Advanced	NBOs							0	
Approaches	FCPSIs							0	
Leverage Ratio	Total							0	

Table 3. – Capital Shortfall for Scheduled Minimum Capital Requirements, (\$\sin \text{millions}) December 31, 2011

December 31	· MULI	-			<del> </del>			,	÷
		Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity	NBOs	\$18	\$42	<b>\$</b> 54	\$67	\$357			
to Risk-Weighted	FCPSIs	\$51	\$83	\$100	\$117	\$202			
Assets	Total	\$69	\$125	\$154	\$184	\$559			
	NBOs	\$25	\$32	\$62	\$79	\$849			
Tier I to Risk-	FCPSIs	\$49	\$62	\$88	\$110	\$239			
Weighted Assets	Total	\$74	\$94	\$150	\$189	\$1,088			
Minimum Total	NBOs	\$169				\$271	<b>\$</b> 355	\$498	\$670
Capital + Conservation	FCPSIs	\$152				\$189	\$228	\$342	\$441
Conservation Buffer	Total	\$321				\$460	<b>\$</b> 583	\$840	\$1,111
Advanced	NBOs				_				0
Approaches	FCPSIs								0
Countercyclical Buffer	Total								0
Advanced	NBOs							0	
Approaches	FCPSIs							0	
Leverage Ratio	Total							0	

# Regulatory Flexibility Act (RFA) Analysis

As part of our analysis, we considered whether the proposed rule is likely to have a significant impact on a substantial number of small entities, pursuant to the RFA. The size threshold for small banks is \$175 million. Tables 4 and 5 show our estimates of the number and capital shortfall for small institutions under the proposed rule. We estimate that the cost of lost tax benefits associated with increasing total capital by \$82 million as shown in table 5 will be approximately \$0.5 million per year. Averaged across the 28 affected institutions, the cost is approximately \$18,000 per institution per year. Among the small institutions facing a potential capital shortfall over the transition period, this cost would only be significant for three of these institutions when measured against total noninterest expenses. Thus, we believe that this proposed rule will not have a significant impact on a substantial number of small entities.

Table 4. – Cumulative Number of Small OCC-Regulated Banking Organizations Short of the Transition Schedule for Minimum Capital Requirements, December 31, 2011

		Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. I, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity	NBOs	4	6	8	9	12			
to Risk-Weighted	FCPSIs	2	3	3	3	6			
Assets	Total	6	9	11	12	18			
	NBOs	7	7	8	10	14			
Tier 1 to Risk- Weighted Assets	FCPSIs	2	3	3	4	6			
M cilinea Vrzzerz	Total	9	10	11	14	20			
Minimum Total  Capital +  Conservation	NBOs	11				14	14	15	19
	FCPSIs	4				4	Ś	9	9
Buffer	Total	15				18	19	24	28

Table 5. – Capital Shortfall for Small OCC-Regulated Banking Organizations for Scheduled Minimum Capital Requirements, (S in millions) December 31, 2011

		Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. I, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity	NBOs	\$9	\$17	\$20	\$23	\$39			
to Risk-Weighted	FCPSIs	\$1	\$2	\$2	\$2	\$5			
Assets	Total	\$10	\$19	\$22	\$25	\$44			<u> </u>
NB(	NBOs	\$21	\$24	\$30	\$33	\$54			
Tier I to Risk- Weighted Assets	FCPSIs	\$1	\$1	\$2	\$2	\$8	30000		
weighted Assers	Total	\$22	\$25	\$32	\$35	\$62			
Minimum Total Capital +	NBOs	\$40		***************************************		\$46	\$52	\$61	\$69
	FCPSIs	<b>\$</b> 3				\$5	\$6	\$10	\$13
Conservation Buffer	Total	\$43				\$51	\$58	\$71	\$82

ATTACHMENT D

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# **MEMORANDUM**

### Comptroller of the Currency Administrator of National Banks

Washington, DC 20219

To: Carl Kaminski, Legislative and Regulatory Activities

Thru: Gary Whalen, Director, Policy Analysis Division

From: Douglas Robertson, Senior Financial Economist, Policy Analysis Division

Date: May 30, 2012

Subject: Impact Assessment for Basel III: Standardized Approaches to Risk-weighted Assets, NPR2

This memorandum provides our assessment of the economic impact of the proposed rules that would implement the Basel III framework developed by the Basel Committee on Banking Supervision. The Basel III framework would revise current general risk-based capital rules and would be applicable to all banking organizations. The federal banking agencies are implementing Basel III through three separate rules. The first rule would apply Basel III minimum capital requirements to all banking organizations (NPR1). The second rule would implement new alternative measures of creditworthiness for all banking organizations (NPR2). The third rule would apply Basel III enhancements to the risk-weighted assets of institutions subject to the advanced approaches capital rules (NPR3).

## 1) Basel III NPR (NPR1)

This will include the changes to the numerator of the risk-based capital ratio, the new ratio requirements (common equity Tier 1 and the higher minimums), as well as the conservation and countercyclical buffers. It also will include the changes to the treatment of mortgage servicing assets and deferred tax assets (DTAs).

## 2) Standardized Approach NPR (NPR2)

This will include the changes to the calculation of risk-weighted assets (the denominator of the risk-based capital ratio), except for the treatment of mortgage servicing assets and DTAs discussed in the Basel III NPR.

⁵ These rules would serve as the generally applicable capital rules and therefore would be a floor for the risk-based capital requirement for advanced approaches banks under Section 171 of the Dodd Frank Act.

# 3) Advanced Approaches NPR (NPR3)

The advanced approaches NPR will introduce enhancements to the advanced approaches rule, and it will include a proposal to expand the scope of the market risk rule to include thrifts.

We estimate that the first-year cost associated with higher minimum capital requirements in NPR1 will be approximately \$5.1 million. We estimate that the first-year cost associated with changes in risk-weighted assets and implementation of alternative measures of creditworthiness in NPR2 will be approximately \$93.2 million. We estimate that the first-year cost associated with changes in risk-weighted assets and simultaneously meeting new market risk capital requirements in NPR3 will be approximately \$46.8 million. Together, we estimate that the overall cost of the three Basel III rules will be approximately \$145.1 million in the first year. After introducing new systems for determining risk weighted assets in the first year, we estimate that the overall cost of Basel III in subsequent years will decrease to approximately \$98.6 million per year.

# IV. The Proposed Rule: Standardized Approach for Risk-weighted Assets (NPR2)

The proposed rule (NPR 2) includes changes to the general risk-based capital requirements that address the calculation of risk-weighted assets. The proposed rule would:

- 8. Revise the treatment of 1-4 family residential mortgages
- Introduces a higher risk weight for certain past due exposures and acquisition and development real estate loans
- 10. Provides a more risk sensitive approach to exposures to non-U.S. sovereigns and non-U.S. public sector entities
- 11. Replace references to credit ratings with alternative measures of creditworthiness
- 12. Provides more comprehensive recognition of collateral and guarantees
- 13. Provides a more favorable capital treatment for transactions cleared through qualifying central counterparties
- 14. Introduces disclosure requirements for banking organizations with assets of \$50 billion or more

## Calculating Risk-Weighted Assets

Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) requires federal agencies to remove references to credit ratings from regulations and replace credit ratings with appropriate alternatives. The proposed rule would introduce alternative measures of creditworthiness for securitization positions and re-securitization positions. Table 1 summarizes changes in the proposed rule.

Table 1: Key Provisions of the Proposed Rule for Calculating Risk-weighted Assets

Aspect of Proposed Rule	Proposed Treatment
Risk-weighted Assets	
Credit exposures to: U.S. government and its agencies U.S. government-sponsored entities U.S. depository institutions and credit unions U.S. public sector entities, such as states and municipalities	Unchanged.
Credit exposures to: Foreign sovereigns Foreign banks Foreign public sector entities Corporate exposures	Introduces a more risk-sensitive treatment using the Country Risk Classification measure produced by the Organization for Economic Cooperation and Development.  Assigns a 100 percent risk weight to corporate exposures, including exposures to securities firms.
Residential mortgage exposures	Introduces a more risk-sensitive treatment based on several criteria, including the loan-to-value-ratio of the exposure.
High volatility commercial real estate exposures	Applies a 150 percent risk weight to certain credit facilities that finance the acquisition, development or construction of real property.
Past due exposures	Applies a 150 percent risk weight to exposures that are not sovereign exposures or residential mortgage exposures and that are more than 90 days past due or on nonaccrual.
Securitization exposures	Maintains the gross-up approach for securitization exposures. Replaces the current ratings-based approach with a formula-based approach for determining a securitization exposure's risk weight based on the underlying assets and exposure's relative position in the securitization's structure.
Equity exposures	Introduces more risk-sensitive treatment for equity exposures.
Off-balance Sheet Items	Revises the measure of the counterparty credit risk of repo-style transactions. Raises the credit conversion factor for most short-term commitments from zero percent to 20 percent.

Aspect of Proposed Rule	Proposed Treatment			
Derivative Contracts	Removes the 50 percent risk weight cap for derivative contracts.			
Cleared Transactions	Provides preferential capital requirements for cleared derivative and repo-style transactions (as compared to requirements for non-cleared transactions) with central counterparties that meet specified standards. Also requires that a clearing member of a central counterparty calculate a capital requirement for its default fund contributions to that central counterparty.			
Credit Risk Mitigation	Provides a more comprehensive recognition of collateral and guarantees.			
Disclosure Requirements	Introduces qualitative and quantitative disclosure requirements, including regarding regulatory capital instruments, for banking organizations with total consolidated assets of \$50 billion or more that are not subject to the separate advanced approaches disclosure requirements.			

## Alternative Measure for Securitization Positions

The alternative measure for securitization positions is a simplified version of the Basel II advanced approaches supervisory formula approach. The simplified supervisory formula approach (SSFA) applies a 100 percent risk-weighting factor to the junior most portion of a securitization structure equal to the amount of capital a bank would have to hold if it retained the entire pool on its balance sheet. For the remaining portions of the securitization pool, the SSFA uses an exponential decay function to assign a marginal capital charge per dollar of a tranche. Securitization positions for which a bank does not use the SSFA would be subject to a 100 percent risk-weighting factor. The proposed rule would also apply minimum risk weights to securitization tranches that would increase as cumulative losses to the pool increase. The proposed rule would allow institutions other than advanced approaches banking organizations to use the gross-up approach, which is similar to an approach provided for under current risk-based capital rules.

# Alternative Measure for Exposures to Sovereign Entities

The proposed rule would assign capital requirements to sovereign exposures based on OECD Country Risk Classifications (CRCs). Risk weights would range from zero percent to 150

percent based on CRCs, and sovereigns that have defaulted on any exposure during the previous five years would have a 150 percent risk weight. Default would include a restructure that results in a sovereign entity not servicing an obligation according to its terms prior to the restructuring. Exposures to the United States government and its agencies would always carry a zero percent risk weight. Sovereign entities that have no CRC would carry a 100 percent risk weight.

The proposed rule would apply a zero percent risk weight to exposures to supranational entities and multilateral development banks. International organizations that would receive a zero percent risk weight include the Bank for International Settlements, the European Central Bank, the European Commission, and the International Monetary Fund. The proposed rule would also apply a zero percent risk weight to exposures to 13 named multilateral development banks and any multilateral lending institution or regional development bank in which the U.S. government is a shareholder or member, or if the bank's primary federal supervisor determines that the entity poses comparable credit risk.

## Other Positions

Corporate Exposures: The proposed rule would maintain current practice under general risk-based capital rules and assign a 100 percent risk weight to all corporate exposures.

Government Sponsored Entities (GSEs): The proposal would apply a risk weight of 20 percent to non-equity exposures and a 100 percent risk weight to preferred stock issued by a GSE.

Depository Institutions, Foreign Banks, and Credit Unions: Generally, the proposal would link depository institution risk weights to the sovereign entity risk weight. Under the proposal, sovereign entity risk weights may take one of the following percentage values: (0, 20, 50, 100, 150). Generally, exposures to foreign depository institutions would receive a risk weight one category higher than the risk weight assigned to the home sovereign. For instance, a bank based in a country that carries a zero percent risk weight would carry a 20 percent risk weight. If a country does not have a CRC, a bank based in that country also carries a 100 percent risk weight. Banks in countries with 150 percent risk weights would also carry 150 percent risk weights.

Residential Mortgage Exposures: The proposed rule would maintain the current risk-based capital treatment for residential mortgage exposures that are guaranteed by the U.S. government or its agency. Residential mortgage exposures that are unconditionally guaranteed by the U.S. government or a U.S. agency would receive a zero percent risk weight, and residential mortgage exposures that are conditionally guaranteed by the U.S. government or a U.S. agency would receive a 20 percent risk weight. A banking organization would divide other residential mortgages into one of two categories based on various loan characteristics such as duration, amortization, performance, and underwriting standards. These loans would then receive risk weights based on the loan-to-value ratio at the origination of the loan or at the time of restructuring. Table 2 shows the risk weights for residential mortgages.

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Table 2 – Risk	Weights for	Residential	Mortgage	Exposures

Loan-to-value ratio (in percent)	Category 1 residential mortgage exposure (in percent)	Category 2 residential mortgage exposure (in percent)
Less than or equal to 60	35	100
Greater than 60 and less than or equal to 80	50	100
Greater than 80 and less than or equal to 90	75	150
Greater than 90	100	200

High Volatility Commercial Real Estate Exposures: The proposed rule would assign a 150 percent risk weight to any high volatility commercial real estate exposure. The proposed rule would generally define such an exposure as a loan that finances the acquisition, development, or construction of real property that is not a one- to four-family residential property or certain commercial real estate projects.

Public Sector Entities (PSEs): A PSE is a state, local authority, or other governmental subdivision below the level of a sovereign entity. The proposed rule would apply the same risk weights to exposures for U.S. states and municipalities as current general risk-based capital rules. Under the proposal, a banking organization would assign a 20 percent risk weight to a general obligation exposure to a U.S. PSE and a 50 percent risk weight to a revenue obligation exposure to such a PSE. For non-U.S. PSEs, the proposed rule would assign a risk weights based on the sovereign's CRC. One risk weight schedule would apply to general obligation claims and another schedule would apply to revenue obligations. Table 3 shows the risk-weight linkage for sovereigns and non-U.S. PSEs.

Table 3. Risk Weights for Exposures to Sovereigns and Public Sector Entities

Sovereign CRC	Sovereign	Non-U.S. PSE	Non-U.S. PSE	
	Entity	General Obligation	Revenue Obligation	
	Risk Weights	Claim	Risk Weights	
	(in percent)	Risk Weights	(in percent)	
	<u> </u>	(in percent)	_	
0-1	0	20	50	
2	20	50	100	
3	50	100	100	
4-6	100	150	150	
7	150	150	150	
No CRC	100	100	100	
Sovereign Default	150	150	150	
		-A-00000000000000000000000000000000000	v4	

## Disclosure Requirements

The proposed rule would also introduce new disclosure requirements for banking organizations with \$50 billion or more in total assets. The proposed rule would also introduce a Pillar 2 supervisory review process for all banking organizations.

# V. Institutions Affected By the Proposed Rule

According to December 31, 2011 Call Report data, there are 7,432 FDIC-insured institutions. After aggregating to the highest holding company, there are 6,744 bank holding companies, of which, 1,213 are national banking organizations. Excluding several thrifts that are included as subsidiaries of national banking organizations, the proposed rule would also apply to 612 federally chartered private savings institutions. Thus, the proposed rule would apply to 1,825 financial institutions regulated by the OCC. Banking organizations using the advanced approaches would not be affected by major portions of the proposed rule.

# VI. Estimated Costs and Benefits of the Proposed Rule

The various elements of the proposed rule will affect costs in three ways: (1) the cost of capital institutions will need to meet the higher minimum capital ratios and the new eligibility standards for capital, (2) compliance costs associated with establishing the infrastructure to determine correct risk weights using the new alternative measures of creditworthiness, and (3) compliance costs associated with new disclosure requirements.

## Benefits of the Proposed Rule

The proposed rule would produce the following benefits:

- 7. Improves the quality of regulatory capital by introducing a common equity Tier 1 regulatory capital requirement and tightening the standards for including non-common equity instruments in regulatory capital
- 8. Increases risk sensitivity of capital requirements and risk-weighted assets
- 9. Improves loss absorbency of regulatory capital
- 10. Improve transparency and market discipline through disclosure requirements.
- 11. Expanded list of eligible third-party guarantors (page 143)
- 12. Expanded array of collateral types
- 13. Enhanced supervisory review process through the establishment of Pillar 2-based expectations for banking organizations

⁶ A national banking organization is any bank holding company with a subsidiary national bank. Two of the 16 organizations also include a federally chartered private savings institution, but both of these organizations also contain a national bank and are included in the 16 national banking organizations.

14. Enhances counterparty credit risk capital requirements that proved inadequate during the financial crisis

# Costs of the Proposed Rule

# 1. Impact of Risk-weighted Assets on Capital Requirements

Minimum required capital levels are likely to change under the proposed rule. The increased risk sensitivity of the alternative measures of creditworthiness implies that capital requirements may go down for some assets and up for others. For those assets with a higher capital charge under the proposed rule, however, that increase may be large in some instances, e.g., requiring a dollar-for-dollar capital charge for some securitization exposures.

The Basel Committee on Banking Supervision has been conducting periodic reviews of the potential quantitative impact of the Basel III framework. The quantitative impact study working group reported that the average change in risk-weighted assets for a global sample of larger banks (including some U.S. banks) was approximately 20 percent. Although these reviews monitor the impact of implementing the Basel III framework rather than the provisions of the proposed rule, for the purposes of this analysis we consider the results of the Basel working group to be a best estimate and thus we increase risk-weighted assets by 20 percent to estimate the impact of the proposed rule on risk-weighted assets.

To estimate the impact of the proposed rule on bank capital needs, we estimate the amount of capital banks will need to amass to meet the new minimum standards described in our analysis of NPR1. As with that analysis, we estimate new capital ratios and requirements by combining various Call Report items to reflect definitional changes to common equity capital, Tier 1 capital, and total capital as described in NPR1. Because this proposed rule, NPR2, will change the capital ratio denominator, risk-weighted assets, we increase current risk-weighted assets by 20 percent. We use this 20 percent adjustment while recognizing that the idiosyncratic nature of each institution's asset portfolio will undoubtedly cause the direction and extent of the change in the denominator to vary considerably from institution to institution.

We thus construct new capital ratios reflecting the requirements of the proposed rules (NPR1 and NPR2) and estimate capital shortfalls as the difference between current capital levels and capital levels necessary to meet the new minimum standards. We estimate the capital shortfall each institution would encounter as the new capital ratios come into effect during the transition period from 2013 through 2019. Table 4 shows our estimates of the number of institutions that would not meet the transition schedule for proposed minimum capital requirements using data as of December 31, 2011. Table 5 shows our estimates of the aggregate amount of capital shortfall

⁷ The working group also reported an average change in risk-weighted assets for a global sample of smaller banks (those with Tier 1 capital less than €3 billion), but no U.S. banks participated in this sample. The reported average increase for this group was less than 10 percent, which suggests that our use of a 20 percent increase in risk-weighted assets for all institutions may overestimate the impact of the proposed rule.

over the transition period ending in 2019. While institutions must simultaneously meet all of the minimum capital requirements, the largest shortfall amount in any given year shows the most binding minimum capital requirement. The number of institutions and the capital shortfall amounts shown in the 2016 column reflect those institutions that show a shortfall with regard to the new PCA standards relative to current capital levels.

As shown in table 4, our estimate of the largest capital shortfall would be an approximately \$27 billion shortfall in 2015 when the new Tier 1 PCA standard for well-capitalized institutions takes effect. We view this new PCA Tier 1 standard as the major capital constraint in the proposed rule.

Because banks confronting a capital shortfall under the proposed rule will need to at least increase their capital levels gradually to meet the transition schedule, we assume that the aggregate cost of increasing capital will be spread out over several years. We estimate that the largest shortfall for any given year will be approximately \$9.0 billion, or one third of the amount needed to meet the new PCA Tier 1 standard for well-capitalized institutions when it takes effect. This estimate combines the capital needs for national banking organizations and federally chartered private savings institutions (together, OCC institutions).

To estimate the cost to banks of the new capital requirement, we examine the effect of this requirement on capital structure and the overall cost of capital. As with our estimate in NPR1, we estimate that the cost of the increase in capital would be tax benefits foregone: the capital requirement (\$9.0 billion), multiplied by the interest rate on the debt displaced and by the effective marginal tax rate for the banks affected by the proposed rule. Graham (2000) estimates a median marginal tax benefit of \$9.40 per \$100 of interest. So, using an estimated interest rate on debt of 6 percent, we estimate that the annual tax benefits foregone on \$9.0 billion of capital switching from debt to equity is approximately \$9.0 billion * 0.06 (interest rate) * 0.094 (median marginal tax savings) = \$50.8 million per year. Approximately \$5.1 million per year is attributable to NPR1, leaving \$45.7 million per year as the capital cost of NPR2.

⁸ See Merton H. Miller, (1995), "Do the M & M propositions apply to banks?" Journal of Banking & Finance, Vol. 19, pp. 483-489.

⁹ See John R. Graham, (2000), "<u>How Big Are the Tax Benefits of Debt?</u>" Journal of Finance, Vol. 55, No. 5, pp. 1901-1941. Graham points out that ignoring the offsetting effects of personal taxes would increase the median marginal tax rate to \$31.5 per \$100 of interest.

Table 4. – Cumulative Number of OCC-Regulated Banking Organizations Short of the Transition Schedule for Minimum Capital Requirements and Estimated Risk-weighted Assets, December 31, 2011

		Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity	NBOs	7	12	15	16	32			
to Risk-Weighted	FCPSIs	8	12	12	14	22			
Assets	Total	15	24	27	30	54			
	NBOs	11	12	22	26	53			
Tier 1 to Risk- Weighted Assets	FCPSIs	11	13	18	18	33		000000000000000000000000000000000000000	
A cignica Assers	Total	22	25	40	44	86			
Minimum Total	NBOs	30				34	47	82	130
Capital +	FCPSIs	26				28	37	51	60
Conservation Buffer	Total	56				62	84	133	190
Advanced	NBOs								0
Approaches	FCPSIs							**************************************	0
Countercyclical Buffer	Total								0
Advanced Approaches	NBOs							0	
	FCPSIs							0	
Leverage Ratio	Total							Û	

Table 5. - Capital Shortfall for Scheduled Minimum Capital Requirements and Estimated

Risk-weighted Assets, (\$ in millions) December 31, 2011

Rish-weighte	LI PERSONAL L	ή, 110 μπητιά#Αλί	AST AVECUS	**** ***	immenenenenenenenenenenenenenenenenenene	<u></u>	***************************************	y [,]	••••••••••••••••••••••••••••••••••••••
		Dec. 31, 2011	Jan. I, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. I, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity	NBOs	\$17	\$59	\$96	\$186	\$924			
to Risk-Weighted	FCPSIs	\$51	\$106	\$127	\$148	\$288			
Assets	Total	\$68	\$165	\$223	\$334	\$1212			
	NBOs	\$41	\$59	\$107	\$142	\$26,192			
Tier I to Risk- Weighted Assets	FCPSIs	\$70	\$85	\$144	\$180	\$490			
a eigned Assers	Total	\$111	\$144	\$251	\$322	\$26,682			
Minimum Total	NBOs	\$437				\$623	\$1,172	\$5,755	\$24,630
Capital +	FCPSIs	\$300				\$417	\$531	\$810	\$1,122
Conservation Buffer	Total	<b>\$</b> 737				\$1040	\$1,703	\$6,565	\$25,752
Advanced	NBOs								0
Approaches	FCPSIs								0
Countercyclical Buffer	Total								0
Advanced	NBOs							0	
Approaches	FCPSIs		-					0	
Leverage Ratio	Total							0	

#### 2. Alternative Measures of Creditworthiness

The proposed rule would require institutions to (1) establish systems to determine risk weights using the alternative measures of creditworthiness described in the proposal, and (2) apply these alternative measures to the bank's assets. We believe that this element of the proposed rule will involve costs associated with gathering and updating the information necessary to calculate the relevant risk weights, establishing procedures, and maintaining the programs that perform the calculations.

In particular, the proposed rule would require institutions with assets in each affected asset category to:

- 1. Establish and maintain a system to apply the gross-up approach or implement the simplified supervisory formula approach (SSFA) for securitization positions.
- 2. Establish and maintain a system to assign risk weights to sovereign exposures.
- 3. Establish and maintain systems to assign risk weights to non-U.S. public sector entities, depository institutions, and other foreign positions.
- 4. Assign 1-4 family residential mortgage exposures to one of two categories.

Listed below are the variables banks will need to gather to calculate risk weights under the proposed rule:

#### Securitization Positions:

- 1. Weighted average risk weight of assets in the securitized pool as determined under generally applicable risk-based capital rules
- 2. The attachment point of the relevant tranche
- 3. The detachment point of the relevant tranche
- 4. Cumulative losses

#### Residential Mortgage Exposures:

- 1. Mortgage category 1 or 2 determination
- 2. Loan-to-value ratio

#### Sovereign Entity Debt Positions:

1. Organization for Economic Co-operation and Development Country Risk Classifications (CRC) Score

Table 6 shows our estimate of the number of hours it will take small and large institutions to perform the activities necessary to meet the requirements of the proposed rule. We base these estimates on the scope of work required by the proposed rule and the extent to which these requirements extend current business practices. We have also taken into consideration observations from comment letters regarding the burden of similar measures in a proposed amendment to the market risk rule. These observations suggest that the securitization element of the proposed rule may involve some additional data gathering before an institution is able to accurately calculate risk weights using the SSFA approach.

Although the total cost of gathering the new variables will depend on the size of the institution's portfolio, we believe that the costs of establishing systems to match creditworthiness variables with exposures and calculate the appropriate risk weight will account for most of the expenses associated with the credit rating alternatives. Once a bank establishes a system, we expect the marginal cost of calculating the risk weight for each additional asset in a particular asset class will be relatively small. We also note that it is likely that a third-party will eventually emerge to provide risk weights for these assets. Our estimates do not reflect this cost-saving innovation, however, as we cannot be sure such a provider will emerge or be retained by institutions subject to the rule.

We estimate that large financial institutions, those with assets of \$10 billion or more, covered by the proposed rule will spend approximately 1,300 hours during the first year the rule is in effect. In subsequent years, we estimate that all financial institutions will spend approximately 180 hours per year on activities related to determining risk weights using the alternative measures of creditworthiness. For smaller institutions, those with total assets less than \$10 billion, we estimate that they will spend approximately 425 hours during the first year the rule is in effect.

Most smaller institutions do not lend to foreign governments or banks in foreign countries, and they do not hold foreign debt securities. Thus, for smaller institutions, we include system and compliance costs related to sovereign debt in the system and compliance costs for other positions.

Table 7 shows our overall cost estimate related to the determination of risk weights using the measures of creditworthiness in the proposed rule. Our estimate of the compliance cost of the proposed rule is the product of our estimate of the hours required per institution, our estimate of the number of institutions affected by the rule, and an estimate of hourly wages. To estimate hours necessary per activity, we estimate the number of employees each activity is likely to need and the number of days necessary to assess, implement, and perfect the required activity. To estimate hourly wages, we reviewed data from May 2010 for wages (by industry and occupation) from the U.S. Bureau of Labor Statistics (BLS) for depository credit intermediation (NAICS 522100). To estimate compensation costs associated with the proposed rule, we use \$85 per hour, which is based on the average of the 90th percentile for seven occupations (i.e., accountants and auditors, compliance officers, financial analysts, lawyers, management occupations, software developers, and statisticians) plus an additional 33 percent to cover inflation and private sector benefits. As shown in table 7, we estimate that the cost of introducing alternative measures of creditworthiness is approximately \$46.5 million.

#### 2. <u>Disclosure Requirements</u>

The proposed rule requires institutions with total assets of \$50 billion or more to disclose information on a somewhat lengthy list of structural and financial variables. We estimate that meeting the disclosure requirements will entail approximately 520 hours during the first year the proposed rule applies, and this will cost the affected institutions approximately \$44,200 in the first year. We estimate that the time necessary to meet the disclosure requirements in subsequent years will diminish substantially, to roughly 25 hours per quarter or 100 hours per year. We estimate that approximately 23 OCC-regulated institutions will be subject to the disclosure requirements in the proposed rule, resulting in a cost of \$1.0 million.

#### 3. Overall Cost Estimate for Standardized Approaches for Risk-weighted Assets

Combining our estimates of capital costs (\$45.7 million), the cost of applying alternative measures of creditworthiness (\$46.5 million), and disclosure requirements (\$1.0 million), our overall estimate of the cost of the proposed rule (NPR2) is \$93.2 million.

¹⁰ According to the BLS' employer costs of employee benefits data, thirty percent represents the average private sector costs of employee benefits.

Table 6. Estimated Annual Hours for Creditworthiness Measurement Activities

Asset	Activity	Estimated hours	Estimated hours
		per institution	per institution with
		with total assets <	total assets ≥ \$10
		\$10 bil.	bil.
Securitization	System		
	development	120	480
	Data acquisition		
	& Due Diligence	80	240
	Calculation,		
	verification, and	***	
	training	60	120
Residential	System		
Mortgages	development	60	60
	Data acquisition	30	50
	Calculation,		
	verification, and		
	training	10	10
Sovereign Debt	System		
-	development		80
	Data acquisition		30
	Calculation,		
	verification, and		
	training		60
Other Positions	System		
Combined 11	development	40	80
	Data acquisition	20	30
	Calculation,		
	verification, and		
	training	5	60
Total Hours		425	1,300

¹⁴ Includes sovereign debt implementation costs for institutions with less than \$10 billion in assets.

Table 7.
Estimated Costs of Creditworthiness Measurement Activities, December 31, 2011

Institution	Number of institutions	Estimated hours per institution	Estimated cost per institution	Estimated cost
Small banking organizations (assets < \$10 bil.)	1,177	425	\$36,125	\$42,519,125
Large banking organizations (assets ≥ \$10 bil.)	36	1,300	\$110,500	\$3,978,000
Total	1,213			\$46,497,125

#### Regulatory Flexibility Act (RFA) Analysis

As part of our analysis, we considered whether the proposed rule is likely to have a significant impact on a substantial number of small entities, pursuant to the RFA. The size threshold for small banks is \$175 million. Tables 8 and 9 show our estimates of the number and capital shortfall for small institutions under the proposed rules (NPR1 and NPR2). We estimate that the cost of lost tax benefits associated with increasing total capital by \$143 million as shown in table 9 will be approximately \$0.8 million per year. Averaged across the 56 affected institutions, the cost is approximately \$14,000 per institution per year. From table 7, we estimate that the cost of implementing the alternative measures of creditworthiness will be approximately \$36,125 per institution. For the 56 institutions with a projected capital shortfall, we estimate that the cost of the standardized approaches for risk-weighted assets will be slightly more costly at approximately \$50,000 per institution.

To determine if the proposed rule has a significant economic impact on small entities we compared the estimated annual cost with annual noninterest expense and annual salaries and employee benefits for each small entity. If the estimated annual cost was greater than or equal to 2.5 percent of total noninterest expense or 5 percent of annual salaries and employee benefits we classified the impact as significant. The proposed rule will have a significant economic impact on 500 small national banks and 253 small federally chartered private savings institutions. Accordingly, the proposed rule appears to have a significant economic impact on a substantial number of small entities.

Table 8. – Cumulative Number of Small OCC-Regulated Banking Organizations Short of the Transition Schedule for Minimum Capital Requirements and Estimated Risk-weighted Assets, December 31, 2011

		Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. I, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity	NBOs	6	8	9	10	16			
to Risk-Weighted	FCPSIs	2	3	3	3	7			
Assets	Total	8	11	12	13	23			
	NBOs	7	8	11	13	22			
Tier 1 to Risk- Weighted Assets	FCPSIs	3	3	5	5	13			
Weighted Assets	Total	10	11	16	18	35			
Minimum Total	NBOs	15				17	22	27	37
Capital + Conservation	FCPSIs	10				11	13	17	19
Buffer	Total	25				28	35	44	56

Table 9. – Capital Shortfall for Small OCC-Regulated Banking Organizations for Scheduled Minimum Capital Requirements and Estimated Risk-weighted Assets, (\$ in millions) December 31, 2011

		Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. I, 2018	Jan. 1, 2019
Common Equity	NBOs	\$8	\$21	\$25	\$30	\$54			
to Risk-Weighted	FCPSIs	\$1	\$2	\$3	\$3	\$10			
Assets	Total	\$9	\$23	\$28	\$33	\$64			
	NBOs	\$25	\$29	\$39	\$45	\$75			
Tier 1 to Risk- Weighted Assets	FCPSIs	\$1	\$2	\$4	\$5	\$16			
weighten Ussets	Total	\$26	\$31	\$43	\$50	\$91			
Minimum Total	NBOs	\$58				\$67	\$76	\$94	\$111
Capital +	FCPSIs	\$9				<b>\$</b> 13	\$17	\$25	\$32
Conservation Buffer	Total	\$67				\$80	<b>\$</b> 93	\$119	\$143

ATTACHMENT D

## 0

### **MEMORANDUM**

Comptroller of the Currency Administrator of National Banks

Washington, DC 20219

To: Carl Kaminski, Legislative and Regulatory Activities

Thru: Gary Whalen, Director, Policy Analysis Division

From: Douglas Robertson, Senior Financial Economist, Policy Analysis Division

Date: May 30, 2012

Subject: Impact Assessment for the Basel III Rule: Advanced Approaches, NPR3

This memorandum provides our assessment of the economic impact of the proposed rules that would implement the Basel III framework developed by the Basel Committee on Banking Supervision. The Basel III framework would revise current general risk-based capital rules and would be applicable to all banking organizations. The federal banking agencies are implementing Basel III through three separate rules. The first rule would apply Basel III minimum capital requirements to all banking organizations (NPR1). The second rule would implement new alternative measures of creditworthiness for all banking organizations (NPR2). The third rule would apply Basel III enhancements to the risk-weighted assets of institutions subject to the advanced approaches capital rules (NPR3). Advanced approaches banking organizations are those institutions with total assets of at least \$250 billion or foreign exposures of at least \$10 billion, or institutions that have elected to adopt the advanced approaches.

#### 1) Basel III NPR (NPR1)

This will include the changes to the numerator of the risk-based capital ratio, the new ratio requirements (common equity Tier 1 and the higher minimums), as well as the conservation and countercyclical buffers. It also will include the changes to the treatment of mortgage servicing assets and deferred tax assets (DTAs).

¹² These rules would serve as the generally applicable capital rules and therefore would be a floor for the risk-based capital requirement for advanced approaches banks under Section 171 of the Dodd Frank Act.

#### 2) Standardized Approach NPR (NPR2)

This will include the changes to the calculation of risk-weighted assets (the denominator of the risk-based capital ratio), except for the treatment of mortgage servicing assets and DTAs discussed in the Basel III NPR.

#### 3) Advanced Approaches NPR (NPR3)

The advanced approaches NPR will introduce enhancements to the advanced approaches rule, and it will include a proposal to expand the scope of the market risk rule to include thrifts.

We estimate that the first-year cost associated with higher minimum capital requirements in NPR1 will be approximately \$5.1 million. We estimate that the first-year cost associated with changes in risk-weighted assets and implementation of alternative measures of creditworthiness in NPR2 will be approximately \$93.2 million. We estimate that the first-year cost associated with changes in risk-weighted assets and simultaneously meeting new market risk capital requirements in NPR3 will be approximately \$46.8 million. Together, we estimate that the overall cost of the three Basel III rules will be approximately \$145.1 million in the first year. After introducing new systems for determining risk weighted assets in the first year, we estimate that the overall cost of Basel III in subsequent years will decrease to approximately \$98.6 million per year.

#### VII. The Proposed Rule: Advanced Approaches Risk-based Capital (NPR3)

The proposed rule would incorporate Basel Committee on Bank Supervision revisions to the Basel capital framework into the banking agencies' advanced approaches capital rules and remove references to credit ratings consistent with section 939A of the Dodd-Frank Act. The proposed rule would apply the market risk capital rule to certain savings associations.

The proposed rule would modify various elements of the advanced approached risk-based capital rules regarding the determination of risk-weighted assets. These changes would (1) modify treatment of counterparty credit risk, (2) remove references to credit ratings, (3) modify the treatment of securitization exposures, and (4) modify the treatment of exposures subject to deduction from capital. The proposed rule would also enhance disclosure requirements, especially with regard to securitizations.

The proposed rule would amend the advanced approaches so that capital requirements using the internal models methodology takes into consideration stress in calibration data, stress testing, initial validation, collateral management, and annual model review. The proposed rule would also require a banking organization to identify, monitor, and control wrong-way risk, which the proposed rule defines as the risk that arises when an exposure to a particular counterparty is positively correlated with the probability of default of such counterparty itself.

The proposed rule would also remove the ratings-based approach and the internal assessment approach for securitization exposures from the advanced approaches rule and require advanced

approaches banking organizations to use either the supervisory formula approach (SFA) or a simplified version of the SFA when calculating capital requirements for securitization exposures.

Advanced approaches banking organizations would be required to calculate their risk-based and leverage capital requirements under the standardized approach (using the numerator and denominator in NPR 1 and NPR 2), as well as the under the revised advanced approaches, outlined in this proposal (NPR 3). Advanced approaches banking organizations would apply the lower risk-based capital and leverage ratios for purposes of determining compliance with the proposed minimum regulatory capital requirements.

#### VIII. Institutions Affected By the Proposed Rule

The proposed rule (NPR3) will apply to advanced approaches banking organizations, i.e., banking organizations with total assets of at least \$250 billion or foreign exposures of at least \$10 billion, other banking organizations that have elected to adopt the advanced approaches, and banking organizations that are subsidiaries of banking organizations that must use the advanced approaches rules. The NPR also proposes to expand the scope of the market risk rule to apply to savings associations and savings and loan holding companies that meet the relevant trading activity thresholds – \$1 billion or more in trading activity or trading activity equal to 10 percent or more of the banking organization's total assets.

#### IX. Estimated Costs and Benefits of the Proposed Rule

#### Benefits of the Proposed Rule

The proposed rule would produce the following benefits:

- 15. Increases risk sensitivity of risk-weighted assets
- 16. Improves transparency and market discipline through disclosure requirements.
- 17. Enhances counterparty credit risk capital requirements that proved inadequate during the financial crisis

#### Costs of the Proposed Rule

#### 1. Impact of Risk-weighted Assets on Capital Requirements

The modifications to risk-weighted assets in the proposed rule will affect overall risk-weighted assets and hence risk-based capital ratios for advanced approaches banks. Applying new risk weights implies that capital requirements may go down for some assets and up for others. As with NPR2, securitization exposures in particular may face higher capital charges under the proposed rule.

As with NPR2, we estimate the proposed rule's impact on risk-weighted assets by applying the average change in risk-weighted assets reported by the Basel Committee on Banking Supervision quantitative impact study working group. For the analysis of NPR3, we first estimate the effect of increasing risk-weighted assets of advanced approaches banks by 20 percent. We also incorporate estimates of the effect of the market risk rule on institutions that are subject to both the advanced approaches rule and the market risk rule.

To estimate the impact of the proposed rule (NPR3) on bank capital needs, we estimate the amount of capital banks will need to gather to meet the new minimum standards described in our analyses of NPR1 and NPR2. As with those analyses, we estimate new capital ratios and requirements by combining various Call Report items to reflect definitional changes to common equity capital. Tier 1 capital, and total capital as described in NPR1. We also increase current risk-weighted assets by 20 percent as described in NPR2.

We thus construct new capital ratios for advanced approaches banking organizations reflecting the requirements of the proposed rules (NPR1 and NPR2) and estimate capital shortfalls as the difference between current capital levels and capital levels necessary to meet the new minimum standards. We estimate the capital shortfall each institution would encounter as the new capital ratios come into effect during the transition period from 2013 through 2019. Table 1 shows our estimates of the number of advanced approaches institutions that would not meet the transition schedule for proposed minimum capital requirements using data as of December 31, 2011. Table 2 shows our estimates of the aggregate amount of capital shortfall over the transition period ending in 2019. While institutions must simultaneously meet all of the minimum capital requirements, the largest shortfall amount in any given year shows the most binding minimum capital requirement. The number of institutions and the capital shortfall amounts shown in the 2016 column reflect those institutions that show a shortfall with regard to the new PCA standards relative to current capital levels.

Table 2 shows that \$22 billion of our NPR2 estimate of a \$27 billion capital shortfall is attributable to 3 advanced approaches banks that would encounter a capital shortfall in 2015 when the new Tier 1 PCA standard for well-capitalized institutions takes effect.

Because many advanced approaches banks are also subject to the market risk rule, we repeat our capital shortfall estimate by adding estimated market risk assets to the capital ratios for these institutions. Table 3 shows our estimate of the number of institutions that would need to increase capital levels to meet new minimum capital requirements. Table 4 shows our estimate of the amount of capital needed to meet those capital requirements.

We assume that the aggregate cost of increasing capital will be spread out over several years. Table 2 reflects capital amounts already included in our analysis of NPR2. To estimate the amount of required capital not accounted for in NPR2, we subtract the capital amounts shown in table 2 from those shown in table 4. This comparison suggests that the earliest significant capital requirement for advanced approaches banks will be raising \$24.8 billion in capital to meet the

new PCA Tier 1 standard for well-capitalized institutions when it takes effect. We estimate that the largest shortfall for any given year will be approximately \$8.3 billion, or one third of the amount needed to meet this new PCA Tier 1 standard.

To estimate the cost to banks of the new capital requirement, we examine the effect of this requirement on capital structure and the overall cost of capital. As with our estimates in NPR1 and NPR2, we estimate that the cost of the increase in capital would be tax benefits foregone: the capital requirement (\$8.3 billion), multiplied by the interest rate on the debt displaced and by the effective marginal tax rate for the banks affected by the proposed rule. Graham (2000) estimates a median marginal tax benefit of \$9.40 per \$100 of interest. So, using an estimated interest rate on debt of 6 percent, we estimate that the annual tax benefits foregone on \$8.3 billion of capital switching from debt to equity is approximately \$8.3 billion * 0.06 (interest rate) * 0.094 (median marginal tax savings) = \$46.8 million per year.

Table 1. – Cumulative Number of OCC-Regulated Advanced Approaches Banking Organizations Short of the Transition Schedule for Minimum Capital Requirements and

Estimated Risk-weighted Assets, December 31, 2011

	Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. I, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity to Risk- Weighted Assets	0	0	0	0	0			
Tier I to Risk-Weighted Assets	0	0	0	0	3			
Minimum Total Capital ÷ Conservation Buffer	0				0	0	1	3
Advanced Approaches Countercyclical Buffer								į
Advanced Approaches Leverage Ratio							0	

¹³ See Merton H. Miller, (1995), "Do the M & M propositions apply to banks?" *Journal of Banking & Finance*, Vol. 19, pp. 483-489.

¹⁴ See John R. Graham, (2000), "How Big Are the Tax Benefits of Debt?" Journal of Finance, Vol. 55, No. 5, pp. 1901-1941. Graham points out that ignoring the offsetting effects of personal taxes would increase the median marginal tax rate to \$31.5 per \$100 of interest.

Table 2. - OCC-Regulated Advanced Approaches Banking Organizations Cumulative Capital Shortfall for Scheduled Minimum Capital Requirements and Estimated Risk-

weighted Assets, (\$ in millions) December 31, 2011

	Jan. I, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity to Risk- Weighted Assets	0	0	0	0			
Tier I to Risk-Weighted Assets	0	0	0	\$22,175			
Minimum Total Capital + Conservation Buffer				0	0	<b>\$</b> 2,501	\$18,586
Advanced Approaches Countercyclical Buffer							\$3,918
Advanced Approaches Leverage Ratio						0	

Table 3. - Cumulative Number of OCC-Regulated Advanced Approaches Banking Organizations Short of the Transition Schedule for Minimum Capital Requirements Including Estimated Risk-weighted & Market Risk Assets, December 31, 2011

	Dec. 31, 2011	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity to Risk- Weighted Assets	0	0	0	0	1			
Tier I to Risk-Weighted Assets	0	0	0	1	3			
Minimum Total Capital + Conservation Buffer	0				1	1	2	4
Advanced Approaches Countercyclical Buffer								1
Advanced Approaches Leverage Ratio							0	

Table 4. – OCC-Regulated Advanced Approaches Banking Organizations Cumulative Capital Shortfall for Scheduled Minimum Capital Requirements Including Estimated Risk-weighted & Market Risk Assets, (S in millions) December 31, 2011

	Jan. 1, 2013	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016 (PCA)	Jan. 1, 2017	Jan. 1, 2018	Jan. 1, 2019
Common Equity to Risk- Weighted Assets	0	0	0	\$15,061			
Tier I to Risk-Weighted Assets	0	0	\$6,689	\$46,937			·
Minimum Total Capital + Conservation Buffer				\$9,101	\$17,473	\$31,516	<b>\$</b> 57,430
Advanced Approaches Countercyclical Buffer							\$23,432
Advanced Approaches Leverage Ratio						0	

#### 2. Cost of Disclosure Requirements

The proposed rule requires advanced approaches banking organizations to amend disclosures regarding securitizations to include the following:

- The nature of the risks inherent in a banking organization's securitized assets,
- A description of the bank's policies for monitoring changes in the credit and market risk of the organization's securitization exposures,
- * A description of a banking organization's policy regarding the use of credit risk mitigation for securitization exposures.
- A list of the special purpose entities a banking organization uses to securitize
  exposures and the affiliated entities that a bank manages or advises and that invest
  in securitization exposures or the referenced SPEs, and
- A summary of the banking organization's accounting policies for securitization activities.

As described in our analysis of NPR2, we estimate that meeting all disclosure requirements will entail approximately 520 hours during the first year the proposed rule applies, and this will cost the affected institutions approximately \$44,200 in the first year. We estimate that the time necessary to meet the disclosure requirements in subsequent years will diminish substantially, to roughly 25 hours per quarter or 100 hours per year.

Because we included these disclosure costs along with system implementation costs in our analysis of NPR2, we do not include these expenses in this analysis. Thus, our overall estimate of the cost of the proposed rule (NPR3) is \$46.8 million per year. This cost estimate reflects the added capital burden of institutions that will be subject to both the advanced approaches capital rules and the revised market risk rule.

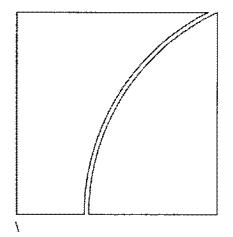
#### Regulatory Flexibility Act (RFA) Analysis

The proposed rule (NPR3) will apply to advanced approaches banking organizations, i.e., banking organizations with total assets of at least \$250 billion or foreign exposures of at least \$10 billion, other banking organizations that have elected to adopt the advanced approaches, and banking organizations that are subsidiaries of banking organizations that must use the advanced approaches rules. Our size threshold for small banks for RFA purposes is \$175 million in assets. The proposed rule will affect six small subsidiaries of advanced approaches organizations. We do not consider this a substantial number of small institutions, and thus we believe that the proposed rule will not have a significant effect on a substantial number of small entities.

## Macroeconomic Assessment Group

established by the Financial Stability Board and the Basel Committee on Banking Supervision

## **Final Report**



Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements

December 2010



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#### 1. Introduction

The Macroeconomic Assessment Group (MAG) was established in February 2010 by the chairs of the Financial Stability Board and Basel Committee on Banking Supervision to coordinate an assessment of the macroeconomic implications of the Basel Committee's proposed reforms. The membership of the MAG comprises macroeconomic modelling experts from central banks and regulators in 15 countries and a number of international institutions. Stephen Cecchetti, Economic Adviser of the Bank for International Settlements (BIS), was asked to chair the Group.

The MAG's Interim Report², published in August 2010, applied common methodologies based on a set of scenarios for shifts in capital and liquidity requirements over different transition periods. These scenarios served as inputs into a broad range of models developed for policy analysis in central banks and international organisations. Close collaboration with the International Monetary Fund (IMF) was an essential part of this process. The Group also consulted with experts in the private sector and the academic world, through both one-on-one interactions and collective roundtables. These discussions provided important context for the MAG's work, particularly on issues that were not captured by members' macroeconomic models

Taking the median across the results obtained by group members, the Interim Report concluded that a 1 percentage point increase in the target ratio of tangible common equity (TCE) to risk-weighted assets would lead to a maximum decline in the level of GDP of about 0.19% from the baseline path, which would occur four and a half years after the start of implementation (equivalent to a reduction in the annual growth rate of 0.04 percentage points over this period), followed by a gradual recovery of growth towards the baseline. This figure is the sum of 0.16%, the median GDP decline estimated for specific countries by national authorities, and 0.03%, which is the potential impact of international spillovers (reflecting exchange rates, commodity prices and shifts in global demand) as estimated by the IMF. It is important to note that these results apply to any increase in target capital ratios, whether its source be higher regulatory minima for required buffers, changes in the definition of capital or risk-weighted assets, the application of a leverage ratio, or a decision by banks to maintain wider voluntary buffers above regulatory minima. The Interim Report also examined the impact of proposed measures by the Basel Committee to strengthen liquidity regulation. A 25% increase in the holding of liquid assets relative to total assets implemented over four years, combined with an extension of the maturity of banks' wholesale liabilities, was estimated to be associated with a median decline in GDP in the order of 0.08% relative to the baseline trend after 18 quarters.

This Final Report builds on the Interim Report's findings by simulating the macroeconomic impact of the changes to capital standards that were agreed in September 2010 by the group of Governors and Heads of Supervision (GHOS), which oversees the Basel Committee. Among other reforms, the GHOS proposed a strengthened definition of capital; calibrated requirements for minimum capital ratios and for a new capital conservation buffer; and specified a transition path for the new standards.

Drawing on these agreements, the analysis in the MAG's Interim Report has been extended along two dimensions. First, the impact of the transition to stronger requirements is studied assuming a transition period of eight years, in line with the transition path set out in the GHOS statement. Second, while the findings in the Interim Report were presented in terms of the impact of a generic one percentage point increase in target capital ratios, the present

The participants in the Group's work are listed in Annex 1.

http://www.bis.org/publ/othp10.pdf.

report examines the impact of the overall increase in bank capital that will be needed to meet the new requirements. In doing this it makes use of an estimate of the December 2009 level of common equity capital relative to risk-weighted assets in the global banking system, based on the revised definitions in the new framework, drawing on the results of the Quantitative Impact Study (QIS) conducted recently by the Basel Committee, and compares this to what will be required under the agreed minimum ratio and capital conservation buffer.

No additional work was done on the impact of stronger liquidity requirements in this report, in view of the fact that the liquidity requirements are still subject to an observation period. The Liquidity Coverage Ratio will be introduced in 2015 and the Net Stable Funding Ratio in 2018. The estimates for the impact of these measures provided in the Interim Report assume a shorter implementation period than that agreed to by the BCBS, and can therefore be viewed as conservative estimates. Further, as discussed in the Interim Report, it would be inaccurate simply to add the estimated impact of meeting the liquidity requirements to the estimated impact of meeting the capital requirements. Banks' efforts to meet the capital requirements are likely to reduce the adjustments the banks will need to make to meet the liquidity requirements, and vice versa.

Based on the unweighted median estimate across 97 simulations, the MAG estimates that bringing the global common equity capital ratio to a level that would meet the agreed minimum and the capital conservation buffer would result in a maximum decline in GDP, relative to baseline forecasts, of 0.22%, which would occur after 35 quarters. In terms of growth rates, annual growth would be 0.03 percentage points (or 3 basis points) below its baseline level during this time. This is then followed by a recovery in GDP towards the baseline. These results, like the Interim Report estimates, include the impact of spiliovers across countries, reflecting the fact that many or most national banking systems would be tightening capital levels at the same time. The estimated maximum GDP impact per percentage point of higher capital was 0.17%, which is slightly less than the 0.19% figure estimated for four-year implementation in the Interim Report. The point at which this maximum impact is reached, the 35th quarter, is quite a bit later than the maximum impact point estimated for four-year implementation in the Interim Report (the 18th quarter). As a result, the projected impact on annual growth rates is less.

As with the conclusions presented in the Interim Report, there are number of reasons why the actual impact could be *greater* than the one reported here. For one thing, banks may attempt to meet the stronger requirements ahead of the timetable set out by the Basel Committee. If they choose to implement the higher requirements in four years, for example, the impact on the level of GDP would be somewhat stronger, and moreover the impact on annual growth would be greater. Second, banks may choose to hold an additional, voluntary buffer of common equity capital above the amounts set out in the new framework. This could increase some of the effects estimated here.

Other factors might lead to a *smaller* GDP impact. First, over the past year many banks have strengthened their capital positions through new equity issuance and retained earnings. This will reduce the amount of additional capital that the system needs to accumulate in the future to meet the requirements. Second, banks have a number of options for responding to the stronger requirements, including reducing costs or shifting their portfolios towards safer assets, which in most cases were not explicitly modelled in the estimations performed by MAG members. These will reduce the need for them to increase loan spreads or cut back on lending volumes, thereby reducing the impact on real activity.

This report, like the MAG Interim Report, focuses only on the transitional costs of stronger capital requirements. The benefits of a well capitalised banking system, in terms of reducing the risk and cost of financial crises and reducing macroeconomic volatility, in turn leading to increased confidence of borrowers and lenders in the stability of the banking system, are well recognised and have been analysed in studies such as the Assessment of the long-term economic impact of stronger capital and liquidity requirements, which was published by the

Basel Committee in August 2010.³ A capital regime materially stronger than ones seen in the recent past is likely to exert a beneficial impact on the macroeconomy that should more than offset the transitional costs of the adjustments that banks need to make to put the regime into practice.

The remainder of this report is organised as follows. Section 2 sets out the MAG's principal findings for the global impact of the calibrated capital requirements as implemented over an eight-year transition period. Section 3 examines how this impact might differ if banks choose to implement the requirements according to a faster schedule than the one required by supervisors. Section 4 offers broad conclusions and identifies open issues. The MAG Interim Report provides more detailed discussions of the transmission channels from bank capital to economic activity and of the methodologies used in the analysis.

#### 2. Results

#### 2.1 Impact of a one percentage point increase in capital ratios

MAG members drew on forecasting and policy analysis models that have been developed at their home institutions to estimate the impact on GDP of a one percentage point increase in bank capital ratios implemented over eight years. In most cases the simulations were conducted over a twelve-year time horizon, in order to permit the analysis of developments after implementation has been completed. Banks were assumed to increase capital at a constant pace over these eight years. While the transition schedules agreed by the Basel Committee do not mandate a perfectly linear increase in capital requirements, the assumption of a linear increase was considered to be appropriate, since it would reflect the likelihood that banks would orient their behaviour towards the final capital target, rather than to intermediate thresholds. It should be noted that the increase in capital considered in this report reflects not only higher ratios, but also the phase-in of deductions and other definitional changes, the impact of which will vary from one bank to another.

The set of models used for this analysis was broadly similar to that used to produce the results presented in the group's Interim Report. In some cases, however, new models were added, previously estimated models were dropped, or changes were made to parameters. This was done to reflect the experience gained in the earlier exercise as to the robustness and informativeness of these models for the task at hand. For example, some models that are informative about macroeconomic dynamics over a relatively short time horizon such as two to four years are less useful over longer horizons such as eight years. A total of 97 sets of model results were submitted by group members. §

The lower right-hand panel of Graph 1 portrays the unweighted median path, across these 97 models, of the impact on GDP of a one percentage point increase in capital ratios implemented over eight years (32 quarters). Along this median path, GDP falls steadily relative to its baseline path, reaching a level 0.15% below baseline before recovering. This maximum impact occurs in the 35th quarter after the start of implementation, just under a year after implementation is completed. By the last quarter of the simulation (which members

http://www.bis.org/publ/bcbs173.pdf.

National implementation of the new minima by supervisors is set to begin in January 2013, with the full set of requirements, including the capital conservation buffer and revised definitions, to be in place by January 2019. For the purposes of this study, we assume that banks begin to increase their capital ratios gradually from the start of 2011, resulting in an eight-year transition period.

⁶ Annex 2 describes the methodologies used and lists the number of submitted models by country or institution.

ran for 48 quarters, i.e. 12 years), GDP has recovered to a level 0.10% below baseline. The middle right-hand panel of Graph 1 shows the distribution of GDP estimates for the 35th quarter across the models submitted.

Graph 1 Aggregate impact of a 1 percentage point increase in the target capital ratio, excluding spillover effects: distribution of estimated GDP deviation across all models

In per cent Four-year implementation¹ Eight-year implementation² Unweighted median: -0.16 Unweighted median 0.09 GDP-weighted median: -0.16 GDP-weighted median: 0.13 Unweighted mean -0.21 Unweighted mean; -0.14 GDP-weighted mean: -0:28 GDP-weighted mean; -0.18 **Scrency** 20 10 10 -0.5 0.5 0.75 -0.5 Deviation from baseline GDP at 18 quarters3 Deviation from baseline GDP at 18 quarters 40 Unweighted median: -0.10 Unweighted median: -0.15 GDP-weighted median, 40.09 GDP-weighted median -0.21 Unweighted mean: -0.19 30 Unweighted mean: -0.20 GDP-weighted mean: -0.20 GDP-weighted mean: -0.28 Frequency 20 20 10 10 -0.75 -0.5 0.5 Deviation from baseline GDP at 32 quarters³ Deviation from baseline GDP at 35 quarters³ 0.1 20% to 80% of GDP from besetine ű.Q 0.0 Estimated -0.2 32 quarters 20% to 80% 40% to 60% rietion -0,3 -0.3 12 16 20 24 28 32 36 40 Quarters from start of implementation⁴ 12 16 20 24 28 32 36 40 B

Quarters from start of implementation

Distributions are computed across the 89 cases used in the MAG Interim Report, excluding those designed to measure the impact of international spillovers.
Distributions are computed across the 97 cases contributed for measure the impact of international spillovers. Distributions are computed across the 97 cases contributed for the MAG Final Report, excluding those designed to measure the impact of international spillovers. shaded areas indicate the range between the 20th and 80th percentile. The vertical line indicates the unweighted median at the quarter indicated (measured from start of implementation). 

4 The vertical lines indicate the 18th and (for the eight-year case) 35th quarters.

For comparison, the left-hand panels of Graph 1, which are taken from the Interim Report, replicate the exercise assuming that the implementation period is four years. As discussed further in Section 3 below, the impact on the level of GDP relative to baseline from a shorter transition period is somewhat greater and takes place over a shorter time horizon.

The new results are broadly similar when model results are weighted by GDP in forming the median, or when the mean result is examined rather than the median. The GDP-weighted median estimate of the reduction of GDP relative to baseline in the 35th quarter is 0.21% and the GDP-weighted mean is 0.26%. Three-fifths of the results forecast a GDP reduction of between 0.07% and 0.30% at the 35th quarter. However, there are a number of results exceeding 0.50%, indicating that downside risks remain a concern.

These effects result from a combination of wider lending spreads and reduced lending volumes (Table 1). The unweighted median estimate is for a decline of lending of 1.4% relative to baseline at the 35th quarter, and a 1.5% decline by the end of the simulation. Lending spreads, in the meantime, are projected to widen by 15.5 basis points by the 35th quarter, and to narrow somewhat thereafter.

Table 1. Estimated deviations of lending spreads, volumes and GDP from baseline forecasts for a one percentage point increase in the target capital ratio implemented over eight years

		Lending volume ¹ (in percent)		Lending spreads ^z (in basis points)		OP ³ Prcent)
	Q35	Q48	Q35	Q48	Q35	Q48
Unweighted median	-1.38	-1.47	15.5	12.2	-0.15	-0,10
GDP weighted median	-1,11	1.11	16.6	12.8	-0.21	-0.18
Unweighted mean	-1.29	-1.46	18.6	17.6	-0.20	-C.16
GDP weighted mean	-1.85	-1.89	17.9	16.7	-0.26	-0.22

Results reported for 38 models. ² Results reported for 53 models. ³ Results reported for 97 models. Not including international spillover effects.

As was done for the Interim Report, the IMF estimated the likely spilicover effects that would result from the simultaneous strengthening of bank capital across countries. This exercise predicted that a one percentage point increase in capital ratios implemented over eight years would result in an additional 0.02% fall in GDP below baseline after 35 quarters. By the end of the simulation (the 48th quarter), the impact of spillovers is less than 0.01%. A dynamic stochastic general equilibrium model with banking estimated by the Bank of Canada obtained qualitatively similar results for the impact of international spillovers.

The overall effect of a one percentage point capital increase can thus be found by adding this estimate of spillover effects to the 0.15% median referenced above for the 35th quarter, for a total of 0.17%, while leaving the effect at the 48th quarter unchanged at 0.10%. In terms of growth rates, these results imply a 0.02 percentage point reduction in annual growth over the first 35 quarters, followed by a 0.02 percentage point increase in growth over the subsequent 13 quarters.

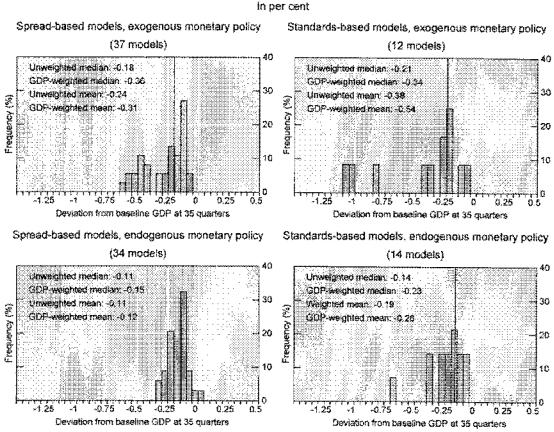
In a weighted median, the sum of the weights on the values above the median value equals the sum of the weights on values below the median. As in the Interim Report, the weights reflect the share of each country's GDP in the total GDP of the countries in the MAG analysis. In cases where there was more than one estimate for a given economy, the GDP weight was equally divided among the different estimates. In calculating the GDP-weighted median, estimates that applied to more than one country (such as euro area or global estimates) were dropped.

#### 2.2 Distribution of results across modelling assumptions

The models used to generate these results employ a variety of assumptions. Graph 2 divides the modelled effects according to their treatment of two issues that are of particular relevance to the question at hand, namely: (1) whether the macroeconomic effects operate primarily through wider credit spreads or also, separately, through a reduction in lending (a tightening in lending standards) that goes beyond the impact of wider spreads; and (2) whether the model estimates incorporate the likely response of monetary authorities to any predicted slowdown in growth.

Graph 2

Aggregate impact of a 1 percentage point increase
in the target capital ratio implemented over eight years, excluding spillover effects:
distribution of estimated GDP deviation across selected models¹



Distributions are computed across models that meet the specified criteria. The vertical line indicates the unweighted median. The shaded areas indicate the range between the 20th and 80th percentile. Quarters are measured from start of implementation.

As in the Interim Report, models that seek to take account of rationing or lending standard effects (Graph 2, right-hand panels) generated a stronger macroeconomic impact than models without such effects (Graph 2, left-hand panels). Focusing on models that do not incorporate a monetary policy response (the top two panels of Graph 2), the 35-quarter impact of a one percentage point increase in the target capital ratio implemented over 8 years (using unweighted medians) rises from 0.18% in models that look only at credit spreads to 0.21% in models that also incorporate lending standard effects.

Models that incorporated the potential response of monetary policy (the bottom two panels of Graph 2) tended to estimate a milder macroeconomic impact of increases in bank capital. The reduction in GDP at the 35th quarter relative to baseline is estimated to be 0.11% in the case of models based only on credit spreads (Graph 2, lower left-hand panel) and 0.14% for models that also incorporated the impact of tightened lending standards (Graph 2, lower right-hand panel).

As noted in the Interim Report, the very low levels of nominal interest rates currently prevailing in many countries may reduce the effectiveness of conventional monetary policy measures in mitigating adverse macroeconomic outcomes. However, over the longer time horizon that is considered in the present report, it is reasonable to expect that rates will eventually normalise to the point where conventional monetary policy responses will regain their typical levels of effectiveness.

#### 2.3 The new requirements relative to the global capital shortfall

To inform the calibration of revisions to the Basel Capital Framework, the Basel Committee conducted a Quantitative Impact Study (QIS) that assessed the impact of the Committee's capital and liquidity proposals on individual banks and the banking industry. The QIS found that, under the Committee's revised definitions of capital and risk-weighted assets, the risk-adjusted common equity tier 1 (CET1) capital ratio of the sample of large, internationally active banks surveyed was 5.7%. The sample of smaller banks included in the study reported a higher CET1 ratio. The QIS did not attempt to estimate system-wide capital ratios, though it did note that coverage of the sample of larger banks approached 100%, while coverage for the sample of smaller banks was lower and varied across countries. The reported ratio for each group of banks was computed by taking the sum of the relevant banks' CET1 capital divided by the sum of the banks' risk-weighted assets.

For the purposes of the present study, we assume the common equity capital ratio in the global financial system under the revised definitions at the start of the simulation exercise is the same as the QIS's weighted average ratio for the larger banks at the end of December 2009, le 5.7%. For a number of reasons, this is likely to represent a conservative estimate of the actual current global capital ratio. First, capital levels in the banking system are likely to have risen since December 2009, given improvements in bank profitability and the likelihood that banks have started to adjust their portfolio composition and strategy in response to recent and anticipated policy changes. Second, this weighted average is calculated across a subset of the surveyed banks, namely those that were large (in terms of absolute capital levels), well-diversified and internationally active. As noted, the sample of smaller banks considered by the QIS averaged higher ratios. Third, the QIS results do not factor in earnings retention and other mitigating actions going forward. For example, global banks are likely to meet the new standards in part by de-risking certain capital markets activities and by running off legacy exposures which are disproportionately penalised by the new standards, but which are not associated with traditional lending activities.

The calibrated Basel Committee proposals envisage a minimum common equity ratio of 4.5%, augmented by a capital conservation buffer of 2.5%, for an overall common equity Tier 1 capital ratio across the global banking system of 7% at the end of the eight year transition period. To achieve this target from a "starting point" of 5.7%, banks would need to raise their capital ratios by 1.3 percentage points. The GDP-impact estimates produced by MAG members were in most cases linear in bank capital. Thus, we can multiply the estimated impacts (including spillover effects) of a one percentage point increase in capital reported

The report of the QIS can be found here: <a href="http://www.bis.org/publ/bcbs186.htm">http://www.bis.org/publ/bcbs186.htm</a>.

above by 1.3 to obtain an estimate of the overall impact. Recall that each percentage point of additional capital was estimated to lower the path of GDP to a point 0.17% below its baseline forecast after 35 quarters, and to 0.10% below baseline in the final quarter of the simulation. This would suggest that banks' efforts to achieve the stronger capital requirements would lead to an overall reduction of GDP to a level 0.22% below baseline forecasts after 35 quarters, followed by an increase in growth to the point where GDP would stand 0.13% below baseline at the end of the simulation, i.e. the twelfth year.

Translating these GDP level effects into annual growth rates, growth would slow by some 0.03 percentage points (that is, 3 basis points) on an annualised basis during the 8 % years following the start of implementation. In subsequent quarters, annual GDP growth would be projected to increase by 0.03 percentage points through the end of the simulation period.

These estimates refer to the impact on global growth of the needed increase in capital in the global banking system. As in the Interim Report, the MAG member institutions submitted results estimating the macroeconomic impact of a common, generic change in standards, that is a one percentage point increase in capital implemented over eight years, and the median and mean results reported here refer to the impact of this change on a representative economy. The actual effects of the strengthened requirements, however, are tikely to be distributed unevenly across individual banks and national banking systems. All else equal, countries in which the capitalisation of a relatively larger share of the banking system currently falls below the global average are likely to experience a relatively greater economic impact, while the effect will be diminished or absent in countries where bank capital levels are already close to or above the proposed minimum requirements. Moreover, within national banking systems there is variation across banks in terms of the degree of adjustment still needed.

Should banks choose to accumulate an additional capital buffer of common equity above these required levels, then each additional percentage point increase in their target capital ratio built up smoothly over an eight year horizon would be predicted to lower GDP by a further 0.17 percentage points after 35 quarters. In terms of growth rates, each additional percentage point in the capital ratio held as a voluntary buffer would lower annual growth by some 0.02 percentage points during the period of buildup, and would add 0.02 percentage points to growth during the subsequent return towards the baseline path.

The level of such a buffer is difficult to predict based on past experience, especially in view of the changes in the regulatory and supervisory regime. For example, it is difficult to say whether, and to what extent, banks' ability to access the capital conservation buffer in times of stress will influence their desired buffer in normal times. Choices are thus likely to vary, both across banks and over time, and will evolve as experience with the new capital framework accumulates.

## 3 Impact of a more accelerated response of banks to the new requirements

As noted in the Interim Report, banks may seek to implement the stronger capital requirements ahead of the schedule set out by supervisors. They might be motivated to do this in order to prove their underlying capital strength to the markets, particularly if their competitors are doing the same.

If this is the case, the more rapid implementation schedule considered in the Interim Report would again become relevant. It will be recalled that, across the 89 models submitted for that analysis, the median impact on GDP for a one percentage point increase in capital implemented across four years was at its largest after 18 quarters, when GDP was projected to be 0.19% below baseline (including the effects of international spillovers). The median

path then recovered to a level about 0.12% below baseline by the end of eight years (Graph 1, left-hand panels). Using the figures set out in section 2.3 above for the overall increase in capital needed to bring the global capital ratio to a level meeting the strengthened requirements, this would suggest an overall impact of GDP of 0.25% at the 18th quarter, which would translate into a reduction of 0.05 percentage points in annual growth rates, followed by a recovery. As discussed above, growth would fall further should banks choose to accumulate an additional, voluntary common equity buffer above the required amount over the same period.

The impact would be still greater if banks choose a two-year implementation schedule. As reported in the Interim Report, if a one percentage point increase in capital is implemented over two years, GDP would fall a maximum of 0.22% relative to baseline before recovering. The maximum GDP loss in the two-year case was projected to occur in the 10th quarter after implementation. The overall maximum GDP impact in the 10th quarter of implementing the strengthened requirements would thus be 0.29%. In terms of annual growth rates, growth would need to fall by 0.11 percentage points during that time before recovering.

To summarise, the shorter implementation scenarios are estimated to provide a somewhat larger decline in the maximum amount by which the level of GDP is projected to fall relative to baseline, reflecting sharper adjustment costs, although the amounts do not differ greatly. The more rapid implementation scenarios also imply a greater impact on growth rates, since the projected decline in the level of GDP relative to baseline would take place over a shorter time frame in these scenarios.

#### 4. Conclusions and open issues

This Final Report extends the analysis presented in the MAG Interim Report of the potential impact of stronger capital requirements on growth over the next several years.

Viewed in terms of the median across all national estimates, the results presented above suggest that the strengthened capital requirements proposed by the Basel Committee are likely to have a relatively modest impact on growth: GDP is projected to fall by 0.22 percentage points below its baseline level in the 35th quarter after the start of implementation, followed by a recovery of growth towards baseline. This implies that annual growth rates will be reduced by 0.03 percentage points for 35 quarters, followed by a period during which annual growth will be 0.03 percentage points higher. These estimates assume that banks act so as to bring the global common equity capital ratio to a level that would meet the agreed minimum and the capital conservation buffer, according to the eight-year transition path set by supervisors. If banks choose to implement the new requirements ahead of the schedule set out by supervisors, the impact on the overall level of GDP will be somewhat greater and compressed into a shorter time period, resulting in a greater impact on growth rates. These effects would also be accentuated to the degree that banks choose to hold an additional voluntary equity capital buffer above the new standards.

As with any forecasting exercise, especially given the length of the horizon used here, there are a number of uncertainties. In particular, as identified in the Interim Report, there are a number of factors that may influence the impact of the capital requirements on bank lending, loan pricing and growth, but were not explicitly incorporated in the models estimated by MAG members. These include the ability of banks to alter their business models in response to the new capital regime (such as by altering their asset composition, reducing inefficiencies, or increasing their reliance on fee-based income); the development of non-bank credit channels; and the capacity of markets to absorb new equity offerings by banks. As noted in the Interim Report, the ability of banks to make these adjustments and the ability of markets to absorb new capital issues are likely to be greater if the transition period is a relatively long one, so the macroeconomic impact would be lessened by a longer transition. The eight year

transition period agreed by the Basel Committee is likely to be long enough to enable many of these offsetting adjustments to take place. However, these factors would be less likely to exert a countervailing influence to the extent that banks voluntarily choose to implement stronger capital ratios on an accelerated schedule. In addition, as noted in Section 1, no additional work was done on the impact of stronger liquidity requirements in this report, in view of the fact that the liquidity requirements are still subject to an observation period.

Although the results presented in this report and the Interim Report incorporate a number of methodological and theoretical advances in the modelling of the macroeconomic effects of conditions in the financial sector, economists still have a great deal to learn about these relationships. Further research is needed on such questions as how banks adjust their risk profiles, loan pricing, and lending behaviour in response to regulatory changes; how changes in banking sector leverage, credit spreads and bank lending volumes affect the dynamics of the macroeconomy; and the relative role of bank and non-bank credit channels in supporting macroeconomic activity. It is hoped that the ongoing debate over appropriate policies to strengthen the financial system will continue to stimulate theoretical and empirical research on these important issues.

## Annex 1: Participants in the Macroeconomic Assessment Group

(The names in bold are the primary representatives of the respective institutions.)

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#### Annex 2. National results

The analysis in this report is based on 97 model results submitted by the MAG member institutions. Table A2.1 summarises members' contributions.

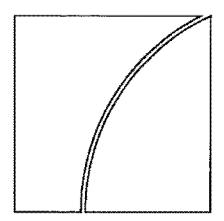
The Interim Report focused on the output of the 89 submitted models that used a "two-step approach", in which lending spread and volume impacts were generated by "satellite models", and then used as inputs into the standard macroeconomic forecasting and policy analysis models in use at central banks and other agencies. The satellite models incorporated a number of techniques. Some of these used a "model bank" approach, which involved estimating banks' adjustments to their capital and assets in response to differences between their actual and target (desired) capital ratios. The estimated target ratio was inferred from the past behaviour of capital ratios, or simply based on average capital levels over a specified period of time. Members then estimated an econometric model in order to capture the response of various balance sheet items to the distance-from-target variable, while controlling for other factors such as GDP growth, the policy rate, inflation, and aggregate bank charge-offs. Others used simpler approaches, such as accounting-based estimates that held a control variable (such as the bank's return on equity) constant and calculated the adjustments to balance sheet and lending spread variables that would be needed to achieve the desired capital target under this constraint.

Most of the results that are summarised in the present report also use this two-step approach. A small number of results, however, make use of techniques submitted to the MAG and discussed as "alternative approaches" in the Interim Report, namely reduced form estimations or bank-augmented dynamic stochastic general equilibrium (DSGE) models. The reduced form estimations use past statistical relationships among capital, growth and other variables to estimate the likely growth effects of tighter capital and liquidity regulation, through the use of vector auto-regression techniques. DSGE estimations aim to provide a coherent framework for policy discussion and analysis by capturing the dynamic relationships among different macroeconomic variables while being grounded in microeconomic theory. Unlike most DSGE models, bank-augmented DSGE estimations model financial intermediaries and their balance sheets explicitly. The reduced form and bank-augmented DSGE estimates were added to the overall population of models summarised in the present report because members felt they had gained experience in constructing and estimating these models, relative to the Interim Report, and were more confident that they accurately captured the impacts being considered here.

Table A2.1. Number of model outputs submitted to MAG subgroups

Country/region	Number of models		
	By national authority	By IMF	By ECB, European Commission
Australia	1	2	
Brazil	3	2	.*.
Canada	6	2	4.44
China	***	2	***
France	2	2	***
Germany	4	2	***
India		2	•••
Italy	5	2	
Japan	4	2	214
Korea	4	2	*.,
Mexico	4	2	***
Netherlands	7	***	
Russia	***************************************	2	• • •
Spain	1	2	***
United Kingdom	3	2	177
United States	4	7	
Euro area		5	15
Sum of the above	42	40	15

## Basel Committee on Banking Supervision



# Results of the comprehensive quantitative impact study

December 2010



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#### Results of the comprehensive quantitative impact study

#### **Executive summary**

The Basel Committee on Banking Supervision ("the Committee")¹ conducted a comprehensive quantitative impact study (QIS) to ascertain the impact of its new requirements to raise the quality and level of the capital base, to enhance risk capture, to contain excessive leverage and to introduce new liquidity standards for the global banking system – collectively referred to as "Basel III" – originally introduced in July and December 2009. The Group of Governors and Heads of Supervision (GHOS), the oversight body of the Committee, confirmed the design and calibration of these reforms at its July and September 2010 meetings. This report summarises the results of the comprehensive QIS by providing aggregated analysis of bank data collected by national supervisors.

Comprehensive QIS information was submitted by individual banks to their national supervisors on a voluntary and confidential basis. A total of 263 banks from 23 Committee member jurisdictions participated in the study, including 94 Group 1 banks and 169 Group 2 banks. Members' coverage of their banking sector was very high for Group 1 banks, reaching 100% coverage for some jurisdictions, while comparatively lower for Group 2 banks and varied across jurisdictions. Banks participating in the study were requested to submit consolidated data as of 31 December 2009. Some follow-up requests were undertaken in order to refine and enhance original submissions and to reflect the 26 July and 12 September GHOS agreements. The Committee appreciates the significant efforts banks and national supervisors contributed to this data collection exercise.

The Committee directed the comprehensive QIS effort to focus on a number of specific items:

- Changes to the definition of capital that result in a new capital standard, referred to as common equity Tier 1 (CET1), a reallocation of deductions to CET1 and changes to the eligibility criteria for Tier 1 and total capital;
- Increases in risk-weighted assets resulting from changes to the definition of capital, securitisation, trading book and counterparty credit risk requirements;
- The international leverage ratio;
- The capital conservation buffer above the CET1 minimum; and
- Two international liquidity standards the liquidity coverage ratio and the net stable funding ratio.

The Basel Committee on Banking Supervision is a committee of banking supervisory authorities which was established by the central bank Governors of the Group of Ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Argentina, Australia, Belgium, Brazii, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. It usually meets at the Bank for International Settlements (BIS) in Basel, Switzerland, where its permanent Secretariat is located.

² Group 1 banks are those that have Tier 1 capital in excess of €3 billion, are well diversified, and are internationally active. All other banks are considered Group 2 banks.

With the exception of the transitional arrangements for non-correlation trading securitisation positions in the trading book, this report does not take into account any transitional arrangements such as phase-in of deductions and grandfathering arrangements, unless noted otherwise. Rather, the estimates presented assume full implementation of the final Basel III package, based on data as of 31 December 2009. No assumptions have been made about banks' profitability or behavioural responses, such as changes in bank capital or balance sheet composition, since then or in the future. For this reason the QIS results are not comparable to current industry estimates, which tend to be based on forecasts and consider management actions to mitigate the impact, as well as incorporate estimates where information is not publicly available.

#### Key results³

#### Overall impact on risk-based capital requirements

Including the effect of all changes to the definition of capital and risk-weighted assets, as well as assuming full implementation, the impact of the GHOS agreement reveals an average decrease for Group 1 banks from an 11.1% gross CET1 ratio (gross of current deductions, based on current risk-weighted assets) to an average net CET1 ratio of 5.7%, a decline of 5.4 percentage points. Comparing gross to net CET1 for Group 2 banks reveals an average decline in ratios from 10.7% to 7.8%, or just 2.9 percentage points, which is considerably less than the decline seen in Group 1 banks.

Calculated on the same basis, the capital shortfall for Group 1 banks in the QIS sample is estimated to be between €165 billion for the CET1 minimum requirement of 4.5% and €577 billion for a CET1 target level of 7.0% had the Basel III requirements been in place at the end of 2009. As a point of reference, the sum of profits after tax prior to distributions across the same sample of Group 1 banks in 2009 was €209 billion. The amount of additional CET1 capital required for Group 2 banks in the QIS sample is estimated at €8 billion in order to reach the CET1 minimum of 4.5%. For a CET1 target level of 7%, Group 2 banks would need an additional €25 billion; the sum of their profits after tax prior to distributions in 2009 was €20 billion.

#### Definition of capital

CET1 capital of Group 1 banks would fall by an average of 41.3%. Group 2 banks, on average, would experience a decline of 24.7% in CET1 capital. The Tier 1 capital ratios of Group 1 banks would on average decline from 10.5% to 6.3%, while total capital ratios would decline from 14.0% to 8.4%. The decline in other capital ratios is also less pronounced for Group 2 banks. Tier 1 capital ratios would decline from 9.8% to 8.1% and total capital ratios would decline from 12.8% to 10.3%.

#### Changes in risk-weighted assets

Overall risk-weighted assets would increase by 23.0% for Group 1 banks. The main drivers of this increase are charges against counterparty credit risk and trading book exposures.

Unless noted otherwise, the analysis of overall changes in risk-weighted assets and capital ratios only features banks that were able to provide quality data on all relevant aspects of the Baset III framework.

For both samples, the estimated shortfall may be understated as some institutions, which are likely to have a shortfall, were excluded from the analysis due to data issues.

Accordingly, banks that have significant exposures in these areas influence the average increase in risk-weighted assets heavily. Some banks also experience a larger than average increase in risk-weighted assets due to securitisation exposures in their banking books. Since Group 2 banks are less affected by the revised counterparty credit risk and trading book rules, their risk-weighted assets would increase by an average of just 4.0%. As a whole, the changes in risk-weighted assets have less impact on banks' capital positions than changes to the definition of capital.

#### Leverage ratio

The weighted average leverage ratio using the new definition of Tier 1 capital and the measure of exposure agreed by the GHOS for testing during the parallel run period is 2.8% for Group 1 banks and 3.8% for Group 2 banks.

#### Liquidity standards

The new liquidity standards result in an average liquidity coverage ratio of 83% and 98% for Group 1 and Group 2 banks, respectively. The average net stable funding ratio is 93% and 103%, respectively.

#### 1. General remarks

At its 12 September 2010 meeting, the Group of Governors and Heads of Supervision (GHOS), the Committee's oversight body, announced a substantial strengthening of existing capital requirements and fully endorsed the agreements it reached on 26 July 2010. These capital reforms, set out in the document Basel III: A global regulatory framework for more resilient banks and banking systems, together with the introduction of two international liquidity standards as outlined in the International framework for liquidity risk measurement, standards and monitoring, deliver on the core of the global financial reform agenda presented to the Seoul G20 Leaders summit in November 2010. The comprehensive quantitative impact study seeks to measure the impact of these capital and liquidity requirements, collectively referred to as "Basel III".

The remainder of this note is structured as follows:

- Section 1 provides an overview of the sample and data quality issues:
- Section 2 shows the total impact of the Basel III proposals on the risk-based capital ratios;
- Section 3 evaluates the impact of changes to the definition of capital;
- Section 4 discusses the changes in risk-weighted assets;
- Section 5 presents the leverage ratio findings;
- Section 6 presents a capital conservation analysis; and
- Section 7 presents an analysis of the impact of the liquidity standards.

#### 1.1 Scope of the impact study

Twenty-three of the 27 Committee member jurisdictions participated in the QIS. The estimates presented are based on data submitted by the participating banks to national supervisors in the QIS workbooks and in accordance with the instructions prepared by the Committee in February 2010.⁸ The results were initially submitted to the Secretariat of the Committee in May 2010.

The purpose of the study was to allow the Committee to assess the impact on participating banks of the capital and liquidity proposals set out in the following documents:

See the 26 July 2010 press release "The Group of Governors and Heads of Supervision reach broad agreement on Basel Committee capital and liquidity reform package" (www.bis.org/press/p100726.htm) and the 12 September 2010 press release "Group of Governors and Heads of Supervision announces higher global minimum capital standards" (www.bis.org/press/p100912.htm).

Basel Committee on Banking Supervision, Basel III: A global regulatory framework for more resilient banks and banking systems, December 2010.

Basel Committee on Banking Supervision, International framework for liquidity risk measurement, standards and monitoring, December 2010.

Basel Committee on Banking Supervision, Instructions for the comprehensive quantitative impact study, February 2010.

- Revisions to the Basel II market risk framework ("the Revisions")⁹ and Guidelines for computing capital for incremental risk in the trading book ("the Guidelines");¹⁰
- Enhancements to the Basel II framework ("the Enhancements")¹¹ which include the
  revised risk weights for re-securitisations held in the banking book;
- Strengthening the resilience of the banking sector ("the Resilience document")¹², including
  - The changes to the definition of capital;
  - The introduction of a leverage ratio;
  - The capital conservation buffer above the CET1 minimum;
  - The changes to the treatment of counterparty credit risk; and
- International framework for liquidity risk measurement, standards and monitoring ("the Liquidity document").¹³

Based on the agreements announced on 26 July 2010, the Committee conducted a follow-up data collection exercise in September 2010 to collect a limited amount of data from the participating banks, allowing the Committee to more precisely present in this report the impact of changes agreed by the GHOS on capital and liquidity standards.¹⁴

#### 1.2 Sample of participating banks

A total of 263 banks from 23 Committee member jurisdictions participated in the study, including 94 Group 1 banks and 169 Group 2 banks. Of these banks, 91 Group 1 banks and 158 Group 2 banks participated in the follow-up data collection exercise. ¹⁵ Banks were asked to provide data as of 31 December 2009 at the consolidated level. As in previous impact studies conducted by the Committee, Group 1 banks are those that have Tier 1 capital in excess of €3 billion, are well diversified and are internationally active. All other banks are considered Group 2 banks. Subsidiaries of other banks were excluded from the analyses to avoid double counting.

As shown in Table 1, 20 member jurisdictions provided data for Group 1 banks and 19 member jurisdictions provided data for Group 2 banks. Members' coverage of their banking sector was very high for Group 1 banks, reaching 100% coverage for some jurisdictions, while coverage for Group 2 banks was comparatively lower and varied across jurisdictions.

Basel Committee on Banking Supervision, Revisions to the Basel II market risk framework, July 2009.

Basel Committee on Banking Supervision, Guidelines for computing capital for incremental risk in the trading book, July 2009.

Basel Committee on Banking Supervision, Enhancements to the Basel II framework, July 2009.

Basel Committee on Banking Supervision. Strengthening the resilience of the banking sector, consultative document, December 2009.

Basel Committee on Banking Supervision, International framework for liquidity risk measurement, standards and monitoring, consultative document, December 2009.

Basel Committee on Banking Supervision, Instructions for the follow-up data collection for the comprehensive quantitative impact study, September 2010.

¹⁵ Not all banks provided data on all parts of the Basel III framework in the comprehensive QIS.

Table 1

Number of banks submitting data for the comprehensive QIS, including the follow-up data collection exercise

Jurisdiction	Group 1	Group 2
Australia	4	1
Belgium	2	2
Brazil	2	0
Canada	6	2
China	5	5
France	5	6
Germany	9	59
Hong Kang	0	7
India	3	6
İtaly	2	20
Japan	9	7
Korea	5	3
Luxembourg	O	1
Mexico	Q	3
Netherlands	4	14
Saudi Arabia	3	0
Singapore	3	O
South Africa	3	3
Spain	2	5
Swaden	4	2
Switzerland	2	6
United Kingdom	5	6
United States	13	0
Total	91	158

This report presents aggregated results of the comprehensive QIS based on revised data provided to the Basel Committee Secretariat by 26 July 2010 including additional data pertaining to the definition of capital, liquidity and counterparty credit risk that was collected between July and October 2010. Despite efforts by national supervisors and banks, there still remain a limited number of banks that are excluded from the overall exercise or for individual sections of the QIS due to incomplete data.

#### 1.3 Methodology

The impact assessment was carried out by comparing banks' capital positions under Basel III to the current regulatory framework implemented by the national supervisor. ¹⁶ To maintain the confidentiality of results, most charts show box plots separately for Group 1 and Group 2 banks including the median (the thin red horizontal line), the upper and lower quartiles (defined by the blue box) and the minima and maxima (the end points of the thin blue vertical line) of the relevant distribution.

Unless noted otherwise, the reported average amounts in this document have been calculated by creating a composite bank at a total sample level, which effectively means that the total sample averages are weighted. For example, the average common equity Tier 1 capital ratio is the sum of all banks' common equity Tier 1 capital for the total sample divided by the sum of all banks' risk-weighted assets for the total sample.

With the exception of the transitional arrangements for non-correlation trading securitisation positions in the trading book, this report does not take into account any transitional arrangements, such as phase-in of deductions and grandfathering arrangements, unless noted otherwise.

#### 1.4 Data quality

Banks submitted very comprehensive and detailed non-public data on a voluntary and bestefforts basis. National supervisors and their QIS teams worked extensively with banks to ensure data quality, completeness and consistency with the published QIS instructions. Unless noted otherwise, the analysis of overall changes in risk-weighted assets and capital ratios only features banks that were able to provide quality data on **all** relevant aspects of the Basel III framework.

In looking at the liquidity-related data provided by many banks, the Committee identified some areas where there may be differences between jurisdictions in interpreting the instructions and the additional guidance published. While these differences in interpretation led the Committee to work on clarifications of definitions and reporting instructions, some differences remain. As a result, not all elements of the data are comparable across banks.

#### 1.5 Interpretation of results

It should be noted that the actual impact of the new requirements by the time they are implemented will likely be lower as the banking sector adjusts to a changing economic and regulatory environment. Indeed, the QIS results do not consider banks' profitability or make any assumptions about banks' behavioural responses, such as changes in capital or portfolio composition and strategy as well as other management actions, to the policy changes since end-2009 or in the future. For this reason, the QIS results are not comparable to industry estimates, which tend to be based on forecasts and consider management actions to mitigate the impact, as well as incorporate estimates where information is not publicly available.

With the exception of the United States where some banks provided current data on a Basel II basis.

#### 2. Overall changes in regulatory capital ratios

Table 2 shows the overall change in common equity Tier 1 (CET1) capital ratios if all the Committee's final rules, both for the definition of capital and for the calculation of risk-weighted assets, were fully implemented as of 31 December 2009. Group 1 banks' average CET1 capital ratios under the new regime would have fallen by almost half from an average gross CET1 capital ratio of 11.1% to 5.7% when deductions and changes in risk-weighted assets are taken into account (a decline of 5.4 percentage points). For Group 2 banks, the new net CET1 capital ratios would decline to 7.8% from 10.7%, indicating that the measures have a considerably greater impact on the larger banks.

These declines are mainly attributable to the new definition of capital deductions and filters not previously applied at the common equity level of Tier 1 capital in most jurisdictions (numerator) and to a lesser but still significant extent to increases in risk-weighted assets (denominator). The CET1 ratios presented in the table compare gross CET1 amounts (before the application of deductions and filters) in relation to banks' current risk-weighted assets (column "Gross") with net amounts in relation to new risk-weighted assets and the application of deductions and filters (column "Net"). The results show significant variation across banks (Chart 1).

Tier 1 capital ratios of Group 1 banks would on average decline from 10.5% to 6.3%, while total capital ratios would decline from 14.0% to 8.4%. Meanwhile, as with CET1, Group 2 banks would experience a more modest decline in Tier 1 capital ratios from 9.8% to 8.1% and a decline in total capital ratios from 12.8% to 10.3%.

It is important to keep in mind that the analysis of overall changes in capital ratios features 74 Group 1 and 133 Group 2 banks that were able to provide quality data on all relevant aspects of the Basel III framework. The exclusion of some banks, which were not able to provide all data, leads to an upward bias in the average capital ratios presented in Table 2.

Table 2

Average capital ratios by banking group, in percent

	CET1		Tie		Total		
	Number of banks	Gross	Net	Current	New	Current	New
Group 1	74	11.1	5.7	10.5	6.3	14.0	8.4
Group 2	133	10.7	7.8	9.8	8.1	12.8	10,3

"Gross CET1" is the ratio of gross CET1 (without deductions) relative to current risk-weighted assets. "Net" columns show net CET1 (with deductions) relative to new risk-weighted assets.

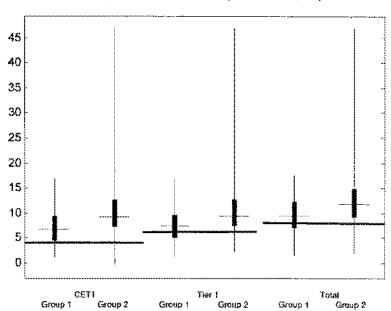


Chart 1

New net CET1, Tier 1 and total capital ratios, in percent 17

Under the Basel III framework, the minimum requirement for CET1, the highest form of loss absorbing capital, will be raised to 4.5% after the application of stricter adjustments. This minimum CET1 capital ratio will be phased in by 1 January 2015. Further, a capital conservation buffer above the regulatory minimum requirement was calibrated at 2.5% and will have to be met with common equity, after the application of deductions, by 1 January 2019.

Table 3 provides information on the additional amount of capital that Group 1 and Group 2 banks would need between 31 December 2009 and 2019 to meet the target CET1 capital under Basel III, assuming a fully phased-in target CET1 requirement as at the end of 2009. Since complete data on the total changes in capital and risk-weighted assets are only available for 74 Group 1 banks and 133 Group 2 banks, it was assumed that those items for which no information on the change in risk-weighted assets was available would remain constant for a particular bank.

Assuming a fully phased-in risk-based capital requirement, the amount of additional CET1 capital required for Group 1 banks in the QIS sample to meet the 4.5% CET1 minimum requirement is €165 billion. For Group 2 banks, of which the coverage is considerably smaller, the shortfall is estimated at €8 billion.¹³ For a CET1 target of 7%, Group 1 banks would need an additional €577 billion and Group 2 banks in the QIS sample would need an additional €25 billion. As a point of reference, the sum of profits after tax prior to distributions across the Group 1 and Group 2 banks in the same sample in 2009 was €209 billion and €20 billion, respectively.

The thick red horizontal lines indicate the 4.5%, 6% and 8% minimum capital requirements for CET1 capital. Tier 1 capital and total capital, respectively. The thin red horizontal lines indicate the median for the respective capital and bank category.

For both samples, it is recognised that this estimated shortfall is understated and incomplete to the extent institutions with shortfalls have been excluded from the analysis.

No assumptions have been made about banks' profitability or behavioural responses, such as changes in bank capital or balance sheet composition, since end-2009 or in the future. For this reason the QIS results are not comparable to current industry estimates, which tend to be based on forecasts and consider management actions to mitigate the impact, as well as incorporate estimates where information is not publicly available.

Table 3

Estimated overall CET1 shortfall, participating Group 1 and Group 2 banks, in € billions

	Group 1 banks	Group 2 banks
Number of banks	87	136
CET1 shortfall - 4.5%	165	8
CET1 shortfall - 7.0% (2019)	577	25

The shortfall is calculated as the sum across individual banks where a shortfall is observed. The calculation includes all changes to RWA (eg definition of capital, counterparty credit risk, trading book and securitisation in the banking book). For banks where complete data on the total change in RWA were not available, it was assumed that RWA for missing items would remain constant.

#### Definition of capital

#### 3.1 Change in eligible capital

For Group 1 banks, the change in net CET1 capital compared to gross CET1 capital amounts to -41.3%. With an average change of -24.7%, the impact is smaller for Group 2 banks as compared to their Group 1 counterparts. The decline in both groups' Tier 1 and total capital is more modest and largely due to changes in capital instrument eligibility.

Table 4
Capital impact of new definition of capital, in percent

**************************************	Number of banks	Change in RWA*	Change in CET1 capital**	Change in Tier 1 capital	Change in total capital
Group 1	87	7.3	-41.3	-30.2	-26.8
Group 2	136	3,2	-24.7	-14.1	-15.6

^{*} Change in current overall risk-weighted assets as a result of proposed changes to the definition of capital, le from applying a risk-weighting treatment to exposures currently being deducted from capital or vice versa. All changes in risk-weighted assets unrelated to the definition of capital are not considered. ** The column "Change in CET1 capital" compares gross CET1 capital (without deductions) with net CET1 capital.

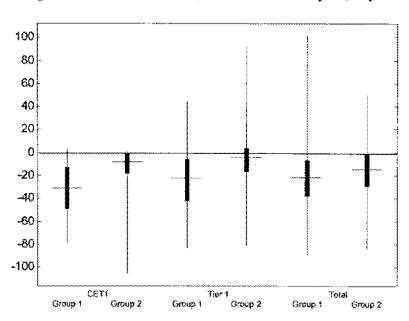


Chart 2

Change in the levels of CET1¹⁹, Tier 1 and total capital, in percent

#### 3.2 Impact of deductions on common equity Tier 1 capital

Table 5 provides additional analyses of the difference between gross and net CET1 capital for Group 1 and Group 2 banks, separating the impact of the various deductions applied to gross CET1.

For the Group 1 banks, the reduction in CET1 capital is driven primarily by deductions of goodwill (-19.0%), deferred tax assets (-7.0%) and holdings in other financial institutions (-4.3%).²⁰ Minority interest (-2.0%) has a large impact in jurisdictions where these interests were included in the current predominant form of Tier 1 capital. That said, the contribution of individual deductions to the overall change in CET1 varies widely across banks. Generally, other deductions, for example those related to own shares, pension fund assets and securitisation gains on sale, are less significant than the aforementioned deduction categories. The category "Excess above 15%" refers to the deduction of the amount by which the aggregate of the three items subject to the 10% limit for inclusion in CET1 capital (significant investments in the common shares of unconsolidated financial institutions, mortgage servicing rights (MSRs) and deferred tax assets (DTAs)) exceeds 15% of a bank's common equity component of Tier 1, calculated after all deductions from CET1.

The change in CET1 capital compares gross CET1 capital (without deductions) with net CET1 capital.

For deferred tax assets, the impacts presented in Table 5 include the impact of items fully deducted from CET1 (eg loss carry forwards) as well as those in excess of the 10% individual threshold under the basket (eg temporary differences). For holdings in other financial institutions, impacts include reciprocal cross-holdings in common equity as well as small investments and significant investments in the common equity of other financial institutions where these investments exceed the 10% individual thresholds.

Similar to the Group 1 banks, the primary drivers of the overall Group 2 bank change in CET1 capital relate to deductions for goodwill (-9.4%), holdings of other financial institutions (-5.5%), deferred tax assets (-2.8%) and intangibles (-2.3%). Again, the contribution of individual deductions to the overall change varies across banks.

Table 5

CET1 deductions and minority interest as a percentage of new CET1 capital gross of deductions

	Number of banks	Goodwill	Intangibles	ir S S	DTA	MSRs	Excess above 15%	Offier	Total	Minority interest**
Group 1	87	-19.0	-4.6	-4.3	-7.0	-0.4	-2.4	-3.6	-41.3	-2.0
Group 2	136	-9.4	-2.3	-5.5	-2.8	0.0	-1.0	-3.7	-24.7	-2.1

^{*} Other includes deductions related to investments in own shares, shortfall of provision to expected losses, cash flow hedge reserve, cumulative changes in own credit risk, pension fund assets, securitisation gains on sale and deductions from additional Tier 1 capital to the extent they exceed a bank's additional Tier 1 capital and, therefore, have to be taken from CET1 capital. ** Minority interest is not included in CET1 capital gross of deductions and the total deductions.

#### 4. Changes in risk-weighted assets

#### 4.1 Overall results

Table 6 presents the change in risk-weighted assets attributable to the introduction of Basel III and separated into the following items:

- Definition of capital: This column measures the change in risk-weighted assets as a result of proposed changes to the definition of capital, ie from applying a riskweighting treatment to exposures currently being deducted from capital or vice versa.
- Counterparty credit risk (CCR): This column measures the increased capital charge for counterparty credit risk and the higher capital charge that results from applying a higher asset value correlation parameter against exposures to financial institutions under the IRB approaches to credit risk. The calculation uses a modified version of the December 2009 proposed bond equivalent capital charge for mark-to-market losses associated with a deterioration in the credit worthiness of a counterparty (ie credit valuation adjustment CVA risk) and a threshold of US\$100 billion for applying the increased asset value correlation to regulated financial institution exposures. As this does not reflect all refinements since the initial proposal, the impact of the final rules will likely be overestimated to some extent.
- Securitisation in the banking book (Sec BB): This column measures the increase in the capital charge for securitisations in the banking book.
- Stressed value-at-risk (sVaR): This column measures the impact of the new stressed value-at-risk capital requirement in the trading book.

- Equity standard measurement method (SMM): This column measures the impact
  of the higher capital charge for certain equity exposures subject to the standardised
  measurement method in the trading book.
- Incremental risk charge and securitisations in the trading book (IRC and Sec TB): This column measures the impact of the incremental risk capital charge and the increase in capital charges for securitisations held in the trading book.

Overall risk-weighted assets increase by 23.0% for Group 1 banks. The main drivers of this increase are charges against counterparty credit risk and trading book exposures. Accordingly, banks that have significant exposures in these areas influence the average increase in risk-weighted assets heavily. Some banks also experience a larger than average increase in risk-weighted assets due to securitisation exposures in their banking book. Since Group 2 banks are less affected by the revised counterparty credit risk and trading book rules, risk-weighted assets increase by an average of just 4.0%.

Table 6
Change in risk-weighted assets, in percent

	N	Overall	Def. of capital	CCR	Sec BB	sVaR	Equity SMM	IRC and Sec TB
Group 1 banks	74	23.0	6.0	7.6	1.7	2.3	0.2	5.1
Group 2 banks	133	4.0	3.2	0.3	0,1	0.3	0.1	0.1

The average impact of the trading book and counterparty credit risk rules could not be estimated by all banks in the sample. Therefore, the sample of banks is smaller than the sample in Table 4 and the average definition of capital impact is different.

The changes in risk-weighted assets for counterparty credit risk and securitisations in the banking book are explained in the following sections. The Armex includes a more detailed technical analysis of the changes in risk-weighted assets resulting from the new trading book framework.

#### 4.2 Counterparty credit risk

The calculation uses a modified version of the December 2009 proposed bond equivalent CVA charge and a threshold of US\$100 billion for applying the increased asset value correlation parameter to regulated financial institution exposures. The recalibration also removes the five times multiplier initially proposed in the consultative document but does not reflect any of the changes to the calculation of CVA in the final rules text.²¹ As with other new requirements, the results vary across banks depending on their business model.

As noted above, this does not reflect all revisions since the initial proposal. Therefore, the impact from the final rules will likely be overestimated to some extent.

The number of banks included in the counterparty credit risk (CCR) analysis is smaller than the number taking part in the QIS as CCR is relevant only to banks engaged in OTC derivatives activities or securities financing transactions (SFTs).

Based on the sample banks included in this analysis, the new CCR requirements resulted in an 11.0% average increase in credit risk-weighted assets for Group 1 banks and a significantly smaller 1.1% increase in credit risk-weighted assets for Group 2 banks. As shown in Table 6, the increase relative to overall risk-weighted assets is 7.6% for Group 1 banks and 0.3% for Group 2 banks.

#### 4.3 Securitisations in the banking book

The Committee introduced several Pillar 1 enhancements to the Basel II securitisation banking book framework in July 2009. Specifically, higher risk weights were introduced for resecuritisation exposures and credit conversion factors for short-term liquidity facilities to off-balance sheet conduits were increased. The effect of these enhancements was captured in the scope of the QIS data collection.

For Group 1 banks, the revised treatment of securitisations would increase overall risk-weighted assets by 1.7%. As expected, the overall change in risk-weighted assets for Group 2 banks (a 0.1% increase) was very modest overall. Importantly, these changes do not reflect the transition from a deduction to a risk-weighting treatment for securitisation exposures in some jurisdictions. Such effects have been attributed to changes in the definition of capital (see Section 3).

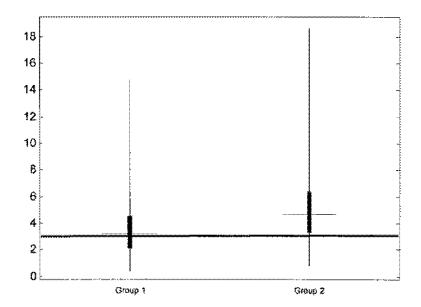
#### 5. Findings regarding the leverage ratio

This section presents the July 2010 GHOS agreement for a supplementary leverage ratio. The calculations use the new definition of Tier 1 capital as the numerator of the ratio and the measure of exposure agreed by the GHOS for testing during the parallel run period as the denominator of the ratio. In the exposure calculation, a 100% credit conversion factor generally applies to off-balance sheet exposures, with the exception of a 10% credit conversion factor being applied to unconditionally cancellable commitments. Basel II netting and potential future exposure calculated according to the current exposure method under Basel II are used for all derivatives.

An important element to understanding the results of the leverage ratio section of the QIS is the terminology used to describe a bank's leverage. Generally, when a bank is referred to as having more leverage, or being more leveraged, this refers to a multiple of exposures to capital (ie 50 times) as opposed to a ratio (ie 2.0%). Therefore, a bank with a **high** level of leverage will have a **low** leverage ratio.

The average leverage ratio is 2.8% and 3.8% for Group 1 and Group 2 banks, respectively, indicating that large banks are considerably more leveraged than smaller banks. As with other policy changes presented in this report there is significant variation within the Group 1 and Group 2 bank samples (Chart 3). The thick red line in the chart indicates the 3% minimum leverage ratio, the thin red horizontal lines indicate the median for the respective bank group.

Chart 3
Leverage ratios, in percent



Independent of the risk-based ratio, approximately 42% of the Group 1 banks and 20% of the Group 2 banks in the sample would have been constrained by a 3% leverage ratio as of 31 December 2009 assuming the new definition of Tier 1 capital was already in place.

#### 6. Capital conservation

#### 6.1 Conservation ratio

The conservation ratio is defined as: 1 – (distributions / profit after tax). Profit after tax is prior to expensed distributions, and distributions (net of Tier 1 injections) include the following elements: ordinary share dividends, other coupons and dividend payments on Tier 1 instruments, common stock buybacks, other Tier 1 buybacks or repayments (gross), and discretionary staff compensation and bonus payments.

In certain cases the ratio can be a negative number or over 100%. To ensure that the ratio is bounded between zero and 100%, certain adjustments were made. When distributions are greater than profit after tax, the ratio is set equal to 0% as the bank has conserved none of its profits (this avoids negative conservation ratios). In instances where distributions are negative (ie the bank has made a net injection of funds) the ratio is set to 100%.

#### 6.2 Sample

The analysis covers 21 Basel Committee member jurisdictions and is confined to Group 1 banks. Banks for which data were missing for any item needed in the calculation of the conservation ratio are excluded from the sample. The conservation ratios are calculated for the period from 2004 to 2009, resulting in a total sample of 371 observations.

#### 6.3 Analysis

Summary statistics for the conservation ratio are presented for the period 2004 to 2009 in Table 7, In the years preceding the crisis the mean and median conservation ratio is stable at 62% to 70%. Capital conservation ratios increased significantly after the start of the crisis, with the median conservation ratio rising to 90% or higher in 2008 and 2009.

Table 7

Conservation ratios summary statistics, all data in percent

	2004	2005	2006	2007	2008	2009
25th Percentile	41.9	37.7	47.5	43.4	70.0	61.0
Median	64,9	66.4	70.2	67.6	100.0	91,3
Mean	62.7	62.5	69.4	63.4	82.1	76.0
75th Percentile	87.0	84.6	100.0	68.0	100.0	100.0

Combining the time series data in Table 7, Chart 4 presents the full sample distribution (371 observations). The mean conservation ratio is around 70% (around 40% of the sample is comprised of observations from 2008 and 2009). The high number of observations in the "90% to 100%" range is due to net capital injections including public sector capital injections, which are reported as having a conservation ratio of 100% in this analysis.

Chart 4
Histogram of conservation ratios, 2004–2009, in percent

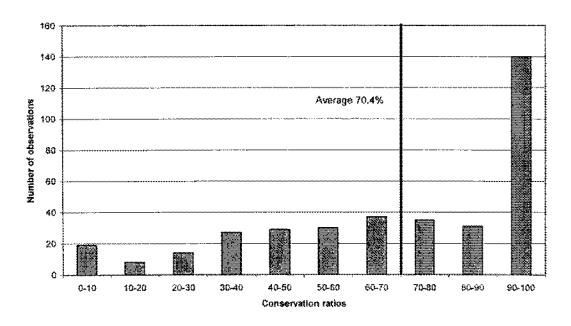


Table 8 examines how the conservation ratios vary according to the profitability and Tier 1 capitalisation of banks. It is expected that a bank with higher profits (defined as profit after

tax to risk-weighted assets) and higher Tier 1 capital ratios would on average have a lower conservation ratio. In Table 8 banks are sorted into quartiles based along these two dimensions (relative Tier 1 capitalisation and profitability). Each cell of the matrix calculates the average conservation ratio for banks in that combination of profitability and capitalisation quartile.

The data show that banks in the lowest Tier 1 quartile and lowest profit quartile tend to conserve more than banks in the highest Tier 1 ratio and profit quartiles. Banks that are both in the highest profit and capitalisation quartile have an average conservation ratio of 56.6%, which compares to the average conservation ratio of banks in the lowest profit and capitalisation cell of 81.6%.

In general however, there appears to be a stronger relationship between profitability and conservation ratios (bottom row of the table), than there is between capitalisation and conservation ratios (right-hand column of the table).

		Profit to RWA quartiles					
		025	25-50	50-75	75-100	All	
	75-100	89.2	74.8	65.5	56.6	71.5	
T1 quarfiles	50-75	74.0	70.3	68.2	50.0	65.6	
	25–50	78.6	77.0	62.5	57.4	68.9	
~	025	81.6	84.8	64.6	70.4	75.3	
************	All	80.8	76.7	65.2	58.6		

Table 8

#### 7. Liquidity

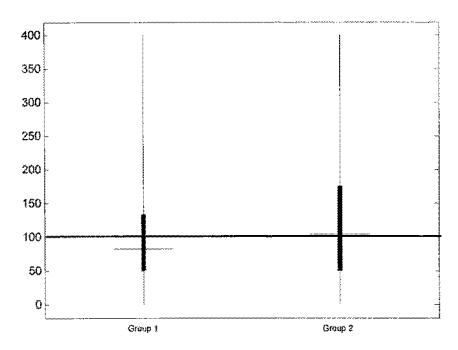
The Committee has further strengthened its liquidity framework by developing two *minimum* standards for funding liquidity. Both standards have been significantly revised since the December 2009 consultative proposal, based on further analysis by the Committee, feedback from the industry, and initial QIS results which gave an indication of the impact of the calibration of the standards. Revisions were made with the intent to right-size the stress scenario to capture a severe, yet not worst-case, scenario.

#### 7.1 Liquidity coverage ratio

One of the standards is a 30-day liquidity coverage ratio (LCR) which is intended to promote short-term resilience to potential liquidity disruptions. The liquidity coverage ratio was designed to require global banks to have sufficient high-quality liquid assets to withstand a stressed 30-day funding scenario specified by supervisors. The LCR denominator is comprised of cash outflows less cash inflows that are expected to occur in a severe stress scenario, while the numerator consists of a stock of unencumbered, high quality liquid assets that must be available to cover any net outflow.

169 Group 1 and Group 2 banks provided sufficient data in the follow-up data collection exercise to calculate the LCR according to the final rules. The average LCR was 83% for Group 1 banks and 98% for Group 2 banks. These aggregate numbers do not speak to the range of results across the banks. Chart 5 below gives an indication of the distribution of bank results; the thick red line indicates the 100% minimum requirement, the thin red horizontal lines indicate the median for the respective bank group, 46% of the banks in the QIS sample already meet or exceed the minimum LCR requirement.

Chart 5
Liquidity coverage ratio, in percent



For the banks in the sample, QIS results show a shortfall of liquid assets of €1.73 trillion as of end-2009, if banks were to make no changes whatsoever to their liquidity risk profile. This number is only reflective of the aggregate shortfall for banks that are below the 100% requirement and does not reflect surplus liquid assets at banks above the 100% requirement. Banks that are below the 100% required minimum have until 2015 to meet the standard by scaling back business activities which are most vulnerable to a significant short-term liquidity shock or by lengthening the term of their funding beyond thirty days. Banks may also increase their holdings of liquid assets.

²² Banks' LCRs have been capped at 400%, both for the calculation of the averages and in the chart.

The key components of outflows and inflows are shown in Table 9, along with the composition of high quality assets currently held at banks depicted in Chart 6 below.

Table 9

LCR outflows and inflows as a percentage of gross outflows

Category	Group 1 banks	Group 2 banks
Outflows to		
Unsecured retail and small business customers	9.7%	18.1%
Unsecured non-financial corporates	15.9%	21.4%
Unsecured financial institutions	27.6%	28.3%
Unsecured sovereign, central bank, public sector entities (PSEs) and other counterparties	9.7%	6.6%
Secured funding	2.4%	1.2%
Collateral, securitisations and own debt	24.9%	10.9%
Credit and liquidity facilities	2.3%	2.7%
Other cash outflows including derivative payables	7.3%	12.8%
Total outflows*	100.0%	100.0%
Inflows from		
Retail and small business customers	2.5%	8.4%
Non-financial corporates	3.2%	5.9%
Financial institutions	7.8%	16.9%
Other entities	0.8%	1.1%
Secured lending	7.5%	6.1%
Asset-backed commercial paper (ABCP), conduits, structured investment vehicles (SIVs) and own account, performing security cash flow	1.3%	1.5%
Other cash inflows including derivative receivables	6.1%	15.9%
Total inflows**	22.2%	40.5%

^{*} May contain rounding differences. ** For the purposes of this table, the 75% cap is only applied to the "total inflow" category. Therefore, the percentages in the inflow categories do not add up to the "total inflow" category.

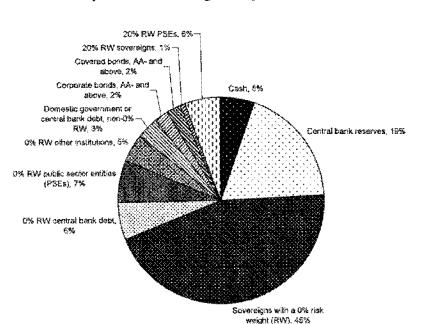


Chart 6
Composition of holdings of liquid assets of banks

#### 7.2 Net stable funding ratio

The second standard is the net stable funding ratio (NSFR), a longer-term structural ratio to address liquidity mismatches and provide incentives for banks to use stable sources to fund their activities.

The NSFR for Group 1 banks is 93% on average. For Group 2 banks, the average NSFR is higher than that of the Group 1 sample at 103%. Chart 7 shows the distribution of results for Group 1 and Group 2 banks; the thick red line indicates the 100% minimum requirement, the thin red horizontal lines indicate the median for the respective bank group. ²³

²³ One bank was removed from Chart 7 due to a result that greatly exceeded the scale of the chart.

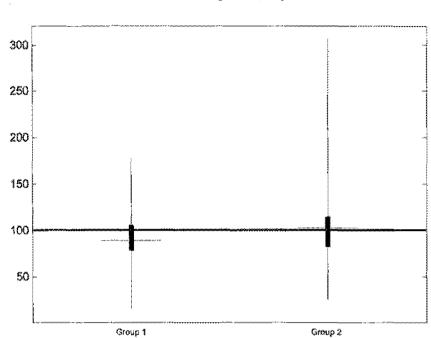


Chart 7 Net stable funding ratio, in percent

166 Group 1 and Group 2 banks provided sufficient data in the follow-up data collection exercise to calculate the NSFR according to the final proposals. 43% of these banks already meet or exceed the minimum NSFR requirement, with 67% of them at an NSFR of 85% or above.

Group 2

QIS results show that banks in the sample had a shortfall of stable funding of €2.89 trillion at the end of 2009, if banks were to make no changes whatsoever to their funding structure. This number is only reflective of the aggregate shortfall for banks that are below the 100% NSFR requirement and does not reflect any surplus stable funding at banks above the 100% requirement. Banks that are below the 100% required minimum have until 2018 to meet the standard and can take a number of measures to do so, including by lengthening the term of their funding, reducing maturity mismatch, or scaling back activities which are most vulnerable to liquidity risk in periods of stress.

It should be noted that the shortfalls in the LCR and the NSFR are not additive, as decreasing the shortfall in one standard may result in a similar decrease in the shortfall of the other standard, depending on the steps taken to decrease the shortfall.

#### Annex

#### Changes in risk-weighted assets in the trading book

With regard to the trading book, the scope of the QIS included consideration of the following treatments: (i) the stressed VaR; (ii) the capital charge for incremental risk; and (iii) the capital charges for securitisation exposures, including the correlation trading portfolio. The capital charges for securitisations that are not included in the correlation trading portfolio have generally been calculated as the larger of the capital charges for net long and net short positions. This is in line with the transitional treatment to be applied from 31 December 2011 to 31 December 2013 as announced in the Committee's 18 June 2010 press release. After the transition period, the capital charge will change to the sum of the capital charges for the net long and net short positions. However, applying this treatment now would substantially overstate the impact as many legacy positions will roll off or be managed down. To the extent capital charges for the correlation trading portfolio are calculated using a comprehensive risk model, they include the impact of the 8% floor of the standardised measurement method.

The original QIS questionnaire and instructions did not reflect subsequent decisions by the Committee regarding three interpretive issues: (i) the application of market value to derivative positions; (ii) the application of off-setting under the standardised measurement method; and (iii) the application of the maximum possible loss principle. Furthermore, the original data collection was not sufficient to assess the impact of basing the standardised approach capital charges for securitisations outside the correlation trading portfolio on the maximum of the capital charges for net long and net short positions during the transitional period. While some banks provided additional data in a follow-up study in May 2010, not all banks were able to provide these data. For banks that did not provide data in the follow-up study or could not fully reflect the three interpretive issues in their calculations, capital charges for securitisation exposures outside the correlation trading portfolio, and capital charges for correlation trading exposures subject to the standardised measurement method as well as the level of the 8% floor, might be overstated.

Table 10 shows the impact of the revised trading book capital charges on overall risk-weighted assets. It is important to note that the sample of banks that provided trading book data in the QIS is larger than the sample of banks included in the Trading Book Group's impact studies. As these additional banks are not expected to be as active in securitisation trading and especially correlation trading, the average impact is expected to be lower.

Stressed value-at-risk (column "sVaR") results in an average increase in overall capital requirements of 2.6%. However, there is significant dispersion of the increases across Group 1 banks with a maximum of 51.8% for one bank in the sample. The elimination of the preferential 4% risk weight for certain equity exposures subject to the standardised measurement method (column "Equity") has almost no impact on Group 1 banks. The incremental and comprehensive risk capital charges and the capital charges for securitisation exposures in the trading book contribute on average 6.9% to the increase of overall capital requirements with a maximum of 112.3% for one bank. The overall average increase is broken down further as follows: the incremental risk capital charge (column "IRC")

^{24 &}quot;Adjustments to the Basel II market risk framework announced by the Basel Committee" (www.bis.org/press/p100618.htm).

contributes 1.5%; the capital charge for non-correlation trading securitisation exposures according to the standardised measurement method (column "SMM non-CTP") contributes 4.4%; the comprehensive risk model for correlation trading exposures (including the floor, column "Correlation trading CRM") contributes 1.7%; the standardised measurement method for correlation trading exposures not included in the model (column "Correlation trading SMM") contributes 0.2%; and the previous capital charges (resulting from the event risk surcharge and previous standardised or VaR-based charges for the specific risk capital requirements of securitisations) reduce the impact of the charges by 0.9%.

Table 10
Increase in trading book-related capital charges relative to overall capital requirements, Group 1 banks, in percent

		Equity	IRC and securitisation						
	SVaR		Overall	IRC	SMM non- CTP	Correlation trading		7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
						CRM	SMM	Prev. charge	
Average	2.6	0.0	6.9	1.5	4.4	1.7	0.2	-0.9	

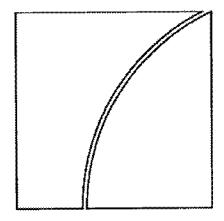
This table includes all banks providing data on the trading book changes, irrespective of whether or not they also provided data on all other policy issues with risk-weighted asset impact. Therefore, the results are not comparable to the last three columns of Table 6.

Across the sample of 61 Group 1 banks providing data, the stressed value-at-risk was on average 248.7% of the value-at-risk provided by firms for a non-stressed period, typically the period ending 31 December 2006. This ratio ranged from as low as 86.7% to a high of 814.9%, with a median of 207.2% and a standard deviation of 141.7%. Some additional summary statistics regarding the new trading book capital requirements compared to current market risk capital requirements are included in Table 11.

Table 11
Increase in trading book-related capital charges relative to current market risk requirements, Group 1 banks, in percent

	sVaR	IRC		Correlation trading	
			SMM non- CTP	CRM	SMM
Number of banks	61	35	45	18	16
Median	51.7	28.8	17.0	25.5	8.2
Minimum	8.5	1.2	0.2	5.6	2.3
Maximum	165.4	171.9	484.8	91.2	61.5
StDev	43.8	49.1	119.4	21.9	17.6

## Basel Committee on Banking Supervision



# An assessment of the long-term economic impact of stronger capital and liquidity requirements

August 2010



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# An assessment of the long-term economic impact of stronger capital and liquidity requirements

### **Executive summary**

This report provides an analysis of the long-term economic impact (LEI) of the Basel Committee's proposed capital and liquidity reforms. It assesses the economic benefits and costs of stronger capital and liquidity regulation in terms of their impact on output. The main benefits of a stronger financial system reflect a lower probability of banking crises and their associated output losses. Another benefit reflects a reduction in the amplitude of fluctuations in output during non-crisis periods. In this analysis, the costs are mainly related to the possibility that higher lending rates lead to a downward adjustment in the level of output while leaving its trend rate of growth unaffected. While empirical estimates of the costs and benefits are subject to uncertainty, the analysis suggests that in terms of the impact on output there is considerable room to tighten capital and liquidity requirements while still yielding positive net benefits.

In interpreting the findings of the report, two points are worth highlighting.

First, the report focuses on the *long-run* economic impact. The analysis assumes that *banks* have completed the transition to the new levels of capital and liquidity. To do this, it compares two steady states, one with and one without the proposed regulatory enhancements. The report does *not* assess the benefits and costs associated with the transition phase. The Macroeconomic Assessment Group (MAG) considers the macroeconomic costs of this transition, but not its benefits.²

Second, the report should *not* be viewed as indicating a particular calibration level. The Committee's calibration is also being informed by its top-down assessment of the capital and liquidity frameworks and the results of the Quantitative Impact Study. Moreover, references to capital and liquidity ratios in this report are based on historical data and definitions and thus should not be read as corresponding directly to those proposed by the Basel Committee.³

Inevitably, the analysis of the macroeconomic benefits and costs is subject to considerable uncertainty. No single approach can capture all the implications of capital and liquidity regulation for bank behaviour and the economy at large. Thus, the report draws on a variety of methodologies and models. The presentation (including sensitivity analysis and technical annexes) provides a sense of the range of results across methodologies and potential uncertainties associated with the estimates.

This report was produced by the Basel Committee's Long-term Economic Impact (LEI) working group, chaired by Claudio Borio (BIS) and Thomas Huertas (UK FSA).

The MAG report is available at http://www.bis.org/publ/othp10.htm.

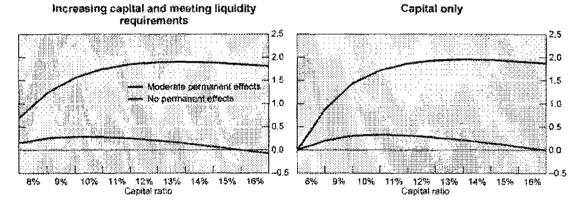
Throughout this report, capital is defined as tangible common equity (TCE) and the capital ratio as the ratio of TCE to risk-weighted assets (RWA). TCE is not of goodwill and intangibles. RWA are measured using historical definitions under Basel I and Basel II. The analysis applies to total TCE held, so that it does not distinguish between the minimum capital requirement and additional capital that banks may hold in excess of the minimum requirement. The assessment of the liquidity regulations focuses on the Nel Stable Funding Ratio (NSFR), as defined in the December 2009 proposal. At the same time, it also provides information pertinent to the assessment of the Liquidity Coverage Ratio (LCR).

The core conclusions are illustrated in the graph below. The graph plots a range of estimates for the net benefits *per year* from reducing the probability of banking crises through higher capital standards while also meeting the liquidity requirements. The net benefits are measured in terms of the long-run change in the yearly level of output from its pre-reform path, with its trend growth rate unchanged. The origin corresponds to the historical average level of the capital ratio and frequency of banking crises — a proxy for the pre-reform steady state. The range of results shown reflects various estimates of the costs of banking crises, depending on whether costs are estimated as, permanent but moderate — which also corresponds to the median estimate across all comparable studies of such costs (red line) — or only temporary (green line). At the same time, taking a conservative approach, the results assume that institutions pass the added costs arising from strengthened regulations on to borrowers in their entirety while maintaining pre-reform levels for the return on equity, interest costs of liabilities and operating expenses. Thus, the costs of meeting the standards may be close to an upper bound.

#### Summary graph

## Long-run expected annual net economic benefits of increases in capital and liquidity

Net benefits (vertical axis) are measured by the percentage impact on the level of output



The capital ratio is defined as TCE over RWA. The origin corresponds to the pre-reform steady state, approximated by historical averages for total capital ratios (7%) and the average probability of banking trises. Net benefits are measured by the difference between expected benefits and expected costs. Expected benefits equal the reduction in the probability of crises times the corresponding output losses. The red and green lines refer to different expensional probability and the effects of crises on output are permanent but moderate (which also corresponds to the median estimate across all comparable studies) or only transitory.

The core message of the graph is that net benefits remain positive for a broad range of capital ratios, with the incremental net benefits from reducing the probability of banking crises gradually declining to become negative beyond a certain range. Admittedly, the precise mapping between higher capital levels and stricter liquidity standards, on the one hand, and the reduction in the probability of crises, on the other, is quite uncertain. With this caveat, the sizeable gap between benefits and costs for a broad range of assumptions still suggests that in terms of the impact on output there is considerable room to tighten capital and liquidity requirements while still achieving positive net benefits.

The following presents in more detail the estimation methods, main results and broader set of factors that need to be considered when making an overall assessment. The body of the report provides detailed information on the dispersion of results and uncertainty surrounding them.

### **Economic benefits**

The first step to estimate the long-term net benefits of the regulatory reforms shown in the graph involves calculating the expected yearly output gain associated with the reduction in the frequency and severity of banking crises. This is equivalent to the reduction in the probability of banking crises times the discounted output costs of their multi-year effects — the "expected costs" of crises. Thus, the calculation involves two steps: estimating the expected discounted cost of crises and estimating the impact of stronger capital and liquidity requirements on those expected costs — on the probability and severity of crises.

Historical experience suggests that, in any given country, banking crises occur on average once every 20 to 25 years, ie the average annual probability of a crisis is of the order of 4 to 5%. The evidence indicates that banking crises are associated with large losses in output relative to trend and that these costs extend well beyond the year in which the crisis erupts. The cumulative (discounted) output losses range from a minimum of 20% to well in excess of 100% of pre-crisis output, depending primarily on how long-lasting the effects are estimated to be.

Using the median estimate of the cumulative discounted costs of crises across all comparable studies, which is around 60%, each 1 percentage point reduction in the annual probability of a crisis yields an expected benefit per year equal to 0.6% of output when banking crises are allowed to have a permanent effect on real activity. Using the median estimate of losses when crises are seen to have only a temporary effect, which is around 20%, each 1 percentage point reduction in the annual probability of a crisis yields an expected benefit per year equal to 0.2% of output. While individual country experiences obviously vary, on balance the frequency of crises does not differ much between industrial and emerging-market economies and, if anything, costs appear somewhat higher in industrial economies.

Mapping tighter capital and liquidity requirements into reductions in the probability of crises is particularly difficult. This study relies mainly on two types of methodology. The first involves reduced-form econometric studies. These estimate the historical link between the capital and liquidity ratios of banking systems and subsequent banking crises, controlling for the influence of other factors. The second involves treating the banking system as a portfolio of securities. Based on estimates of the volatility in the value of bank assets, of the probabilities and of correlations of default and on assumptions about the link between capital and default, it is then possible to derive the probability of a banking crisis for different levels of capital ratios. Combinations of these methodologies are also used.

Although there is considerable uncertainty about the exact magnitude of the effect, the evidence suggests that higher capital and liquidity requirements can significantly reduce the probability of banking crises. As one would expect, the incremental benefits decline at the margin. Thus, they are relatively larger when increasing bank capital ratios from lower levels and they decline as standards are progressively tightened. As an illustration, the models suggest that the decrease in the likelihood of crises is three times larger when capital is increased from 7% to 8% than when it is raised from 10% to 11%. Intuitively, the further away banks are from insolvency, the lower is the marginal benefit of additional protection. It should be recognised, though, that while the results are consistent across methodologies, the rate at which these benefits accrue is dependent on model assumptions and is very hard to pin down with confidence.

The average peak-to-trough estimate of losses associated with banking crises is around 10%. This ignores the duration of crises and is thus not comparable to estimates of cumulative losses (see Annex 1).

Intuitively, a stronger banking system should also be expected to reduce the severity of banking crises. Higher aggregate levels of capital and liquidity should help insulate stronger banks from the strains faced by weaker ones. There is, however, no extant research on this issue. The preliminary exploration carried out in this study, based on a simple reduced-form relationship akin to those used to estimate the impact on the probability of crises, finds some evidence of a relationship. However, the estimated relationship is statistically weak, perhaps owing to the limited number of observations that could be used (10 crises only). In the spirit of conservatism, the estimates are not used in the calculation of net benefits, effectively assuming that tougher standards have no impact on the severity of crises.

#### **Economic costs**

The long-run costs of higher capital and liquidity requirements on output are assessed using a variety of macroeconomic models, including a subset of those used by the MAG.⁵ The list includes dynamic structural general equilibrium (DSGE) models, semi-structural models and reduced-form models. In contrast to the MAG, because of the focus on the long-run steady state, higher capital and liquidity requirements are assumed to increase the cost of bank credit without additional non-price restrictions (eg credit rationing). The higher cost of bank credit lowers investment and consumption, in turn influencing the steady-state level of output.

The methodology to calculate the cost depends on the features of the macroeconomic models. In those that already include measures for capital and/or liquidity, changes in these variables can be imposed directly. In those that do not, it is first necessary to map regulatory requirements to lending spreads, or the cost of borrowing more generally, as this is always included in the models.

The mapping of changes in regulatory requirements into lending spreads relies on a representative bank's balance sheet for several national banking systems. The pre-reform steady state is approximated by the average composition of the balance sheets over several years prior to the crisis, together with historical estimates of funding costs and returns on equity. Based on this, it is then possible to calculate the increase in lending spreads necessary to recover the additional costs of the higher standards. As already noted, this mapping is based on the conservative assumption that the whole adjustment is absorbed by lending rates, ie any increase in funding costs or reductions in returns on investments are fully passed through. It also assumes that the cost of capital does not fall as banks become less risky. It thus represents something closer to an upper bound.

This simple mapping yields two key results, with the central tendency across countries measured by the median estimate. First, each 1 percentage point increase in the capital ratio raises loan spreads by 13 basis points. Second, the additional cost of meeting the liquidity standard amounts to around 25 basis points in lending spreads when risk-weighted assets (RWA) are left unchanged; however, it drops to 14 basis points or less after taking account of the fall in RWA and the corresponding lower regulatory capital needs associated with the higher holdings of low-risk assets.

Not surprisingly, these results are sensitive to the return on equity (ROE) that banks are assumed to target. For example, if the average ROE is assumed to be 10% (rather than the 1993-2007 average of nearly 15% but consistent with a range of academic studies), then

A number of the models used by the MAG could not be employed because they do not have a well defined steady state for the level of output, or this is difficult to compute. Even so, the results produced in this report are consistent with those produced by those models and the overall MAG results, when that steady state is approximated by the level of output at the end of the simulation period used by the MAG (eight years).

each 1 percentage point increase in the capital ratio can be recovered by a 7 basis point rise in lending spreads.

Similarly, the results are very sensitive to the full-pass-through assumption. Banks have various options to adjust to changes in required capital and liquidity requirements other than increasing loan rates, including by reducing ROE, reducing operating expenses and increasing non-interest sources of income. Each of them could cut the costs of meeting the requirements. For example, on average across countries, a 4% reduction in operating expenses, or a 2 percentage point fall in ROE, is sufficient to absorb a 1 percentage point increase in the capital-to-RWA ratio. In practice, banks are likely to follow a combination of strategies.

Based on this intermediate step, it is then possible to estimate the impact of tougher regulatory requirements on output across the full set of macroeconomic models. A 1 percentage point increase in the capital ratio translates into a median 0.09% decline in the level of output relative to the baseline. The median impact of meeting the liquidity requirement is of a similar order of magnitude, at 0.08%.

### Comparing benefits and costs - overall assessment

The various measures just described are then put together to quantify the net benefits shown in the summary graph. That graph indicates that, on balance, there is considerable scope to increase capital and liquidity standards while yielding positive net benefits. In reaching an overall assessment, however, it is important to highlight the factors that are not considered explicitly in the graph and that could make the final estimate of the net benefits higher or lower. Some of these factors have already been noted. In some cases, quantifying their effects is exceedingly difficult.

Several factors could lead to a higher estimate of net benefits:

- In addition to reducing the probability of banking crises, higher capital and liquidity standards, by making the financial system more resilient, can reduce the amplitude of the business cycle. This impact can be enhanced through countercyclical capital buffer schemes. While hard to compare with the benefits included in the graph, these effects can be significant. They are evaluated in detail in section II.B and Annex 4 of this report.
- In a similar way to that noted above, but focusing on crisis periods, a risk-averse
  society would be prepared to pay a premium over the expected costs of an extreme
  event such as a banking crisis (probability times its cost in terms of output) in order
  to insure against it, ie pay over the actuarially fair price. This premium has not been
  included in the calculations and would increase the benefits.
- The expected costs of crises are based on data from historical episodes featuring large-scale government intervention to minimise the negative effects on output. In the absence of such intervention, the average costs of banking crises are likely to be significantly higher. In addition, the discount rate used to estimate the present value of the multi-year cost of crises is quite conservative.
- To the extent that higher capital and liquidity requirements also reduce the severity of crises, the benefits will be higher.
- The analysis assumes full pass-through of the higher funding costs/iower yield from investments to loan rates. However, in the long run it is reasonable to expect that, by reducing banks' riskiness, higher capital and liquidity requirements should lead to lower debt and equity costs. Moreover, once adjustment is complete, differences

between the cost of equity and debt could reduce to tax effects. Banks could also adjust by increasing efficiency or reducing operating expenses. These effects would substantially reduce the estimated long-run costs.

 To the extent that greater intermediation is provided by the non-bank sector, the estimated costs will be lower.

Similarly, there are a number of factors that could reduce the net benefits:

- The existing literature, which is the basis for this report's estimates of the costs of banking crises, may overestimate the costs of banking crises. Possible reasons include: overestimation of the underlying growth path prior to the crises; failure to account for the temporarily higher growth during that phase; and failure to fully control for factors other than a banking crises per se that may contribute to output declines during the crisis and beyond, including a failure to accurately reflect causal relationships.
- Capital and liquidity requirements may be less effective in reducing the probability of banking crises than suggested by the approaches used in the study. This would reduce the overall net benefits for a given level of the requirements. However, to the extent that net benefits remain positive, it would also imply that the requirements would need to be raised by more in order to achieve a given net benefit.
- Shifting of risk into the non-regulated sector could reduce the financial stability benefits
- The results of the impact of regulatory requirements on lending spreads are based on aggregate balance sheets within individual countries, so that they do not consider the incidence of the requirements across institutions. They implicitly assume that the institutions that fall short of the requirements (ie, that are constrained) do not react more than those with excess capital or liquidity (ie, that are unconstrained). These effects may not be purely distributional.

As a final caveat, the results summarised above reflect the estimated net benefits associated with higher capital and liquidity standards, averaged across a number of countries over an extended period. Clearly, there is a range of uncertainty around estimates of central tendencies, reflecting data limitations and the need for various modelling assumptions. In addition, the estimated net benefits may be higher or lower in individual cases.

#### Introduction

This report assesses the Long-term Economic Impact (LEI) of the Basel Committee's December 2009 proposed reforms to the capital and liquidity frameworks. Its purpose is to assess the economic benefits and costs of more stringent capital and liquidity requirements once banks have completed the transition to the new requirements.

Importantly, the aim of the report is *not* to provide a specific calibration of the capital and liquidity requirements. Rather than gauging the optimal level of capital and liquidity requirements, the analysis aims at collecting and synthesising quantitative evidence regarding the relative magnitude of the macroeconomic benefits and costs. In doing so, it provides a range over which the benefits exceed the costs in the long run. Given the uncertainties involved in the assessment, this exercise simply helps to outline the contours for the calibration exercise. On balance, the analysis suggests that there is considerable room to tighten capital and liquidity requirements while still yielding positive net benefits, measured in terms of output.

The report focuses exclusively on the long run, or endpoint of the reforms. It assesses the shift from one steady state to another (with and without the reforms). As such, it does not assess the costs associated with the transition phase itself. The task of assessing the costs during the transition phase has been undertaken by the Macroeconomic Assessment Group (MAG). In addition, the MAG measures only costs. It does not consider the benefits that higher capital provides during the transition phase by making the banking system stronger. These benefits accrue immediately.

To interpret correctly the results of the report, the definition of capital is critical. Capital in this report refers to total capital holdings; no distinction is made between the minimum capital requirement and additional buffers. Moreover, capital is defined as tangible common equity (TCE)⁷ and the capital ratio as the ratio of TCE to risk-weighted assets (RWA), where RWA are based on definitions under Basel I and Basel II. The actual values of capital and RWA under the new proposals will therefore differ.⁸ In this context it must be stressed that the definitions used were in part dictated by the availability of data and, while related to regulatory ratios, they should not be read as exactly corresponding to either the Basel II ratios or the revised ratios under consideration by the Basel Committee.

The analysis of the impact of liquidity standards presents particular challenges. Under the BCBS's December 2009 proposal, banks would be required to meet two new liquidity requirements – a short-term requirement called the Liquidity Coverage Ratio (LCR) and a long-term requirement called the Net Stable Funding Ratio (NSFR). The LCR ensures that banks have adequate funding liquidity to survive one month of stressed funding conditions. The NSFR addresses the mismatches between the maturity of a bank's assets and that of its liabilities. The report focuses mainly on the NSFR, seen as the more relevant constraint for macroeconomic effects in the long run. In addition, data limitations made it especially hard to

The MAG was set up at the request of the Chairs of the BCBS and the FSB and is a collaborative effort comprising representatives from central banks and regulators in 15 countries. The report of the MAG is available at http://www.bis.org/publ/othp10.htm.

Common equity = common stock + additional paid-in capital + retained earnings - treasury shares; tangible common equity = common equity - intangibles - goodwill.

Given that the models used to assess the economic benefits and costs are calibrated to a variety of historical capital adequacy measures, the analysis in this report uses a mapping from these measures to the ratio of TCE to RWA. This converts different ratios into a consistent variable using statistical techniques (see Annex 5).

analyse the LCR for national banking systems. At the same time, the use of the ratio of liquid assets to total assets in specific parts of the analysis also provides information relevant for the assessment of the effects of the LCR. In this report, references to the liquidity requirement refer to the December 2009 proposal for the NSFR.

This report proceeds as follows. Section II outlines the steady-state economic benefits of stronger capital and liquidity requirements. The benefits reflect mainly a lower incidence of costly banking crises, but also a likely reduction in the amplitude of normal business cycles. Section III provides estimates of the steady-state economic costs of increasing capital and liquidity. Section IV brings together the analyses of the previous two sections to arrive at a range of quantitative estimates of those net benefits. It then highlights a set of factors not explicitly covered in the net benefit estimates and that should be taken into account when making an overall assessment. A series of annexes provide greater detail on the existing research into crises, on the models and methodologies used in this paper, and on the estimation results.

#### II. Economic benefits

The economic benefits of enhanced capital and liquidity regulations reflect mainly the fact that a more robust banking system would be less prone to crises that have large macroeconomic effects in terms of forgone output. Tighter regulatory standards may also lead to smaller output fluctuations and, hence, higher welfare even in the absence of banking crises. This section synthesises the evidence on these two effects. It first reviews the literature on the costs of banking crises and presents evidence on the impact of capital and liquidity regulation on the probability of systemic banking crises and on their severity. It then proceeds to discuss the evidence on the potential effect of tighter standards on the cyclical volatility of GDP.

The primary findings are: (i) on average, systemic banking crises have been very costly, with longer-term losses of output that are as high as multiples of annual GDP; (ii) better capitalisation and higher liquidity of banks reduce the likelihood of crises; (iii) there is some evidence that higher capital and liquidity reduce the severity of crises; and (iv) the reforms can reduce the amplitude of business cycles, not least if countercyclical capital buffers are in place.

#### ILA Benefits from reduced costs associated with banking crises

This report measures the expected yearly output gain associated with the reduction in the frequency and severity of banking crises as the reduction in the annual probability of banking crises times their output costs, ie as the reduction in the "expected costs" of crises. Linking stronger capital and liquidity requirements to the expected costs of crises requires estimation of the relationships of capital and liquidity ratios to the probability and severity of crises.

### II.A.1 The frequency of banking crises

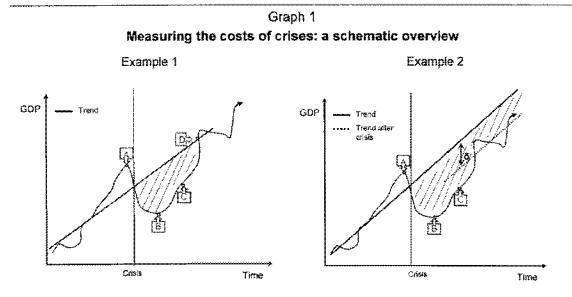
Averaging across countries and time, historical experience indicates that banking crises occur once every 20 to 25 years. The only period free of banking crises is that from the end of the Second World War until (depending on the country) the early 1970s–1980s – a period

in which the financial sector was very heavily regulated. 9 Crises have reoccurred and tended to become more frequent since then.

Table A1.4 in Annex 1 provides an overview of the banking crises in BCBS member countries since 1985. Different authors classify crises differently. Reinhart and Rogoff (2008) find 34 crises over the 25 year period, while Laeven and Valencia (2008) report only 24. Taking these together, it is possible to conclude that the frequency of crises ranges from 3.6% to 5.2% per year, with an average across samples and definitions of around 4.5%. Interestingly, the frequency of crises seems to be, if anything, slightly higher for G10 countries. In what follows, these average frequencies will be interpreted as the probability of a banking crisis in any given year and country.

### II.A.2 The economic costs of banking crises

There is a substantial body of literature estimating the economic costs of banking crises in terms of GDP forgone. While researchers have adopted a variety of methods, on average the magnitude of the resulting GDP costs is estimated to be very large.



Point A: pre-crisis peak, Point B: post-crisis trough, Point C: GDP growth equals trend GDP growth for the first time after the crisis. Point D: the level of GDP returns to the pre-crisis level.

Graph 1 provides an overview of the approaches used in this literature to assess the costs. It depicts the path of GDP over the different phases of two stylised types of banking crisis (examples 1 and 2). In each case, point A shows the peak of the business cycle prior to the crisis; point B marks the subsequent turning point for GDP (the cyclical trough); and point C shows the point where the path of GDP regains its pre-crisis trend growth rate. The difference between the two examples is that in example 1 output eventually catches up with its pre-crisis path (at the point labelled "D"), while in example 2 GDP remains on a permanently lower path, albeit one with the same growth rate as that prevailing prior to the

See Reinhart and Rogoff (2008) or Laeven and Valencia (2008).

The frequency is calculated as the number of crises divided by the product of the number of years from 1985-2009 and number of countries in the sample, independent of whether countries experienced a crisis or not. This essentially assumes that the length of the crisis is one year (see also footnote 14).

crisis. In example 2, the permanent loss in the level of GDP arising from the crisis is labelled  $\delta$ . In other words, in example 1 the cost of the crisis is *temporary*, while in example 2 it is *permanent*.

Table 1 applies the classification adopted in Graph 1 to the findings in the literature. The table summarises the results found in the literature, the details of which are provided in Annex 1 and Table A1.1. Since different studies rely on different metrics, the results are presented along two dimensions. The rows relate to the time over which the costs are measured: the period between peak and trough (between A and B); the period until the "end of the crisis". The columns relate to how the costs are measured. The left-hand column compares the level of GDP at the end of the corresponding period with that at the beginning of the episode. The right-hand column shows the cumulative loss in GDP over the corresponding period. In the case of permanent output effects (last row), the figure in the left-hand column corresponds to the size of the permanent effect ( $\delta$ ) in the level of GDP, and that in the right-hand column to the cumulative (discounted) losses in output, both measured as deviations from the trend growth path prevailing before the crisis.

Overall, the literature points to substantial output losses. In the first column of Table 1 the median drop in output across crises and across studies, either the peak-to-trough (A to B) or until growth recovers to its pre-crisis trend (A to C), is 9–10%. Studies that found a permanent gap between the pre- and post-crisis implied growth path ( $\delta$  in Graph 1) estimate this gap to be between 2 and 10%, with a median of about 6%.

Table 1

Median output losses associated with a banking crisis¹

(as a percentage of pre-crisis GDP)

	Difference between GDP at beginning and end of period	Cumulative discounted loss
Period from peak to trough (A to B)	9	
Period until growth rate recovers (A to C)	10	
Period from peak to end of crisis ²		19
Infinite horizon (in the presence of permanent steady-state effects) (5, in example 2)	6 ³	158
Memo item: Median cumulative effect across all studies		63

¹ Numbers are medians of the results reported by a number of academic studies. See Annex 1 and Table A1.1for details. As a percentage of pre-crisis GDP. ² The category includes studies where the endpoint for crises was determined by the time when GDP recovered to its pre-crisis peak, by expert judgment, or by assuming that crises last a fixed number of years. ³ Studies assessing the impact of banking crises on long-run output find on average a 10% effect, Studies using potential output (eg based on OECD estimates) find on average a 2% drop.

The terminology used in many studies does not make a clear distinction between the length of a crisis and that of its effect on output. Studies determine the endpoint of crises by expert judgement, by assuming that crises last a fixed number of years, or by the time when GDP recovers to its pre-crisis growth path (point D in the graph). When effects are permanent, using this terminology, crises would in effect have an infinite horizon.

Since all studies show that, even if temporary, the impact of banking crises lasts for several years, cumulative output losses are higher than peak-to-trough (A to B) declines. The median discounted cumulative loss of output over the course of a crisis estimated without allowing for the possibility of permanent effects (the area between the pre-crisis growth path and actual output between points A and D) is 19% of peak pre-crisis GDP (of point A). Studies that do allow for the possibility of permanent effects find them and estimate the corresponding median cumulative output loss at 158%. The median cumulative loss across all comparable studies is 63%.

These results from the existing literature are obviously based on crises prior to the current one. Haldane (2010) provides a range of estimates for the 2007–09 banking crisis assuming that a varying fraction of output losses experienced in 2009 will be permanent – the fractions are 25%, 50% and 100%. Using these figures, Haldane estimates that global output losses are a minimum of 90% of 2009 world GDP, but could rise to as high as 350% if the whole output loss turns out to be permanent (see Table A1.1).

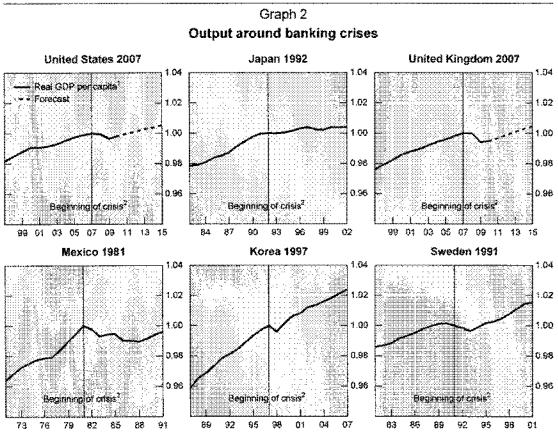
Graph 2 illustrates the findings using some historical examples. It shows the evolution in the level of GDP per capita 10 years before and after each banking crisis. The various panels reveal a downward shift in trend output in the aftermath of a crisis — a sign of a possible permanent effect. In some cases, even trend growth rates appear to be permanently lower after the event. This is consistent with one study that finds banking crises can have a negative effect on growth even over a 30-year horizon (Ramirez (2009)).

By focusing on medians across models, Table 1 masks a significant range of crisis outcomes across studies and individual episodes. For example, one study found on average discounted cumulative losses of banking crises that exceed 300%. Most studies also report that the maximum cost of an individual episode is three to five times higher than the average cost of a crisis (see Table A1.1). Researchers also tend to find, if anything, that industrial countries suffer greater costs than emerging markets.

Inevitably, since crises are rare, statistical precision can only be achieved by pooling country experiences. This is appropriate to the extent that the economic processes underlying crises and country characteristics are relatively similar. It is always possible, however, that the average international experience is not representative of that of an individual country.

The results reported in Table 1 are robust to a variety of cross-checks (see Annex 1). For example, studies that specifically allow for the possibility of reverse causality – ie that banking crises may be caused by, rather than cause, the reductions in output – also report sizeable effects. Moreover, the results may underestimate the size of the losses in that they do not take account of the effect of government intervention that often takes place to limit the impact of the crisis on output. In the absence of such intervention, the costs of crises could be much higher – a view that is supported by evidence on the costs of crises back in history when government intervention was much smaller. ¹² That said, it should also be recognised that factors unrelated to banking crises, and not well controlled for in these studies, may also influence the output losses observed in the data.

Moreover, the discount rate used to calculate the present value of future losses is rather conservative (5%). Were a lower discount rate to be used, the median losses would be higher; see Annex 1.



¹ GDP per capita is the logarithm of real GDP per capita, normalised to 1 at the beginning of the crisis. ² The starting years for crisis are based on Laeven and Valencia (2008) and Reinhart and Rogoff (2008).

Source: IMF (2009)

Why should the effects of banking crises be so long-lasting, and possibly even permanent? One reason is that banking crises intensify the depth of recessions, leaving deeper scars than typical recessions. Possible reasons for why banking related crises are deeper include: a collapse in confidence; an increase in risk aversion; disruptions in financial intermediation (credit crunch, misallocation of credit); indirect effects associated with the impact on fiscal policy (increase in public sector debt and taxation); or a permanent loss of human capital during the slump (traditional hysteresis effects). To elaborate on this point, note that for output effects to be temporary, in the post-crisis period there needs to be an interval of above-trend growth that will return the economy to the path it would have followed in the absence of the crisis. As long as the channels listed above reduce potential output, there is no reason to expect a period of higher growth to follow after the adjustment has taken place. This may also hold in cases where the crisis is accompanied by a reduction in debt and the capital stock from unsustainable levels. During the stock adjustment phase, output growth is slower or negative until the excess is reabsorbed, at which point the economy can return to its previous trend growth rate. In such a case, the adjustment phase is not followed by a period of above average growth, so that permanent effects on output are observed.

#### II.A.3 The expected benefits from reducing the frequency of banking crises

Based on the reported results in this section, Table 2 shows the expected annual benefit that would accrue from reducing the probability of a banking crisis by 1, 2 or 3 percentage points per year, respectively. The benefit is calculated as the reduction in the annual probability of a

crisis times the cost of a crisis, measured as the discounted present value of the cumulative loss.

These benefits depend on the costs of the crisis. The first column reports the benefits arising under the assumption that crises have no permanent effects – the case in which the median cumulative loss is 19% of pre-crisis GDP ( $\delta$  = 0). The second column reports the benefits assuming the median cost of crises across all comparable approaches reported in the literature. ¹³ This implies a loss equivalent to 63% of pre-crisis GDP and could be thought of as corresponding to a moderate permanent effect on output (eg  $\delta$  = 3%). The third column looks at the consequences if the output costs of crises are assumed to be equal to the median loss reported by studies that allow for permanent effects (ie 158% of pre-crisis GDP or  $\delta$  = 7.5%). However, given the uncertainty associated with the estimates and taking a prudent approach, less emphasis is placed on these results in the analysis that follows. ¹⁴

The table shows that reducing the probability of crises has substantial benefits. Even in the absence of any permanent crisis-related output effects, a 1 percentage point reduction in the probability of crises generates a benefit on the order of 0.2% of GDP per year. When crises have long-lasting effects, the gains are commensurately larger, between 0.6% and 1.6% of GDP per year.

Table 2

Expected annual benefits of reducing the annual probability of crises¹

Reduction in probability of crises (in percentage points)	Crises have no permanent effect on output	Crises have a long-lasting or small permanent effect on output	Crises have a large permanent effect on output
1	0.19	0.63	1.58
2	0.38	1.26	3.16
3	0.57	1.89	4.74

¹ The expected annual benefits are measured as the reduction in the annual probability of a crisis times the (discounted) cumulative output losses due to a banking crisis. Cumulative output losses are 19% (no permanent effect), 63% (small permanent or long-lasting) and 158% (large permanent). All the figures are in percentages of long-run GDP per year.

The results in Table 2 are simply the product of the change in the annual probability of a crisis and the cost if the crisis occurs. Put differently, these estimates do not depend on how the reduction in the likelihood of a crisis is achieved. The next section links the tighter regulatory standards to the change in the probability of a banking crisis.

This has to exclude the studies that measure output losses only as the peak-to-trough fall in GDP, as they do not take into account the length of the crises (cumulative losses).

The high-side estimates are based on studies that extrapolate a significant portion of the observed post-crisis shortfall in output into the indefinite future. However, the longer lasting the reduction in output, the greater the chance that it could reflect other factors, such as a persistent slowdown in trend productivity growth that occurred independently of the financial crisis; in fact, such factors may be an underlying cause of the financial crisis itself. Given this risk, it seems prudent to take a conservative approach and focus on the two lower sets of estimates in this analysis.

#### II.A.4 The impact of capital and liquidity requirements on the probability of crises

The report uses three different methods to estimate the relationship between regulatory requirements and the probability of a crisis occurring in a given year: reduced-form models, calibrated portfolio models and calibrated stress test models. The results point to a clear role for capital. Liquidity is also important, but because it presents more data and modelling challenges than capital its impact is addressed by fewer models and results vary more across models. The rest of this section outlines the methodologies followed and presents the main results. Annex 2 provides a more detailed description of the models and the individual results. ¹⁵

#### Methodologies

Reduced-form models estimate the probability of crises based on the statistical relationship between the incidence of crisis episodes and aggregate data on banks' leverage and liquidity, as well as other variables that serve as controls. The report used results from three such models examining the experience of a panel of countries over a period of nearly 30 years (1980–2008). These models incorporate the impact of liquidity on the probability of crises, albeit in the form of the ratio of liquid assets to total assets rather than the ratios specified in the December 2009 proposals of the Basel Committee. Two models also makes a distinction between liquidity on the asset and liability (funding) sides of the balance sheet, by introducing the ratio of deposits to total liabilities as an additional variable.

Portfolio models employ standard portfolio credit risk methodologies to quantify the impact of higher regulatory requirements on the probability of systemic crises by treating the system as a portfolio of banks – each bank being the analogue of a security in a portfolio. One model uses data for five UK banks, including information on counterparty credit risk in the interbank market. The other model analyses a system of more than 50 large global banks. Both models use information from market prices as key input parameters, such as default correlations, in deriving the likelihood of a systemic crisis. Given their structure, however, neither of these models can assess the impact of liquidity requirements. With this in mind, the model estimated on the sample of global banks was augmented by a reduced-form relationship between the probability of default of the banks in the portfolio and their capital and liquidity ratios in order to produce another set of results that is also applicable to liquidity ratios.

The final approach used in this exercise relies on the Bank of Canada's stress testing framework. This methodology is based on the idea that the failure of a bank arises from either a macroeconomic shock or spillover effects from other distressed banks. Spillover effects arise either because of counterparty exposures in the interbank market or because of asset fire sales that affect the mark to market value of banks' portfolios. In this context, a greater buffer of liquid assets can only be beneficial insofar as it helps the bank to avoid asset fire sales, which would otherwise lead to losses. The resilience of the system is measured in terms of its response to very severe macroeconomic shocks.

#### Results

Table 3 summarises the core results. These are reported as the average probabilities of a crisis implied by the various models for different levels of capitalisation. The two right-hand

Annex 2 also reports point estimates of the probability of a systemic banking crisis, which correspond to various capital ratios and, where appropriate, liquidity buffers for the individual modelling approaches.

¹⁶ One model was estimated by the UK FSA/NIESR, and the other two by the Bank of Japan (see Annex 2).

columns of the table also report the impact of meeting different levels of strengthened liquidity standards using the subset of models that can analyse the impact of liquidity.

The interpretation of the results is subject to two caveats, which highlight the uncertainty surrounding the findings. First, as with all econometric exercises, many estimates reported here are based on historical correlations between capital and liquidity levels, on the one hand, and the occurrence of crises, on the other. These backward-looking correlations may not accurately represent future relationships or causal links. That said, the more structural calibrated portfolio models should be more robust to this critique, though these models also rely upon assumptions regarding long-run relationships among variables. Second, the models used in this context rely more than other parts of the analysis on capitalisation and liquidity ratios that are different from the standard ones used across the report. Hence, the interpretation of the results requires as an intermediate step a mapping of the relevant regulatory variables into those used in the models. The need to make these conversions using statistical estimates introduces additional uncertainty about the estimates, which is more pronounced in the case of the liquidity ratios. In this context it should be noted that actual levels held by banks typically include buffers above the minimum.

Table 3

The impact of capital and liquidity on the probability of systemic banking crises

(In percent)

All models		Models unable to assess changes in liquid assets		dels incorpora ges in liquid a	
TCE/RWA	No change in liquid assets	No change in liquid assets	No change in liquid assets	Meeting NSFR (NSFR = 1) ¹	NSFR = 1.12 ²
6	7.2	8.7	5.8	4.8	2.7
7	4.6	5.1	4.1	3.3	1.8
8	3.0	3.1	2.8	2.3	1.2
9	1.9	1.9	2.0	1.6	0.9
10	1.4	1.3	1.5	1.2	0.7
11	1.0	0.9	1.1	0.9	0.5
12	0.7	0.6	0.8	0.7	0.4
13	0.5	0.5	0.6	0.5	0.3
14	0.4	0.4	0.5	0.4	0.2
15	0.3	0.3	0.3	0.3	0.2
# models	6	3	3	3	3

¹ Meeting the NSFR is modelled as a 12.5% increase in the ratio of liquid assets over total assets. ² The NSFR equals 1.12 if liquid assets increase by 50% for the average bank.

Nearly all of the results reported below are based on models calibrated to the ratio of total capital to total assets rather than to that of TCE to RWA. Similarly, due to the lack of data, the analysis of the impact of higher liquidity was first conducted in terms of the ratio of liquid assets to total assets and then converted (approximately) to the ratios in the BCBS December 2009 proposals.

¹⁶ Annex 5 describes the mapping procedure.

A consistent result across different models and methodologies is a significant reduction in the likelihood of a banking crisis at higher levels of capitalisation and liquidity for the banking system as a whole. This is true both for the models that focus only on capital (summary shown in third column from the left) and those that incorporate liquidity effects (summary shown in the fourth column). A TCE/RWA capital ratio of 7% is roughly equivalent to the average capital to total asset ratio of 5% and is associated with a probability of a systemic crisis of 4.6%, which is roughly equal to the historical average experience. 19 As a result, one can think of the corresponding row and the columns that do not consider any increase in the liquidity ratio as reflecting the pre-reform steady state. Increasing the capital ratio from 7% to 8%, with no change in liquid assets, reduces the probability of a banking crisis by one third (eg from 4.6% to 3.0%). Looking at the models that incorporate changes in liquid assets, increasing the liquidity ratio to meet the NSFR while keeping a capital ratio of 7% reduces the likelihood of systemic banking crises from 4.1% to 3.3%. The reduction in the probability of crises continues as capital and liquidity levels increase, as can be seen by comparing figures down the rows (for capital) and across the three columns on the right-hand side (for liquidity). In fact, if the liquid assets to total assets ratio exceeds the proposed liquidity requirement, at a 7% TCE/RWA ratio, the estimated reduction in the probability of crises is about the same as that associated with an increase of 2 percentage points in the capital ratio (from 7% to 9%).

Another consistent result across models is that the incremental benefit of higher capital and liquidity requirements declines as the system becomes better capitalised. That is, when banks have low levels of capital, even small increases have a very significant impact, but the marginal benefit of further increases in capital ratios declines as banks move further away from the insolvency threshold. For instance, increasing capitalisation from 10% to 11% induces a drop in the likelihood of crises about one quarter to one third of the corresponding estimated drop when TCE/RWA increased from 7% to 8%. Similarly, the incremental fall in crisis probabilities from a tightening of liquidity standards declines as the levels of capital increase. These results are fairly intuitive. The rationale is quite similar to that applying in the context of risk models applied to individual banks. For a given volatility in the value of assets, the further away a bank is from the insolvency threshold, the lower is the benefit of additional protection.

This declining marginal contribution of capital and liquidity in reducing the probability of crises has two important implications. First, the benefits of tighter standards are not without bounds but they plateau at some point. Second, the benefits will depend not only on the initial conditions for capital and liquidity, but also on the other conditioning variables used to calibrate these models.

As mentioned earlier, these results on the impact of tighter regulatory standards on the probability of crises are subject to considerable model and estimation uncertainty. Despite the fact that the message from different models is quite consistent, there is a possibility that the effect could be different from that estimated. One possibility is that the decline in the probability of crises is more gradual than suggested by Table 4 and Annex 2. If so, the rate at which benefits of tighter regulatory standards accrue would be lower than reported. This could arise, for instance, if banks responded in part to the imposition of standards by seeking to increase the risks they take on (eg, increase the volatility of their assets) in undetected ways. However, to the extent that net benefits remain positive, in order to achieve a comparable level of benefits, standards would have to be tightened further than implied by

The average ratio of total capital and reserves to total assets for the 14 largest OECD countries from 1980 to 2007 is 5,3%. Using an average of the conversion tables presented in Annex 5, a TCE/RWA ratio of 7% is equivalent to a 5% ratio of total shareholder equity over total assets.

this analysis. In other words, the overall economic gain might be lower but capital and liquidity standards would have to be set at a higher level in order to bring about these benefits.

#### II.A.5. The impact of capital and liquidity requirements on the severity of crises

Higher capital and liquidity standards are likely to reduce not just the probability, but also the severity of banking crises. Intuitively, higher aggregate levels of capital and liquidity should help insulate stronger banks from the strains faced by the weaker ones. Surprisingly, there is no extant academic research on this issue. That said, a simple exploration of the data provides some support for this intuition.

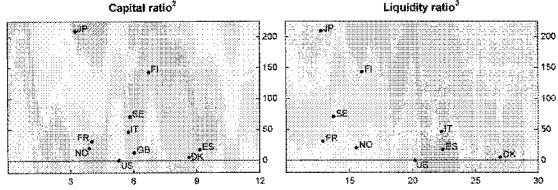
Graph 3 is a scatter plot of the estimated GDP costs of crises (on the vertical axis) against the aggregate level of capital and liquidity buffers in each country's banking system immediately prior to the onset of the crisis (on the horizontal axis). The data suggest that lower capital-to-asset ratios and lower liquidity ratios are associated with higher output losses during the ensuing crisis. Unfortunately, the relationship is relatively weak, with the implied regression coefficient not statistically different from zero — a result that may be due to the limited number of observations (10 crises only). On the spirit of conservatism, these possible benefits are not included in the calculation of net benefits discussed in section IV below, effectively assuming that tougher standards have no impact on the severity of crises.

Comparing capital and liquidity buffers with the length of systemic banking crises yields similar results. The number of years that it takes for GDP to return to its long-run trend growth rate is inversely related to the aggregate level of the two types of buffers prior to the crisis. Statistics presented in Barrell et al (2010b) support this finding.

#### Graph 3

#### Captal and liquidity ratios and the severity of past crises

Cumulative output losses relative to pre-crisis GDP (in percent)¹



¹ Output losses are measured as the cumulative difference between actual and trend output during the crisis period. Crisis dates are as in Laeven and Vetencia (2008). ² The capital ratio is the ratio of total capital to total assets. ³ The liquidity ratio is the ratio of cash, balances with the central bank and securities to total assets.

Sources: OECD; IMF; BIS calculations

### II.B. Economic benefits from reducing the volatility of output

In addition to the benefits from reducing output losses associated with banking crises, higher capital and liquidity requirements may also reduce the amplitude of normal business cycles. Studying this question requires the use of recently developed dynamic stochastic general equilibrium (DSGE) models that explicitly integrate bank capital and, in some cases, measures of liquidity.²¹ The analysis indicates that the reforms have a modest dampening effect on the volatility of output. This effect appears more sizeable if countercyclical buffers are in place.

To examine the impact of capital and liquidity on output volatility in normal times, simulations were conducted assuming an increase in the capital ratio of 2, 4 and 6 percentage points relative to a baseline. In the baseline case, an economy begins in steady state and is hit by a technology shock (a positive or negative change in productivity, for instance) with no change in bank capital and liquidity ratios. This shock generates output volatility, measured by the standard deviation of output from its steady state. The exercise is then repeated assuming capital ratios that are 2, 4 and 6 percentage points higher. The difference in the standard deviation of output between the two scenarios provides an estimate of the benefit of higher capital requirements on output volatility. A similar experiment is then run assuming that banks' liquid assets to total assets are increased relative to the baseline by 25 and 50 per cent, respectively. The results reported here focus on the United States and the euro area, two economies for which the group had access to such models.

Semi-structural models, which are also used for monetary policy purposes, do not explicitly feature bank capital and liquidity and are not appropriate to calculate the impact of tighter capital and liquidity requirements on output volatility, as opposed to the level of output. The reason is that in this case the change in the standards has to be modelled as an adjustment to the level of the borrowing rates. As the size of the adjustment is constant, and does not reflect economic conditions over the cycle, it does not have a material impact on volatility, Further details on the suite of models used in this report are provided in Annex 4. Note that similar DSGE models are also used in the work of the MAG.

Table 4 presents the results for the various scenarios. They show that increases in capital and liquidity requirements can reduce the volatility of output in response to a shock. The magnitude of the effect varies across models and simulations, ranging between a minimum decrease in standard deviation of output of 0.5 percentage points and a maximum of 15 percentage points relative to the baseline. Using medians across models, a 2 percentage point increase in the capital ratios reduces the standard deviation of output by a modest 1.9 percentage points. Higher liquidity requirements reduce output volatility somewhat further. For example, the workstream examined the impact of a 25% increase in the ratio of liquid assets to total assets, which in the context of these models could be regarded as roughly equivalent to meeting the NSFR. This increase in liquidity combined with a 2 percentage point increase in capital ratios reduces the standard deviation of output by 3.1 percentage points. ²³

Table 4

Decrease in the standard deviation of output due to regulatory tightening¹

Increase in TCE/RWA relative to baseline	Target liquidity tightening relative to baseline	Average	Min	Max	Median	Number of models
(percentage points)	(percentage increase)		(percent	decrease fro	m baseline)	
2	Ō	2.5	5.1	0.5	1.9	5
4	O	5.2	10.8	1.1	3.9	ű
6	0	7.6	16.4	1.5	6.0	5
2	25	3.0	4.5	1.4	3.1	4
4	25	5.4	10.3	2.2	4.6	4
6	25	8.3	15.9	3.1	7,1	4
2	50	4.2	5.9	3.4	3.8	4
4	50	7.3	9.6	5.4	6.9	4
6	50	-0.1	15.5	7.0	8.9	4

Decrease in the unconditional standard deviations when the economy is hit by a technology shock.

The basic intuition for the reduction in volatility is straightforward. Higher capital and liquidity ratios permit banks to absorb losses in downturns and restrain lending in a boom, thereby smoothing the supply of credit over the cycle, and, as a consequence, also investment and consumption.

The translation of meeting the NSFR into variables captured by these macro models is not straight forward. The group, therefore, used an indirect approach. Section III shows that meeting the NSFR translates into a 14bp increase in lending spreads. Work by the MAG shows that a similar spread increase is the result of a 25% increase in the ratio of liquid assets relative to total assets. Hence, the group concluded that meeting the NSFR can be approximated by a 25% increase in the liquid asset ratio.

This figure should be interpreted as broadly indicative, as it depends inter alia on the measure of voiatility used. Clearly, the decline in the variance of output – an equally plausible measure – would yield quantitatively different results.

Carrying this intuition a step further, the models that include bank capital also allow a tentative evaluation of the impact of a countercyclical capital buffer on the volatility of economic output. A variant of such a buffer is currently being consulted on by the Basel Committee (BCBS (2010)). To explore this issue, the models were augmented with a countercyclical capital requirement rule, which causes the capital requirement to increase in step with the credit-to-GDP ratio.²⁴

The results, summarised in Table 5 below, suggest that such a rule can substantially reducing the volatility of key variables, including output. For example, the unconditional output standard deviation tends to decline by almost one fifth with respect to a baseline in which no countercyclical rules are in place.

Table 5

Decrease in the standard deviation of output due to countercyclical capital buffers¹

Increase in TCE/RWA relative to baseline	Target liquidity tightening relative to baseline	Average	Min	Ħах	Median	Number of models
(percentage points)	(percentage increase)		(percentage	deviation fro	m bassline)	
2	0	16.7	22.4	10.2	17.6	3
4	Ö	18.4	21.6	16.3	17.2	3
6	0	19.8	21.6	16.6	21.3	3
2	25	16.7	22.5	9,8	17.9	3
4	25	15.0	20.7	16.0	17.2	3
	25	19.8	21.5	16.4	21.4	3
2	50	16.7	23.3	9,3	17,6	3
4	50	17.9	21.3	15.6	16.8	3
6	50	20.1	23.3	16.0	21.1	3

¹ Decrease in the unconditional standard deviations when the economy is hit by a technology shock, in the baseline no countercyclical rules are in place.

#### III. Economic costs

The computation of the steady-state economic costs of higher capital and liquidity requirements for the level of output are based on a variety of macroeconomic models, which are described in Annex 4. As explained in greater detail below, some of the models include measures of bank capital and liquidity, allowing for a direct examination of changes in capital and liquidity on the long-run level of output. For the models that do not include measures of bank capital or liquidity it is necessary to follow a two-step procedure. First, the increase in capital and liquidity is mapped to an equivalent change in lending spreads, as borrowing costs are always included in the models. Then, this increase in lending spreads is used as an input to compute the adjustment in the level of steady-state output. In either case, the fall in

Purely as an illustration, the simulations employed a prudential rule that increases the capital requirement when the credit-to-GDP ratio increases, so as to generate movements of the capital ratio in the neighbourhood of ±2 percentage points around its steady state, and to mimic the effect of a capital buffer.

the level of output represents the economic cost of the regulatory change. This section describes the first, intermediate step and then considers the impact of the regulatory reform across the whole set of models used in the analysis.

The steady-state analysis assumes that the impact of higher capital and liquidity operates through the higher cost of credit. By focusing on price adjustments, the analysis does not capture any possible impact of credit rationing that might arise from more stringent requirements. The reason for this choice is precisely that the analysis focuses on the long-run steady state, after banks have fully adjusted to the new requirements. While banks might shrink their assets by rationing credit if the transition period is too short, the impact of credit rationing is likely to be much smaller in the long run, as markets have time to clear. Non-price effects are likely to be more important during the transition, and are thus considered in the work of the MAG.

### III.A. Changes in lending spreads

This section describes the first step of the two-step process of calculating the impact of changing capital and liquidity requirements on economic output and welfare: the change in lending spreads. Capital and liquidity requirements are considered in turn.

While the analysis is based on a number of assumptions, it utilises information for a broad range of countries. The cornerstone of the analysis is a representative bank for each of 13 countries, drawing on income and balance sheet data averaged over a total of 6,660 banks for the 15-year period from 1993 to 2007. The resulting balance sheet and a set of costs of funds and returns on assets for each representative bank are assumed to represent a long-run average (steady state) that reflects each country's institutional setting and regulatory framework. Table A3.1 in Annex 3 reports the weighted average bank balance sheet and income statement across the whole sample. 26

#### III.A.1 The impact of higher capital requirements

Mapping the impact of the higher capital requirements on lending rates requires estimates of the cost of various sources of funding. The cost of equity is assumed to equal the 15-year average return on equity (ROE) for each country, which averages 14.8% across the countries in this sample.²⁷ The cost of liabilities is based on short-term and long-term wholesale debt, and is calibrated to match the historical ratio of interest expense to total assets observed for each country. The computation assumes a fixed spread over deposits of 100 basis points for short-term debt and 200 basis points for long-term debt. These spreads are consistent with historical averages across the countries in this sample, and generate an upward sloping yield curve.²⁶

The experiment assumes that the TCE/RWA ratio is raised by increasing equity and reducing long-term debt correspondingly. Importantly, it assumes (i) that any higher cost of funding

The countries considered in this analysis are: Australia, Canada, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, Spain, Switzerland, the United Kingdom and the United States.

²⁸ All variables are standardised by dividing by each bank's total assets in each year.

Note that taking a 15-year average ROE may bias the overall cost estimates upwards if the last 15 years are not reflective of the long-term cost of equity, perhaps because they were associated with a period of near-continuous economic expansion and extraordinary bank profitability in many countries.

Details on all the assumptions used in this analysis, and their impact on the results, are provided in Annex 3.

associated with this change is *fully recovered exclusively* by raising loan rates – 100% pass-through; and (ii) that the costs of equity and of debt are *not* affected by the lower riskiness of the bank. As discussed in more detail below, this, together with the rather conservative assumption about the initial ROE, suggests that the results should be viewed as providing something close to an upper bound of the impact on loan spreads.

Next, the capital ratio for the representative bank in each country is increased by increments of 1 percentage point. All else equal, this reduces ROE.²⁸ White part of the fall in ROE is offset by the smaller amount of debt outstanding, reducing the bank's interest expense, the overall effect of the change in capital structure is to reduce net income as debt is substituted with more expensive equity. In line with the full-pass-through assumption, banks are assumed to pass on these additional costs to borrowers, raising the spreads charged on loans in order to exactly offset the increase in the cost of funding, keeping ROE unchanged at its historical average level.

Column A of Table 6 reports the results of this exercise. In order to keep ROE from changing, each percentage point increase in the ratio of TCE to RWA results in a median increase in lending spreads across countries of 13 basis points.

This result is obviously sensitive to a number of the assumptions in the analysis. For example, if the average ROE for the representative bank in steady state is 10.0% (rather than the 1993–2007 average of 14.8%), then the gap between the cost of equity and the cost of debt is smaller and the relative attractiveness of leverage is reduced. Based on this lower ROE assumption, a 1 percentage point increase in TCE/RWA can be offset by raising lending spreads by 7 basis points.

Moreover, banks could offset the loss of net income arising from meeting increased capital requirements through other means than raising loan rates. For example, banks could in principle (i) increase non-interest income (eg fees and commissions), (ii) reduce the rate paid on deposits, or (iii) reduce operating expenses. Any combination of these actions will generate higher net income and reduce the need to raise lending spreads.

It is possible to provide a sense of the magnitudes involved. The rise in lending spreads associated with a 1 percentage point increase in the capital ratio could be avoided by reducing operating expenses by 3.5% (median). Similarly, a 1.9 percentage point fall in median ROE is sufficient to absorb a 1 percentage point increase in the capital-to-RWA ratio.

Indeed, there are good reasons to believe that the cost of capital would decline in response to a reduction in bank leverage. As capital levels increase and the bank becomes safer, both of these costs should decline, further reducing the impact on lending spreads. And, in the limit, the change in the cost of capital could reduce to tax effects (Modigliani and Miller (1958)). Such a decline has not been considered in the estimates included in the table.

Academic studies have also provided estimates of the long-run costs of higher capital requirements. These confirm the conclusion that the median estimates in this report, used to derive the core measure of net benefits in section IV, are very conservative.

Return on equity (ROE) = net income / shareholders' equity.

Academic studies which place the real cost of equity for banks in the region of 10% include Zimmer, S A and R N McCauley (1991), King, M (2009), Capie, F and Billings, M (2004).

Table 6								
Impact of increases in capital and liquidity requirements								
on lending spreads (in basis points)								

Increase in capital ratio (percentage points)	Cost to meet capital (A)	Cost to meet NSFR (B)	Total (A+B)	Cost to meet NSFR	Total (A+C)	
			ng RWA anged	Accounting for decline in RWA		
O	0	25	25	14	14	
<b>*</b> *	13	25	38	13	26	
+2	26	25	51	13	39	
+3	39	24	63	11	50	
+4	52	24	76	8	60	
<del>4</del> 5	65	24	89	6	71	
+6	78	23	101	5	83	
Inter-quartile range (25th to 75th percentile) for a 1 pp change in capital	9 to 19	16 to 46		11 to 25		

Using a method close to the one presented in this section, Elliott (2009, 2010) studies the long-run effect of tightening capital requirements on banks' lending spreads in the United States. Elliott's analysis suggests that these effects are small, especially if banks are able to offset any increase in their funding costs by other means (eg, a reduction in their return on equity (from 15% to 14%), in the remuneration of deposits and administrative costs). Elliott estimates that without these offsets, lending rates would rise by about 80bps in the long run in response to a 4 percentage point increase in the ratio of equity over unweighted assets; with the adjustments, lending rates would only increase by 20bps. Given that banks only provide some of the credit in the economy, Elliott concludes that this 20bps increase would translate into an overall increase in lending costs of 5 or 10 bps.

Using very different tools, Kashyap, Stein and Hanson (2010) also conclude that the long-run costs of increasing capital requirements are likely to be small. They find that, as a first approximation, the Modigliani-Miller theorem appears to describe quite well the empirical relationship between banks' return on equity and their leverage. Higher capital ratios should therefore significantly reduce banks' per-unit cost of capital. Using data for the US, the authors find that a 4 percentage point increase in the ratio of equity over unweighted assets would lead, in the long run, to a 10 bps increase in banks' funding costs if tax effects are the only departure from Modigliani-Miller; rising only to up to 18 bps if further possible departures are considered.

### III.A.2 Calculating the impact of higher liquidity requirements

Based on the information available to the LEI working group, it was only possible to model the December 2009 proposal for the NSFR, albeit imperfectly.

The cost of meeting the NSFR depends on assumptions about the structure of banks' balance sheets and the strategies banks are assumed to follow when adjusting. The analysis assumes that banks follow a specific sequence of adjustments, with costs rising with each subsequent step. Once the NSFR is met, subsequent adjustments are not required. Following the same approach used for capital, it is assumed conservatively that all the cost

of meeting the NSFR is recovered by raising lending spreads — 100% pass-through — and that the costs of debt and of equity are not affected by the higher liquidity of the balance sheet. The analysis considers the cost of meeting the NSFR both including and excluding the potentially substantial synergies in meeting the capital requirement due to the corresponding reduction in RWA.

In order to meet the NSFR, it is assumed that banks make the necessary changes to their assets and liabilities in the following order:

- 1. Banks lengthen the maturity of wholesale funding. Banks are assumed to initially fund 25% of their wholesale debt at less than one year, and reduce this quantity towards zero as they work to meet the NSFR. The result is an increase in interest expense based on the difference between the costs of short- and long-term debt. Throughout, the volume of interbank funding and that of trading liabilities are assumed to remain unchanged.
- 2. Banks increase their holdings of highly rated, qualifying bonds. This shift away from lower-rated, higher-yielding assets is assumed to reduce the return on these interest-earning assets by 100 basis points.
- 3. Finally, and only if needed, banks reduce "Other assets". Interest income declines, assuming these other assets earn a higher return compared to the original investment portfolio.

Each of these changes either reduces interest income or raises interest expense, thereby lowering net income. Banks avoid a fall in their ROE by raising lending spreads. This increase in lending spreads is over and above that due to higher capital requirements.

It is important to note that when a bank changes the composition of its balance sheet to meet the NSFR, it increases its holdings of high-quality assets, lowering its RWA. This reduces the capital that must be held to satisfy a given capital requirement.

Columns B and C of Table 7 report two estimates of the costs of meeting the NSFR, depending on whether the change in RWA is taken into account or not. When the rebalancing from risky to risk-free assets in banks' investment portfolios is assumed not to affect RWA, lending spreads increase by 25 basis points on average to maintain ROE (see column B). When the synergies are taken into account, the additional cost to meet the NSFR is significantly lower, at 14 basis points or less (column C).

These estimates are clearly sensitive to the assumption concerning the amount of interest income that is lost by shifting from investments in high-yielding, low-rated bonds to investments in low-yielding, high-rated bonds. On average, the impact on lending spreads is proportional to the loss of income from investments. Thus, if the opportunity cost on investments is doubled from 100 to 200 basis points, the impact on lending spreads doubles as well — from 25 to 50 bps when ignoring the decline in RWA, or from 14 to 28 bps taking the fall in RWA into account.

This analysis of the impact of the NSFR on lending spreads is rather conservative. As in the case of capital requirements, it assumes funding costs that are insensitive to risk and 100% pass-through. Moreover, banks have options that are more cost-effective and competitive

³¹ Other assets include a bank's buildings and properties, which represent less than 1% of total assets on average.

than simply raising lending rates. One example is to reduce the maturity of some corporate loans to less than one year.

#### III.B. Impact on the long-term steady-state level of output

Turning to the second step of the analysis, this section examines the impact of increases in bank capital and liquidity on the steady-state (long-term) level of output. This is done using a suite of models: (i) structural models, including DSGE models; (ii) semi-structural models, commonly used by central banks for forecasting purposes; and (iii) reduced-form models, such as vector error correction models (VECM).³² As far as possible, the analysis was carried out using the same models employed in the work of the MAG.

That said, choices of methods were constrained by the need for the models to exhibit two features. First, the steady state of the models must be affected by the proposed new regulation — otherwise the model would simply assume away any long-term economic impact. Second, it must be relatively straightforward to compute the change in the steady state. The first criterion excluded most reduced-form approaches, in which the notion of steady state is typically not meaningful. So, for example, this report could not draw on the vector autoregression approach used in the MAG since, by construction, those models always return (possibly slowly) to the baseline following a shock. The second criterion excluded most of the large-scale models used by the MAG.

Of the 13 models considered in this report, eight feature bank capital alone, while five feature both bank capital and bank liquidity.

As emphasised in the previous discussion, changes in capital and liquidity requirements have an impact on economic activity by increasing the cost of financial intermediation. With borrowing more costly, there is a reduction in the level of debt-financed investment and consumption. While the resulting reduction in aggregate demand should lower inflationary pressures, inducing a monetary policy easing that could offset the increase in lending spreads, in these models monetary policy has no impact in the long run. In other words, the steady state is determined solely by real factors, of which the real cost of intermediation is one

in models that do not include the relevant regulatory variable directly, the effects of tighter capital and liquidity requirements are proxied by an increase in the lending spread. Following the previous analysis, as summarised in Table 6, each percentage point increase in the capital ratio is assumed to result in a 13 basis point increase in the lending spread, and meeting the NSFR in an additional 14 basis point, or 25 basis points, increase, depending on whether the corresponding fall in RWA is taken into account or not.

Importantly, as most of the models are largely linear, the effects of tighter regulation on output are approximately linear as well. That is, doubling the increase in capital or liquidity requirements roughly doubles the effect on output, regardless of its starting level.

Table 7 shows the impact on output of increasing the ratio of TCE to RWA by 2, 4, and 6 percentage points, respectively. The first three rows measure the impact of the higher capital

³² See Annex 4 for further details on the modelling approaches.

requirements alone, while the rows below include the cost of meeting the NSFR.³³ A 1 percentage point increase in the capital requirement (with no change in liquidity ratios) translates into a 0.09% median loss in the level of output, with a range from 0.02% to 0.35%.³⁴

This estimate is corroborated by two additional pieces of evidence. First, the estimate is in line with the results obtained by the MAG for the end of the simulation period but using a broader set of models, including the large-scale semi-structural ones. Since the simulation period is rather long (32 quarters), the end-of-period effect can be viewed as an alternative approximation to the long-run output cost of the new regulation. Under the main approach in the MAG report ("standard" macroeconomic models), a 1 percentage point increase in the capital ratio yields a 0.10% decline in output after 32 quarters (median across models). Second, the estimate is in line with an alternative measure of the costs of higher capital. This measure is based on welfare (a utility-based concept), and is expressed in terms of permanent consumption loss. Results from this method, reported in more detail in Annex 6, suggest that a 1 percentage point increase in capital ratios results, on average, in a fall of steady-state consumption of 0.10%.

Taking the cost of meeting the higher liquidity requirements into account leads to an additional decline in the level of output. Including the synergies between meeting the higher capital requirement and the NSFR – the case that includes the impact on RWA – the estimated median impact amounts to an additional 0.08 percentage point fall in output. Without taking into account these synergies, the additional median fall in output is 0.15 percentage points.³⁵

Models which are able to model the ratio of liquid assets directly, rather than rely on the estimated increase in lending spreads, approximate meeting the NSFR by a 25% (50%) increase in the ratio of liquid assets to total assets if RVVA are allowed (not allowed) to adjust. See footnote 22 for a further details.

This is calculated as the average impact across the medians reported in Table 7; ie 1/3 x (.02/2 + .33/4 +.5/6)

This is calculated as the average impact for different capital levels of additionally meeting the NSFR, with and without falls in RWA. Eg for meeting NSFR with a fall in RWA = 1/3 ( 0.25-0.2 +0.45-0.33 +0.59-0.5)=0.08.

Table 7

Steady state output loss due to regulatory tightening¹

Increase in TCE/RWA ratio relative to current level ²	Target liquidity tightening relative to current level ³	Euro area  DSGE models, with bank capital	Euro area DSGE models, without bank capital	United States DSGE and VECM models, with bank capital	United States DSGE models, without bank capital	Italy, United Kingdom Semi- structural models, without bank capital	Average	Std Dev	Min	Max	Median	Number of models
(percentage points)	(percentage increase)				(percentar	ge deviation from	n baseline)			1.0.000000		
2	ē.	0.29	0.24	0.10	0.29	0.29	0.25	0.20	0.04	0.70	0.20	13
4	1 0	0.53	0.49	0.25	0.57	0.58	0.47	0.35	0.07	1.10	0.33	13
6		0.81	0.72	0.35	0.83	0.84	0.69	0.50	0.07	1.58	0.50	13
2	NSFR, fall in RWA	0.34	0.34	0.20	0.40	0.45	0.37	0.30	0.00	1.07	0.25	13
Ā	NSFR, fall in RWA	0.63	0,61	0.35	0.72	0.73	0.61	0.44	80.0	1.47	0.42	13
6	NSFR, fail in RWA	0.86	0.86	0.50	0.96	0.99	0.80	0.56	0.08	1.85	0.59	13
	NSFR, no change	0.49	0.46	0.29	0.56	0.56	0.51	0.40	0.07	1.52	0.33	13
2	in RWA NSFR no change in RWA	0.73	0.72	0.49	0.82	0.83	0.72	0.52	0.07	1.83	0.50	13
6	NSFR no change in RWA	0.96	0.98	0.59	1.06	1.09	0.92	0.63	0.07	2.05	0.65	13

¹ Unweighted averages across models. ² When bank capital is not included in the model, each 1 percentage point increase in the capital ratio is translated into a 13 basis point increase in the spread. ³ Meeting the NSFR without considering the impact on RWA is assumed to translate into a 25 basis point increase in lending spreads, while taking the synergies of liquidity and capital regulation into account reduces the cost to 14 basis points.

### IV. Net benefits

This section brings together the analysis of the economic benefits and costs carried out so far. It first derives a summary estimate of the net benefits associated with the reduction in the incidence of banking crises. Following the previous analysis, these calculations are in terms of the *level* of output. For that reason, the benefits that arise from a lower *volatility* of output are not included at this stage. The section then highlights a broader set of considerations, not explicitly included in the summary estimate, that need to be taken into account when forming an overall assessment. The main conclusion is that, on balance, there is considerable room to raise capital and liquidity requirements while still yielding net benefits.

In making an assessment of the net benefits in terms of the level of output per year, it is important to understand the relationship between benefits and costs over time. Higher capital and liquidity reduce the annual probability (and arguably the severity) of banking crises, but the costs of the crisis are not limited to the crisis year, as they have long-lasting, possibly permanent, effects on output. The cost of tighter regulation is the yearly cost in terms of output forgone. The more permanent the effects of a crisis are on output growth, the larger is the annual net benefit.

An apt analogy is with a museum's security system. The system lowers the probability of a break-in, but if the break-in takes place, the costs can be substantial and may even be permanent, if unique works of art are irreparably damaged or lost forever. The yearly benefit reflects this lower probability times these long-lasting effects. The yearly cost includes the running costs, in the form of wages for staff, maintenance and the like. The benefits and costs of regulation in any given year are similar: the benefit is the annual reduction in the probability of a crisis in the given year times its (discounted) long-lasting costs, which extend beyond that year; the cost is the lower annual output during that year.

Table 8 and Graph 4 provide summaries of the results from the previous sections of the report. They show the estimated benefits and costs and corresponding net benefits measured by the percentage change in the yearly level of output. These changes should be interpreted relative to the pre-reform steady state, proxied by the historical average level of the capital ratio (7%) and frequency of banking crises without the liquidity requirements being met (the first row in Table 8 and the origin in the graph). The table and the graph show a range of results, reflecting various estimates of the costs of banking crises, depending on whether costs are estimated as permanent but moderate - which also corresponds to the median estimate across all comparable studies (red line) - or only as temporary (green line). Table 8 also presents the estimates of net benefits when the costs of banking crises are estimated as large and permanent. As noted previously, taking a conservative approach, the report places less emphasis on the latter results. In all cases the results assume that institutions pass the added costs arising from strengthened regulations on to borrowers in their entirety while maintaining pre-reform levels for the ROE, interest costs of liabilities and operating expenses. Thus, in this sense, the costs of meeting the standards may be close to an upper bound. 36

The assessment of the liquidity regulations focuses on the NSFR, as defined in the December 2009 proposal. At the same time, it also provides information pertinent to the assessment of the LCR.

Table 8

Expected long-run annual benefits and costs of tighter regulatory standards¹
(benefits and costs are measured by the percentage impact on the level of output per year)

Capital ratio ²	Expected costs ³	Expected benefits (moderate permanent effect) ⁴	Net benefits (moderate permanent effect) ⁵	Net benefits (no permanent effect) ⁵	Net benefits (large permanent effect) ⁵
Liquidity requiren	nent not met			***************************************	
7%	0.00	0.00	0.00	0.00	0.00
8%	0.09	0.96	0.87	0.20	2.32
9%	0.18	1.62	1,44	0.31	3.87
10%	0.27	1.98	1.71	0.33	4.70
11%	0.36	2.23	1.87	0.31	5,23
12%	0.45	2.39	1.94	0.27	5,54
13%	0.54	2.50	1.96	0.21	5.73
14%	0.63	2.58	1.95	0.15	5.84
15%	0.72	2.64	1.92	0.08	5.90
Liquidity requiren	nent met				
7%	0.08	0.76	0.68	0.15	1.83
8%	0.17	1.40	1.23	0.25	3.33
9%	0.26	1.82	1.56	0,29	4,30
10%	0.35	2.10	1.75	0.28	4.91
11%	0.44	2.29	1.85	0.25	5.30
12%	0.53	2.42	1.89	0.20	5.55
13%	0.62	2.52	1.90	0.14	5.70
14%	0.71	2.60	1.89	0.07	5.80
15%	0.80	2.65	1.85	0.00	5.85

¹ The starting point of the net-benefit analysis corresponds to the pre-reform steady state, approximated by historical averages for total capital ratios (7%) and the average probability of banking crises. ² The capital ratio is defined as TCE over RWA. ³ To meet the liquidity requirement, the annual expected output cost is estimated to be 0.06%. Each 1 percentage point increase in the capital ratio starting at 7% thereafter results in a 0.09% fall in the level of output below the baseline. ⁴ Expected benefits equal the estimated reduction in the annual probability of crisis times the (discounted) cost of a crisis using the median estimate of the cost of crises equal to 63% of pre-crisis output ( moderate permanent effect). ⁵ Net benefits are the difference between expected benefits and costs; expected benefits are calculated assuming a crisis has a moderate permanent effect (cost of a crisis equals 63%), no permanent effect (cost of a crisis equals 158%).

### Graph 4

### Long-run expected annual net economic benefits of increases in capital and liquidity

Net benefits (vertical axis) are measured by the percentage impact on the level of output

#### Increasing capital and meeting liquidity Capital only requirements 20 1.5 Moderate permanent effects No permanent effects 1.0 10 0.5 0.5 0.0 OO 12% 13% 14% 15% 10% 12% 13% 16% Capital ratio Capital ratio

The capital ratio is defined as TCE over RWA. The origin corresponds to the pre-reform steady state, approximated by historical averages for total capital ratios (7%) and the average probability of banking crises. Net benefits are measured by the difference between expected benefits and expected costs. Expected benefits equal the reduction in the probability of crises times the corresponding output losses. The red and green lines refer to different estimates of net benefits, assuming that the effects of crises on output are permanent but moderate (which also corresponds to the median estimate across all comparable studies) or only transitory.

The core message of the graph is that net benefits remain positive for a broad range of capital ratios, with the incremental net benefits from reducing the probability of banking crises gradually declining to become negative beyond a certain range. Admittedly, the precise mapping between higher capital levels and stricter liquidity standards, on the one hand, and the reduction in the probability of crises, on the other, is quite uncertain. With this caveat, the sizeable gap between benefits and costs for a broad range of assumptions still suggests that in terms of the impact on output there is considerable room to tighten capital and liquidity requirements while still achieving positive net benefits.

In reaching an overall assessment, however, it is important to highlight the factors that are not considered explicitly in the previous summary estimates and that could make the final estimate of the net benefits higher or lower. Some of these factors have already been noted and discussed in detail in the report, others not. In some cases, quantifying their effects is exceedingly hard.

Several factors could lead to a higher estimate of net benefits:

- In addition to reducing the probability of banking crises, higher capital and liquidity standards, by making the financial system more resilient, can reduce the amplitude of the business cycle. This impact can be enhanced through countercyclical capital buffer schemes. While hard to compare with the benefits included in the graph, these effects can be significant. They were evaluated in detail in section II.B and Annex 4 of this report.
- In a similar way to that noted above, but focusing on crisis periods, a risk-averse
  society would be prepared to pay a premium over the expected costs of an extreme
  event such as a banking crisis (probability times its cost in terms of output) in order
  to insure against it, ie pay over the actuarially fair price. This premium has not been
  included in the calculations and would increase the benefits.

- The expected costs of crises are based on data from historical episodes featuring large-scale government intervention to minimise the negative effects on output. In the absence of such intervention, the average costs of banking crises are likely to be significantly higher. In addition, the discount rate used to estimate the present value of the multi-year cost of crises is quite conservative.
- To the extent that higher capital and liquidity requirements also reduce the severity of crises, the benefits will be higher.
- The analysis assumes full pass-through of the higher funding costs/lower yield from investments to loan rates. However, in the long run it is reasonable to expect that, by reducing banks' riskiness, higher capital and liquidity requirements should lead to lower debt and equity costs. Moreover, once adjustment is complete, differences between the cost of equity and debt could reduce to tax effects. Banks could also adjust by increasing efficiency or reducing operating expenses. These effects would substantially reduce the estimated long-run costs.
- To the extent that greater intermediation is provided by the non-bank sector, the estimated costs will be lower.

Similarly, there are a number of factors that could reduce the net benefits:

- The existing literature, which is the basis for this report's estimates of the costs of banking crises, may overestimate the costs of banking crises. Possible reasons include: overestimation of the underlying growth path prior to the crises; failure to account for the temporarily higher growth during that phase; and failure to fully control for factors other than a banking crises per se that may contribute to output declines during the crisis and beyond, including a failure to accurately reflect causal relationships.
- Capital and liquidity requirements may be less effective in reducing the probability of banking crises than suggested by the approaches used in the study. This would reduce the overall net benefits for a given level of the requirements. However, to the extent that net benefits remain positive, it would also imply that the requirements would need to be raised by more in order to achieve a given net benefit.
- Shifting of risk into the non-regulated sector could reduce the financial stability benefits.
- The results of the impact of regulatory requirements on lending spreads are based on aggregate balance sheets within individual countries, so that they do not consider the incidence of the requirements across institutions. They implicitly assume that the institutions that fall short of the requirements (ie, that are constrained) do not react more than those with excess capital or liquidity (ie, that are unconstrained). These effects may not be purely distributional.

As a final caveat, the results summarised above reflect the estimated net benefits associated with higher capital and liquidity standards, averaged across a number of countries over an extended period. Clearly, there is a range of uncertainty around estimates of central tendencies, reflecting data limitations and the need for various modelling assumptions. In addition, the estimated net benefits may be higher or lower in individual cases.

### Annex 1

Costs of crises: a literature survey

There is a growing research literature analysing the costs of banking crises. This annex surveys that literature, explaining the methodologies used and providing a summary of the quantitative results.

### Methodologies

The research literature uses a variety of approaches to measure the cost of banking crises. In what follows these are classified in groups depending on two key dimensions: the period over which they measure the impact of crises and the type of metric used to calculate their cost. This section discusses these two dimensions by reference to Graph 1 in the main text, which illustrates a stylised path of a crisis episode. Table 1 applies the same classification to the findings in the literature.

The first dimension relates the two points in time (or phases of a crisis episode) chosen as reference points for the measurement of costs. There are four types of approach. The first type focuses on the period between the GDP peak prior to the crisis and the subsequent through after the onset of the crisis (time between A and B in Graph 1). The second type defines the crisis period from the cyclical peak to the time that the GDP growth *rate* recovers to its pre-crisis level (between A and C in Graph 1). It is important to note that this point is not equivalent to that when GDP returns to its pre-crisis trend path. In fact, at that point GDP would be necessarily below that trend because (by definition) the economy has not undergone a catch-up period of faster than average growth in order to recover the ground lost during the crisis. The third type of approach defines the crisis period as lasting until the level of GDP returns to its pre-crisis trend path (between A and D). Studies that use expert judgement or set a prespecified fixed length for all crises would fall under this category, since they tend to come to similar conclusions. Finally, the fourth type of approach allows for the possibility of permanent effects of crises on the level of GDP (ie a downward shift in the growth path), hence effectively looking at an infinite horizon.

The second dimension in the classification of approaches relates to the *metric* used for the costs of crises. One approach focuses on the gap between potential or trend output and output at the end of a specific phase of the crisis. This gives a measure of how much output falls between two points in time, but it does not reflect the duration of the episode and, hence, the cumulative losses over the same period. For crises with permanent effects the corresponding metric would be the gap between the pre-crisis and post-crisis GDP trends (ō in Graph 1). The second approach looks instead at the cumulative losses from the onset of the crisis until the (variously defined) end of the crisis. For crises that have long-lasting (multi-year or permanent) effects the calculation of the cumulative costs would entail some form of discounting (see discussion below).

Table A1.1 lists different studies grouped along these two dimensions together with their estimates of the costs of the average crisis. The first three groups of studies adopt as metric the difference in levels between two different points in time. The first of these uses the simplest approach, which is to measure costs by considering the peak-to-trough drop in output (ie relative difference in GDP between point A and point B in Graph 1). The second group assumes that crises end once output growth returns to its pre-crisis trend (ie relative difference in GDP between point A and point D). Typically studies that follow this approach

estimate the total impact on the level of GDP by calculating the sum of deviations of the postcrisis growth rate from the pre-crisis trend growth. For short crises, this is approximately the difference between trend and actual levels of output at point C.37 Generally, trend growth in these studies is calculated as the historical average growth over a period that ranges (depending on the study) between three and 10 years prior to the crisis.³⁶ An alternative approach to measuring the differential between actual and potential growth is to use regression analysis to estimate the impact on GDP growth following a banking crisis. Two papers (Hutchinson and Neuberger (2005) and Demirgüç-Kunt et al (2006)) rely on this method. They find that crises affect growth negatively for two to three years. The third group of studies that measure the drop in the level of GDP focus on permanent effects (5 in Graph 1) and follow Cerra and Saxena (2008). They estimate the impact on GDP (more specifically. GDP growth) by using panel regressions for a group of countries that experienced banking crises. The regressors include lags of the dependent variable and/or other explanatory variables, as well as a dummy that flags the beginning of a banking crisis. The dummy variable allows the simulation of impulse response functions as shown in Graph A1.1.

The last two groups of studies summarised in Table A1.1 look at the cumulative effect on GDP, a better measure of the overall economic costs of banking crises. Less than half the studies in the literature calculate cumulative costs explicitly by summing across the difference between the actual level of GDP and its trend over the crisis period (as defined in each study).39 The trend of output is determined in different ways: as the historical average growth; 40 as weighted average of past and world growth; by using the Hodrick-Prescott filter; or by reference to estimates of potential output (eg from OECD). The first of these two groups of studies does not allow for permanent output effects becausethe length of a crisis (ie the period over which its effects are estimated) is assumed to be finite. 41 The second and last group of studies does allow for the possibility of permanent effects. Boyd et al (2005) use two methods of calculating long-run costs after a crisis. The first method is more conservative and uses only actual GDP for the countries that had a crisis several years prior to the end of the sample (the results are listed under Method 1 in Table A1.1). In order to assess the full cumulative costs into the infinite horizon the authors use projections of both GDP and potential output for all crisis countries (these results are labelled Method 2 in Table A1.1). Haldane (2010) quantifies the costs of the current financial crisis by looking at the present value of output losses for the United Kingdom and the world. To provide a range of

All studies following this approach express the measured costs in total growth forgone during the assumed period of the crisis. Assuming that discount rates equal trend growth rates, the measured costs are also approximately the costs relative to pre-crisis GDP, especially if crises are not too long. Hoggarth et al (2002) prove mathematically that the difference is actually underestimated for crises lasting longer than two years, as the approach does not recognise the reduction in output levels in the previous years.

³⁶ Interestingly, this choice of trend implies that in some cases actual growth never reaches the pre-crisis trend growth. This is a sign of permanent effects, although the studies disregard this possibility. The crises in Mexico (1981) and or Japan (1992) are cases in point.

Except for Boyd et al (2005), costs are expressed relative to trend GDP. Assuming that discount rates equal trend growth rates, the measured costs are also the costs relative to pre-crisis GDP.

In comparison to other methods, relying on historical averages may overestimate trend output. This is particularly true is averages are calculated over shorter periods, as many banking crises tend to be preceded by unsustainable booms. A higher estimate of trend would imply higher costs of crises.

Some studies fix the length of crises at four years (eg Laeven and Valencia (2008)) or determine it on the basis of expert judgment (eg Hoggarth et al (2002)) or allow it to be determined endogenously by assuming that crises end when the level of GDP returns to its pre-crisis level (eg Cecchetti et al (2009)) or to the pre-crisis trend (eg Haugh et al (2009)).

estimates, the analysis assumes that different fractions of output losses experienced in 2009 are permanent (25%, 50% and 100%). Losses are expressed relative to 2009 output.

A key parameter that influences the magnitude of cumulative losses is the choice of discount factor, especially in the case of studies that find permanent effects. Table A1.1 reports the average output losses shown in each study, even though different studies are based on different assumptions. For example, Boyd et al (2005) use a discount rate of 5%, while Haldane (2010) uses 2.5%. In this report, to provide a conservative estimate, permanent drops in steady-state output (ie those in the third group of studies reported in Table A1.1) are converted into cumulative losses (CL) by discounting future losses with a 5% discount rate (ie CL =  $\delta/(1-\alpha)$ ) with the discount factor  $\alpha = 1/(1+5\%)$ ). A a lower (higher) discount rate would imply higher (lower) costs.

One paper in the literature (Ramirez (2009) finds that banking crises have long-lasting effects on long-term *growth rates*, no just the level of output (see Table A1.3). The study relies on data from 1894 in the United States. Using a panel of all US states and controlling for other factors, the analysis finds that increasing banking fragility (measured as the ratio of deposits in failed banks over total deposits) by 1% reduces the average annual growth rate between 1900 and 1930 by 2–5%.

#### Results

Table A1.1 shows that results in the literature are surprisingly consistent.

Studies in the first two groups, which compare GDP at the beginning of the crisis to the trough or to the point when its growth recovers, find a drop of around 10% relative to pre-crisis GDP. Costs tend to be somewhat lower for samples ending in the late 1990s (IMF (1998), Bordo et al (2001) Hoggarth et al (2002)). The results of these two groups are not taken into account when analysing the range and median of cumulative output losses of banking crises. The reason is that they refer to the difference in GDP between two points in time and, without some indication about the length of crises, they cannot be made comparable to the cumulative measure of costs adopted in this report.

Within the third group of studies, which measure point-in-time losses in the presence of permanent effects ( $\delta$  in the main text), there is a considerable difference between those that measure deviations of potential output (eg Barrell et al (2010a) or Furceri and Mourougane (2009)) or deviations of actual output (eg Cerra and Saxena (2008), Turini et al (2010), IMF (2009), Furceri and Zdzienicka (2010)). The former studies find a permanent drop of 2% after a banking crisis, while the latter find effects of the order of 7.5–10%. The figures reported in the first column of Table A1.1 for this group of studies convert the estimates of a permanent drop in the level of GDP to a cumulative loss figure that is comparable to that reported by the next group of studies. The calculatoin was based on a 5% discount rate, as described above, and it corresponds to cumulative losses in the range of 42–210% relative to pre-crisis GDP.

The cumulative loss estimates listed in Table A1.1 for the fourth and fifth group of studies are reported directly by these papers. They correspond to the average effect found across all crises in each study (Table A1.2 reports episode-specific loss figures for BCBS countries as reported in the subset of all studies that provide the disaggregate estimates).

Table A1.1

Cost of a banking crisis relative to pre-crisis GDP¹

		Results reported in the literature						
Study	Cumulative losses	Mean	Min	Мах	Industrial economies ²	Emerging markets?		
Difference between GDP at beginning and en	d of period	M	***************************************			ACCOUNTY OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTION OF THE SECTI		
Period from peak to trough?								
Reinhart and Rogoff (2009)	1	9	0	29	j			
Cecchetti et al (2009)		9	0	42	1			
Period until growth rate recovers ¹		ĺ						
Bordo et al (2001) (sample 1973-97)		6			7	6		
Bordo et al (2001) (sample 1919-39)	# # #	11			12	9		
IMF (1998)	*	12			10	12		
Hoggarth et al (2002)		14			13	15		
Demirgüç-Kunt et al (2005)		7			1			
Hutchison and Neuberger (2005)	ļ	10						
Infinite horizon (permanent effects)*		ļ			ļ			
Cerra and Saxena (2008)	158	7.5			15	4		
Turini et al (2010)	197	9.4						
IMF (2009)	210	10			11	5		
Furceri and Zdzienicka (2010)	95	4.5			I I I I I			
Furceri and Mourougane (2009)	42	2	1.5	4	# # # #			
Barrel et al (2010a)	42	2	0	23	<b>1</b>			
Cumulative losses	ŕ	•			•			
Period from peak to end of crisis	1	I						
Hoggarth et al (2002)	16	16	0	122	21	14		
Laeven and Valencia (2008)	20	20	D	123				
Haugh et al (2009)	21	21	10	40				
Cecchetfi et al (2009)	18	18	0	130	E 1 1 2			
Infinite horizon (permanent effects)					***************************************			
Boyd et al (2005): Method 1	63	63	Ô	194	į			
Boyd et al (2005): Method 2	302	302	Ô	1041	•			
Haldane (2010) ⁶	200	200	90	350	٠			
Crises have no permanent effects		,			•			
Average cumulative losses	19	]						
Median cumulative losses	19							
Crises have permanent effects?					National Property Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Con			
Average cumulative losses	- 145				•			
Median cumulative losses	158				######################################			
All studies	1				######################################			
Average cumulative losses	106	i i			<del>1</del>			
Median cumulative losses	63	l						

Costs are expressed relative to pre-crisis GDP. If studies normalise costs by the trend, the table assumes that the discount rate equals the trend growth rate. In per cent. Results cannot be converted to cumulative losses as the duration of crises is unknown. Permanent drops in steady-state output are converted into cumulative losses (CL) by discounting future losses with a 5% discount rate (CL =  $\delta$ /(1- $\alpha$ ) with  $\alpha$  = 1/(1+5%)). There is no unique definition of developed economies and emerging markets. Hoggarth et al (2002) and Cerra and Saxena (2008) distinguish between high- and low-income countries. Using this classification, the IMF (2009) does not find significant differences. Results shown in Table A1.1 are based on a classification of high and low financial development. Bordo et al (2001) and IMF (1998) use judgment. Results are for world GDP. As a percentage of 2009 output. Median across studies shown under Period from peak to end of crisis".

Overall, the literature finds large costs of banking crises. The median cumulative output loss across all comparable studies is 63% of pre-crisis output. The average loss is higher, exceeding 100%. These figures pool results from all studies for which cumulative losses can be calculated (ie all figures reported in the first column of the table). For studies that assess the costs of crises over a specified period, hence implicitly assuming that effects are only transitory (the third group in the table), the median cumulative loss estimate is 19%. Studies that explicitly allow for permanent effects (the last two groups of studies) have a much higher median estimate of cumulative loss, equal to 158%. It should be noted once again that these median losses are sensitive to the choice of discount rate, as this affects the results of the conversion of permanent drops in output into cumulative losses. For example, the median loss across all models is 82% if a discount rate of 2.5% is used. However, effects of higher discount rates are less significant. Even with an extreme discount rate of 10%, the median loss would still be as high as 50%.

To provide ranges, Table A1.1 also shows the minimum and maximum costs for individual crises, whenever this information is available. The highest costs are of an order three to seven times higher than the average. The minimum is generally zero. A closer look indicates that this may be driven by definitions of what constitutes a systemic banking crisis. For example, some studies assume that Canada had a banking crisis in 1983. While two small banks failed, experts at the Bank of Canada do not consider this event a systemic banking crisis.⁴² Unsurprisingly, most studies find zero output costs for this crisis.

Table A1.2 shows the costs of crises in BCBS member countries. Owing to data availability, this can only be done for 7 of the 21 studies shown in Table A1.1. Sometimes this information is not provided; in other cases the methodology used does not allow for the computation of crisis-specific estimates. This, for example, is the case for all the studies that try to measure the permanent drop in output following a banking crisis, as the regression analysis yields, by construction, an average estimate across countries. It is apparent that there are no significant differences between G10 and non-G10 members. Haldane (2010) is the only study estimating costs for the current crisis. For world GDP, estimates range from 90% to 350% relative to 2009 output (Table A1.1). Results are even larger for the United Kingdom, where the upper estimate exceeds 500% (Table A2.1). Several studies also distinguish between industrial and emerging markets economies. There is a clear indication that costs of crises are, if anything, actually *lower* for emerging market economies.

### Robustness

Papers in the literature generally undertake a range of robustness tests. These indicate that the dating of crises or the estimation of trend output can impact on the specific point estimates for costs. However, Table A1.1 highlights that results across studies are consistent, even though samples and crisis dates vary substantially. Furthermore, the literature has also explored many different methods for calculating trends, ranging from historical averages, statistical filters, regression analysis, OECD estimates of potential output to estimates of potential output using production functions.

⁴² This information is based on work by the Macro Variables Task Force of the Basel Committee.

There is no unique definition of industrial and emerging market economies. Hoggarth et al (2002) and Cerra and Saxena (2008) distinguish between high- and low-income countries. Using this classification, the IMF (2009) does not find significant differences. Results shown in Table A1.1 are based on a classification of high and low financial development. Bordo et al (2001) and IMF (1998) use judgment.

A key issue when estimating the costs of crises is to recognise the possibility that they may be the *result* of large shocks to the real economy (ie, be endogenous). If this is the case, the measured costs would – at least partially – not be the costs caused by the banking crisis, leading to an overestimate.

The literature attempts to control more formally for this problem. Two studies (Bordo et al (2001), Haugh et al (2009)) compare the output costs of normal recessions with costs of banking crises and show that the latter are around 3.5 to 4 times larger. Hoggarth et ai (2002) try to control for endogeneity by matching crisis countries with similar non-crisis countries. The average costs controlling for endogeneity are broadly similar to those without controlling for it (13% versus 16%). Cerra and Saxena (2008) run a range of robustness checks. In all cases they continue to find significant permanent drops in long-run output following a banking crisis. Even the lowest estimates indicate a drop in the level of the long-run trend by 4%. More generally, it has also been shown that many banking crises are not preceded by a growth slowdown/recession (eg Alfaro and Drehmann (2009)). The current crisis is a good example.

Ramirez (2009) undertakes a very clean historical study comparing Nebraska and West Virginia following the US banking crisis in 1894. While no banks failed in West Virginia, Nebraska experienced a relatively high failure rate. Controlling for other factors, the author shows that Nebraska grew on average 1% less per year in 1900–30 than West Virginia. These results show very large costs of a banking crisis. First of all, the author does not even consider the first seven years after the outbreak of the crisis, even though significant costs were found during this period in all other studies. Second, in comparison to all other studies these results show a long-run reduction not only in the level of output but also in its trend growth rate.

Table A1.2

## Estimated costs of different crisis episodes: results of selected studies for a range of crises

As a percentage of pre-crisis GDP1

	Start of crisis ²	Peak to trough	Cumulati	ve losses	until end of	Cumulative losses allowing for permanent effects			
		Cecchetti et al	Laeven and Valencia	Hoggarth et al	Cecchetti el al	Haugh et al	Boyd et al (M 2) ³	Boyd et al (M 1) ⁵	Haldane'
Argentine	1980	14.1	10.8	25.9	44.5				
Argentina	1989	12.1	10.7	16.1	16.2				
Argentina	1995	6.1	7.1	5.8	5.2				
Argentina	2001	15.1	42.7		26.9				
Brazil	1990	11.4	12.2	1	6.0				
Brazil	1994	2.5	0.0	0.0	1.9				
Canada	1983			0.0			0.0	0.0	
Finland	1991	11.8	59.1	44,9	40.7	40.6	473.9	97.2	
France	1994			0.7			72.0	2.7	*
Indonesia	1997	18.1	67.9	20.1	50.7				
Japan	1997, 1992, 1990*	3.4	17.6	71.7	6.7	12.3	<b>52</b> 5.7	55.6	***************************************
Korea	1997	9.2	50.1	12.8	9.3		694.4	17.7	-
Mexico	1981		51.3	0.0					
Mexico	1994 1991.	10.4	4.2	5.4	10.7			<b>T</b>	
Norway	1988 1987	1.5	0.0	27.1	0.6	34.8	313.5	86.4	
Spain	1977. 1982 ²			122.2		10.1	466.4	186.2	
Sweden	1991	5.8	30.6	3.8	11.0	16.7	256.7	58.4	***************************************
Turkey	2000	9.3	5.4		9.1				*****
UK	1974		, maren	26.5					***************************************
UK	2008		***************************************	TO THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF 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constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la	130-520
us	1988, 1984, 1990 ⁴		4.1	0.0	***************************************	11.4	Ů.	0	THE PROPERTY AND THE PROPERTY BASE
Average of	shown crises	9.3	23.4	22.5	17.1	21.0	311.4	56.0	300

¹ Costs are expressed relative to pre-crisis GDP. If studies normalise costs by the trend, the table assumes that the discount rate equals the trend growth rate. In per cent. ² The dating of crises is not the same across studies. If several years are provided, the references for the crisis dating used in the studies are (a) Laeven and Valencia (LV) 1997, Hoggarth et al (HO) and Haugh et al (HA) 1992, Boyd et al (B) 1990; b) LV 1991, HO and HA 1988, B 1987; c) LV 1977, HO 1977, B 1977, HA 1982; d) LV 1988, HO 1988, HA 1990. Cecchetti et al (2009) base their crisis dating on LV. ³ To calculate cumulative costs of permanent effects, Boyd et al (2005) rely on projections of future GDP (M 2). To provide conservative estimates, the study also shows results when only actual data are used (M 1). ⁴⁾ As a percentage of 2009 output.

Table A1.3

The reduction of annual GDP growth in the long run following a banking crisis¹

Study	Mean	Controlling for endogeneity
Ramirez (2009)	1–3	1

¹ The study analyses the impact of defaulted deposits on the average annual growth rate in 1900–30 following the US banking crisis in 1894. The table shows results for the average default rate, given the estimated range in the paper.

Table A1.4

Banking crises in BCBS countries since 1985¹

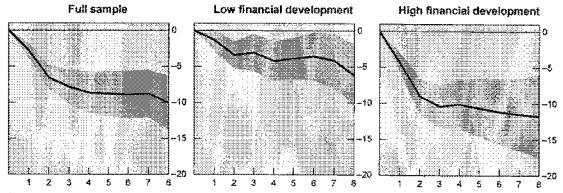
	Reinhart and Rogoff (2008) ⁽¹⁾	Laeven and Valencia (2008) ⁽¹⁾
Argentina	1969, 1994, 2001	1989, 1995, 2001
Australia	1989	
Belgium	2008	2008
Brazil	1990, 1994	1990, 1994
Canada		
China	1997	1998
France	1994, 2008	2008
Germany	2007	2007
Hong Kong	1998	
India	1993	1993
Indonesia	1992, 1997	1997
Italy	1990	
Japan	1992, 2008	1997, 2008
Korea	1986, 1997	1997
Luxemburg	2008	2008
Mexico	1992	1994
Netherlands	2008	2008
Russia	1995, 1998	1998
Saudi Arabia	**	
South Africa	1989	
Sweden	1991	1991
Switzerland	2008	2008
Turkey	1991, 2000	2000
United Kingdom	1991, 1995, 2007	2007
United States ²	2007	1985, 2007
Frequency of banking crises	1985-2009 ³	***************************************
All BCBS countries	5.2%	3.6%
G10 countries	5.2%	4.1%

¹ Both papers were published prior to the failure of Lehman. The dating of the recent crisis is based on the strict crisis definition by Borio and Drehmann (2009). ² The beginning of the savings and loan crisis according to Reinhart and Rogoff is 1984 and therefore excluded from the table. ³ The frequency is calculated as the number of crises divided by the number of countries in the sample times the years from 1985 to 2009. Adjusting for a three-year duration of crises and considering Russia and China only from 1992 onwards will increase the frequency to 5.9% (6.8%) and 3.9% (4.3%) for all BCBS (G10) countries.

### Graph A1.1

#### The evolution of output after banking crises1

As a percentage of the pre-crisis trend



¹ Mean difference from year t = 0; first year of crisis of t = 1; financial development is measured by the credit-to-GDP ratio.

Source: IMF (2009).

#### Annex 2

#### A brief summary of the crisis prediction/simulation models

This annex first provides methodological details of the models used to estimate the impact of tighter regulatory standards on the annual likelihood of a systemic banking crisis. It then discusses individual results.

#### Methodology

#### (i) FSA/NIESR model

Researchers at NIESR and the UK FSA (Barrell et al (2010b)) estimate a logit model explaining the probability of banking crises with the aggregate capital ratio, the aggregate liquidity ratio, the current account deficit and house price changes. Their sample includes annual data for 14 OECD countries from 1980 until 2008. And their sample of crises covers systemic and non-systemic crises from the World Bank (2003) crises database, updated for recent events. The final equation of the NIESR model is as follows:

$$Prob(crises) = f(-0.34 Lev_{-1} - 0.11A Liq_{-1} + 0.08 Rhpg_{-3} - 0.24 Cbr_{-1})$$

Lev is the ratio of total capital over total assets, A_Liq is the ratio of cash and balances with the central bank plus securities over total assets, Rhpg is real house price growth, and Cbr is the ratio of the current account balance over nominal GDP. All the coefficients are statistically significant at least at the 5% level. Subscripts indicate time lags. As in other studies, the lags are included to limit the risk of reverse causality, ie that crises affect capital and liquidity rather than the other way round.

Results shown in Table A2.1 are based on setting the initial level of the liquidity ratio, the current account deficit and real house price growth at the respective mean across all countries in the sample for 2006. Ratios for TCE/RWA are mapped into the leverage ratio by following the methodology set out in Annex 5 and taking an average across European and US banks.

#### (ii) Bank of Japan model

Researchers from the Bank of Japan (Kato et al (2010)) estimate a probit model for 13 OECD countries, using annual data from 1980 to 2008. Crises cover both systemic and non-systemic crises, as identified in World Bank (2003) and Laeven and Valencia (2008). The authors estimate specifications with and without interactions among variables.

The final equation of the model without interactions is

$$Prob(crises) = f(-0.15Lev_{-3} - 0.04A \ Liq_{-1} - 0.01L \ Liq_{-1} + .04Rhpg_{-1} - 0.17Cbr_{-1})$$

and that of the model with interactions

$$Prob(crises) = f(-0.96(Lev_1*A_Liq_1) - 0.35(Lev_1*L_Liq_2) + .05Rhpg_2 - 0.04DRhp_3 - 0.22Cbr_2)$$

Lev is the ratio of total capital over total assets, A_Liq is the ratio of cash and balances with the central bank plus securities over total assets, L_Liq is the ratio of customer deposits to total deposits, and Rhpg is real house price growth. Cbr is the ratio of the current account balance to nominal GDP. All the coefficients are statistically significant in both specification at least at the 5% level. Subscripts indicate time lags.

Results shown in Table A2.1 are based on setting the initial level of the liquidity ratios, the current account deficit and real house price growth at the respective mean across all countries in the sample for 2006. Ratios for TCE/RWA are mapped into the leverage ratio by following the methodology set out in Annex 5 and taking an average across European and US banks.

#### (iii) The estimated portfolio model

As with other portfolio models (see below), this approach calculates the probability of a systemic crisis by interpreting the banking system as a portfolio of banks (the analogue of individual securities for portfolio credit risk models). For this report, it is assumed that systemic risk materialises when four or more institutions fail. Default correlations are based on Moody's KMV estimates of the institutions' asset-return correlations in order to derive the sensitivity of banks' assets to common shocks. The model is estimated for the 51 largest banks globally and shocks are assumed to follow a normal distribution.

Bank-specific probabilities of default (PDs) in the estimated portfolio model are based on a simple logit model linking capital and liquidity ratios to the likelihood of default. The logit model is estimated for a sample of over 110 large globally active banks – including the 51 banks considered in the final model – using data from 2000 until 2008. The identification of stressed banks is based on input from national supervisors. A range of models has been estimated, dropping various countries or including other control variables. But the results for the leverage and liquidity ratio are very robust. For the simulations shown in this paper we use the following specification

where *Cap* is the ratio of TCE to total assets and *L_Liq* the ratio of customer deposits to total liabilities. All the coefficients are statistically significant at least at the 5% level.⁴⁴

Results shown in Table A2.1 are based on setting the liquidity ratio at the end-2006 level for individual banks. Correlations are based on end-2007 data. Ratios for TCE/RWA are mapped into the ratio of TCE over total assets by following the methodology set out in Annex 5 and taking an average across European and US banks.

#### (iv) Bank of England Merton-style model

In order to quantify the link between the banking sector's capitalisation and the likelihood of a systemic banking crisis, researchers at the Bank of England used a Merton-style structural credit risk model based on Elsinger et al (2006). The framework captures two channels of system-wide risk: (i) the risk that banks fail simultaneously, because their asset values are

⁴⁴ The ratio of liquid assets to total assets was also incorporated in some estimations but found to be insignificant.

correlated; and (ii) direct balance sheet links between banks, through which the failure of one bank can cause the failure of other institutions.

The model is calibrated using data for the five largest UK banks, with a systemic crisis defined as the joint default of at least two of these banks. Following Merton (1974), the volatility and the covariance of each bank's assets is inferred from the volatility of the market value of its equity. The results are sensitive to the period over which it is calibrated. The more volatile equity prices over the period, the greater the inferred volatility of the bank's assets, and the greater the chance that the asset value falls sufficiently to push a bank's equity below the threshold for failure. The reported results allow for some uncertainty in this viability threshold.

#### (v) BIS model

The BIS model is a variant of a model developed by Tarashev and Zhu (2008). It interprets the banking system as a portfolio of banks and estimates the loss distribution arising from bank defaults. Bank failures are correlated. Correlations are based on Moody's KMV estimate of the institutions' asset-return correlations. In contrast to the BoE model and the baseline version of Tarashev and Zhu, which assume that shocks to banks' assets are normally distributed, the model assumes a T distribution with four degrees of freedom. This distribution has fatter tails. The model is estimated for the 51 largest banks globally. Correlations are based on end-2007 data. For this report it is assumed that systemic risk materialises when four or more institutions fail. Ratios for TCE/RWA are mapped into the ratio of shareholder equity over total assets following the methodology set out in Annex 5 for European banks.

When simulating the impact of higher capital levels on the probability of systemic crises, the BoE and BIS models hold all other parameters, including the volatility of assets, constant. If banks, however, take on more risk to compensate for higher capital requirements, this would tend to reduce the marginal impact on the probability of failure of individual institutions and hence of systemic risk.

#### (vi) The Bank of Canada stress testing framework

The simulations in this report use the stress testing model developed by researchers at the Bank of Canada. Details about the model and data are provided by Gauthier et al (2010). The authors look at six major Canadian banks for the period ending Q2 2008. The model generates the distribution of credit losses at Canadian banks under a severe but plausible scenario. It incorporates the impact of externalities through counterparty credit risk and asset fire sales. Asset fire sales are triggered whenever the Tier 1 capital ratio of a bank falls below 7% (the minimum required by the Canadian regulator). In case of an asset fire sale, the equilibrium price for illiquid assets is obtained from a calibrated demand curve and the endogenous aggregate supply of assets. Contagion occurs through counterparty credit risk and mark to market accounting as in Cifuentes et al (2005).

#### Results

Table A2.1 shows simulation results for each model for different capital and liquidity ratios. Table A2.2 summarises this information by looking at average results for different modelling approaches. This table in turn provides the basis for results used in the main text (Table 3). The summary results do not include the stress testing exercise conducted by the Bank of Canada. The fact that these results reflect the links between liquidity, capital and crisis under stressful scenarios sets them apart from the results of models that are more geared to average relationships. Had the stress testing results been included in the averages reported in Table A2.2 the conclusions would have been qualitatively identical but the marginal impact of liquidity would have been smaller.

The simulations of the reduced-form models indicate an average probability of a systemic crisis of 4.1% when the capital ratio is 7% and there is no change in any of the liquidity ratios from their pre-crisis levels. This is at the low end of the historical average of 4–5%. Within the framework of these models, increasing capital ratios by 1 percentage point reduces the annual probability of systemic crises by around 25–30%, depending on the starting level of capital. For example, the reduction in the probability is from 4.1% to 2.8% when capital is increased from 7% to 8%. Meeting the NSFR, as modelled by a 12.5% increase in the ratio of liquid assets over total assets (see Annex 5 for a detailed discussion of the mapping between meeting the NSFR and the liquidity ratios used by the reduced-form models), has a somewhat lower effect as it reduces the annual probability of crisis by around 15–20%. Increasing the liquid asset ratio by 25% or even 50% has clearly a larger impact on the likelihood of systemic crises.

The two reduced-form models estimated by researchers from the Bank of Japan also incorporate the ratio of deposits relative to total liabilities as another liquidity ratio. Using these models shows that increasing the ratio of deposits to total assets by 10 percentage points (one way of increasing funding liquidity) reduces the probability of crises by around one sixth (eg 4.1% to 2.9% for a 7% TCE/RWA ratio). A 20 percentage point increase would lower the probability by more than one third (eg 4.1% to 2.4% for a 7% TCE/RWA ratio).

The second panel of Table A2.2 reports average results based on portfolio credit risk models. The results of these three models are similar to those coming from the reduced-form approaches. For instance, increasing the ratio of TCE to RWA from 7% to 8% reduces the probability of crisis by roughly one third (eg 5.1% to 3.1%), with no change in liquidity. Increases in the ratio of deposits to total liabilities also serve to reduce the probability of a crisis. But this is only captured by one model.

The last panel in Table A2.1 reports the impact of liquidity and capital ratios on the likelihood that two or more banks default, conditional on a *very severe macroeconomic shock*. In this environment, higher capital ratios clearly have large benefits. Increasing capital ratios from 7% to 8% decreases the likelihood of a systemic crisis by two thirds (eg from 4.7% to 1.7%) with no increase in liquidity. By design, the role of liquidity is limited in the stress test model. Nonetheless, higher liquidity buffers are still found to yield a modest benefit. For example, when the capital ratio is 7%, increasing the ratio of liquid assets by 25% reduces the likelihood of crisis by around 0.1 percentage points (eg from 4.7% to 4.6%).

Given the small number of models the average rather than median is presented. However, using all models the average and median are very similar.

Results shown in Table A2.2 indicate a different impact as the average for "no increase in liquidity" also incorporates the FSA model.

Table A2.1

The annual probability of a crisis for different capital and liquidity ratios¹

	TCE/RWA	No increase in liquidity	increase in deposits over total liabilities			e in liquid r total asse		Increase in liability side liquidity; and increase in liquid asset ratio		
			wdamick	10	20	12.5	25	60	10; 25	20; 50
FSA model	6	6.9			6.1	5.4	4.2			
	7	5.5			4.8	4.2	3.3			
	8	4,3			3.8	3.3	2.6			
	9	3.4			3.0	2.6	2.0			
	10	2.7			24	2.1	1.6			
	11	2.1			1.9	1.6	1.3			
	12 13	1.7 1.3			1.5 1.1	1.3 1.0	1.0 0.8			
	14	1.0			0.9	9.0 0.8	0.6			
	15	0.8			0.7	0.6	0.5			
Linear BoJ	6	3.2	2.8	2.5	2.5	1.9	1.1	1.7	0.8	
model	7	2.5	2.2	2.0	1.9	1.4	0.8	1.3	0.6	
	8	1.9	1.7	1.5	1.5	1.1	0.6	1.0	0.5	
	9	1,5	1.3	1.1	1.1	0.8	0.4	0.7	0.3	
	10	1.1	1.0	0.9	0.8	0.6	0.3	0.5	9.2	
	11	8.0	0.7	0.6	0.6	0.4	0.2	0.4	0.2	
	12	0.6	0.5	0.5	0.5	0.3	0.2	0.3	0.1	
	13	0.5	0.4	0.3	0.3	0.2	<b>0.1</b>	0.2	0.1	
	14	0,3 0,2	0.3 0.2	0.2 0.2	0.2 0.2	0.2 0.1	0.1 0.1	0.1 0.1	0.1 0.0	
Non-linear	15		9.2 6.3			4.7		4		
BoJ model	6 7	7.3 4.2	9.5 3,5	5.5 2.9	5.9 3.2	2.3	2.8 1.2	4 1.9	2 0.8	
Liter (times)	8	2.3	1.8	1.4	1,6	1.1	0.5	9. <b>8</b>	0.3	
	9	1.2	0.9	0.6	0.7	0.5	0.3	0.3	0.1	
	10	0.6	0.4	0.3	0.3	0.2	0.0	0.1	0.0	
	11	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	
	12	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
	13	0.0	0.0	0.0	0.0	G.Ú	0.0	0.0	0.0	
Bottom-up	6	8.3	7.3	6.4						
approach	7	5.6	4.9	4.3						
	8	3.8	3.2	2.8						
	9	2.5	2.1	1.9						
	10	1.6 1.0	1.4 0.9	1.2						
	11 12	0.7	0.9	0.8 0.5						
	13	0.4	0.4	0.3						
	14	0.3	0.2	0.2						
	15	0.2	0.1	0.1						
BoE model	6	12.8		/* I.IIII		######################################	~~~~~~~ <del>~</del>			
for major	7	6.0								
UK banks	8	2.5								
	9	0.8								
	10	0.3								
	11	0.1								
DIC made)	12	0.0				<del></del>	······································	***************************************		
BIS model	6	4.9								
for global banks	7 8	3.8 2.9								
Acres than	9	2.3								
	10	1.8								
	11	1.4								
	12	1.2								
	13	1.0								
	13 14	9.8								
	13 14 15				·			,,,,,,		
	13 14 15	0.8 0.7 6.4		······································		6.2	6.1	· · · · · · · · · · · · · · · · · · ·		
BoC stress testing	13 14 15 6 7	0.8 0.7 6.4 4.7		<del> </del>		4.6	4.6		THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE S	
	13 14 15 6 7 8	0.8 0.7 6.4 4.7 1.7			· · · · · · · · · · · · · · · · · · ·	4.6 1.8	4.6 2			
testing	13 14 15 6 7	0.8 0.7 6.4 4.7		, , , , , , , , , , , , , , , , , , ,		4.6	4.6			

¹ Once the likelihood of crisis reaches zero, higher capital ratios are not shown.

Table A2.2

Average annual probability of a crisis for different modelling approaches
(all numbers in percentages)

Tangible common equity over risk-weighted assets	No increase in liquidity	Increase in liability side liquidity; and increase in liquid asset ratio						
		10	20	12.51	<b>25</b> 2	50	10; 25	20; 50
	Мо	dels incorpora	ling changes	in liquid assets	(reduced-form	models)		-
6	5.8	4,6	4.0	4.8	4.0	2.7	2.9	1.4
7	4.1	2.9	2.4	3.3	2.7	1.8	1.6	0.7
8	2.8	1.8	1.5	2.3	1.8	1.2	0.9	0.4
9	2.0	1.1	0.9	1.6	1.3	0.9	0.5	0.2
10	1.5	0.7	0.6	1.2	1.0	0.7	0.3	Q.1
11	1.1	0.4	0.4	0.9	0.7	0.5	0.2	Q.1
12	0.8	0.3	0.3	0.7	0.5	0.4	0.1	0.1
13	0.6	0.2	0.2	0.5	0.4	0.3	0.1	0.0
14	0.5	0.1	0.1	0.4	9.3	0.2	Q.1	0.0
15	0.3	0.1	0.1	0.3	0.2	0.2	0.0	0.0
# models³	3	2	2	3	3	3	2	2
	Models	unable to ass	ess changes	in liquid assets	(portfolio credit	risk models)		
6	8.7	7.3	6.4	<b>***</b>				
7	5.1	4.9	4.3					
8	3.1	3.2	2.8					
9	1.9	2.1	1.9					
10	1.3	1.4	1.2					
11	0.9	0.9	6.0					
12	0.6	0.6	0.5					1
13	0.5	0.4	0.3					1
14	0.4	0.2	0.2					1
15	0.3	0.1	0.1					İ
# models ⁴	3	1	1					<b>‡</b>
			P	∖ll models ⁵				***************************************
6	7.2							
7	4.6							
8	3.0						•	
9	1.9						Į	
10	1,4					i	1	
11	1.0							1
12	0.7					1		
13	0.5		1					
14	0.4		1					
15	0.3	1	Ì					*
# models	6	•	I			1		****

¹ Meeting the NSFR is modelled by a 12.5% increase in the figuid asset ratio. ² The NSFR equals 1 12 if liquid assets increase by 50% for the average bank. ³ When only two models are reported these are the linear and non-linear BoJ models. ⁴ When only one model is reported this is the Estimated Portfolio Model. ⁵ Average across all reduced-form and portfolio credit risk models.

#### Annex 3

#### Mapping higher capital and liquidity requirements to lending spreads

This annex provides details on how the increased cost of higher capital and liquidity requirements are mapped to higher lending spreads. The calculations are based on a representative bank for each country, with the results averaged across countries to arrive at the estimates reported in Table 7. The calculation assumes that the ROE and cost of debt do not change with lower leverage. It also assumes that banks pass on any additional costs to lending spreads, and do not adjust other sources of income or operating expenses. For each country, the impact on lending spreads is calculated (i) assuming no change in RWA, and (ii) allowing RWA to decline as steps are taken to meet the NSFR (namely holding more government bonds relative to other investments). Within each scenario, the costs are calculated for incremental increases in capital ratios of 1 percentage point. These costs are linear in the increase in capital ratios.

The exercise is conducted as follows. A representative bank for each country is constructed based on aggregate banking sector data for 13 OECD countries. Income statement and balance sheet data from 6,600 banks are averaged over the 15-year period from 1993 to 2007. These representative banks proxy for a long-run average or "steady state" reflecting each country's institutional setting and regulatory framework. All variables are standardised by dividing by a bank's total assets in a given year.

Table A3.1 shows the stylised balance sheet and income statement based on the simple average of the representative figures for each of the 13 countries. All items are shown as a percentage of total assets. Loans represent about half of the typical banks' assets, followed by investments (16.1%), interbank claims (12.2%) and trading-related assets (10.4%). These assets are funded primarily by deposits (43.5%), trading-related liabilities (15.2%), debt (14.2%) and interbank funding (12.6%). Shareholders' equity represents 5.3% of assets, of which common equity is the majority (4.7%). Risk-weighted assets represent around half of total assets.

Table A3.1

Stylised balance sheet and income statement across 13 countries, 1993–2007¹

Salance sheet	Average	Income statement	Average
Cash and balances at central banks	2.3	Interest income	5.9
Interbank claims	12.2	Interest expense	4.0
Trading-related assets	10.4	A. Net interest income	1.8
Net loans, leases and mortgages	51.6	Trading income	0.2
Investments and securities	16.1	Non-interest income ex trading	1.3
Other assels	7.4	B. Non-interest income	1.5
Of which: goodwill and intangible assets	0.5	C. Total revenues (A + 8)	3.3
TOTAL ASSETS	100.0	Personnel expenses	0.9
		Other administrative expenses	1.2
Deposits by customers (retail, corporate)	43.5	D. Total operating expenses	2.1
Interbank funding	12.6	E. Operating profit (D – E)	1.2
Trading-related liabilities	15.2	F. Income tax provision	0.2
Debi	14.2	G. Net income (return on assets)	0.8
Other liabilities	9.3		the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
TOTAL LIABILITIES	94.7		***************************************
Common stock	4.7	Return on equity (ROE) (%)	14.8%
Preferred stock	0.3	Leverage multiple	18.5x
Minority interests	0.2		1
Other reserves and equity	0.1	Average effective tax rate (%)	33.2%
TOTAL SHAREHOLDERS' EQUITY	5.3	-	
TOTAL LIABILITIES & STOCKHOLDERS' EQUITY	100.0	ranco de partir de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la	
Risk-weighted assets / total assets	53.9	434 344 344	***

^{1.} As a percentage of total assets.

In terms of the composition of net income, net interest income is 1.8%, with non-interest income also important at 1.5%. Total operating expenses amount to 2.1%. Personnel expenses represent close to 43% of total operating expenses. Net income (or ROA) is 0.6%, implying that the average return on equity (ROE) is 14.8%. The average historical tax rate is 33.2%.

#### Calculating the impact of higher capital requirements

The impact of higher capital on loan spreads is measured as follows. All formulae referenced below are listed at the end of this annex.

- A representative bank balance sheet and income statement for each country is constructed by taking the weighted average across a country's banks from 1993 to 2007. Equations (1) through (4) show the standard accounting relationships.
- The cost of equity is set at the 15-year average ROE for each country (equation 5).
   Equity is the most expensive form of capital. Debt is less expensive due to its higher claim on a bank's assets and its tax advantage in a number of jurisdictions. A marginal tax rate of 25% is used in this analysis.
- The costs of deposits, short-term and long-term wholesale debt are calibrated to
  match the historical ratio of interest expense to total assets. With the cost of
  deposits equal to some value of x%, the cost of short-term debt is assumed to be
  x% + 100 basis points and the cost of long-term debt x% + 200 basis points

(equations 6 to 8). These spreads are consistent with historical averages across the countries in this sample, and generate an upward-sloping yield curve. The share of debt that is less than one year in maturity (rho) is set at 25% (equation 10). Interest expense is then calculated using equation (11).

- Interest income is generated by interbank claims, loans and investments. Trading income is generated by trading assets minus trading liabilities. A portion of investments (theta) is invested in government bonds that return a risk-free rate of interest, while the remaining investments are invested in higher-yielding securities. The risk premium on these higher-yielding investments is the difference between the return on investments and the risk-free rate (equation 9).
- From this starting point, the quantity of TCE/RWA is increased by increments of 1 percentage point to meet specific targets of RWA (equation 14). The size and composition of the balance sheet is held constant but the relative share financed by equity and debt changes.
- An increase of TCE/RWA of 1 percentage point generates a smaller rise in equity as RWA are typically only 50% of total assets (equation 15). This increase in the quantity of equity is matched by a decrease in the quantity of debt (equation 16). As the most expensive form of debt, long-term debt is the first to be replaced with equity.
- The change in capital structure leads to a rise in the bank's cost of capital, as taxadvantaged debt is substituted with more expensive equity. A higher quantity of
  equity for a given level of net income leads to a fall in ROE (equation 5). Part of this
  fall in ROE is offset by the decline in interest expense due to the smaller quantity of
  debt outstanding (equations 11 and 16).
- In the central scenario, it is assumed that the cost of equity and the cost of long-term
  debt are unchanged. In theory, the cost of equity and debt should both decline as
  leverage decreases and the risk of default becomes smaller. The estimates in this
  analysis therefore are conservative, as a fall in either of these costs would reduce
  the impact on loan spreads.
- Banks respond to the fall in ROE by raising the spreads charged on loans (alpha, equation 17). The size of the increase in loan spreads is determined such that the increase in net income exactly offsets the increase in the cost of capital, allowing ROE to be unchanged (equation 18).

#### Calculating the cost to meet the December 2009 proposal for the NSFR

The formula for calculating the NSFR is detailed in the December 2009 BCBS consultative document, with a simplified version shown in equation 19. The numerator measures the sources of available stable funding (ASF), with greater weight given to funding sources that are more stable and least likely to disappear under stressed market conditions. Equity, longer-term debt and longer-term liabilities are the most stable forms of funding, followed by deposits. The denominator shows assets that require funding, with a factor (or haircut) applied based on their expected liquidation value under stressed circumstances. Cash, securities with less than one year to maturity and interbank loans do not have to be funded and have a factor of 0%. Government debt is considered very liquid and must only be funded at 5% of face value. Corporate loans and retail loans that mature within one year must be funded 50% and 85%, respectively, assuming that they are not rolled over when they mature. All remaining assets must be funded at 100%. To achieve a target NSFR, banks must extend the maturity of their funding and reduce the maturity or the riskiness of their assets.

An estimate of the impact of the NSFR requires details on the composition of investments held by banks, the stability of their deposits, and the size of "Other assets". This information is not available, but is being collected by the BCBS through the Quantitative Impact Study (QIS). In the absence of QIS data, the only way to arrive at a starting value of the NSFR is to make a number of assumptions. Supervisors in some countries provided rough estimates for their banks, and these estimates are applied to all the sample countries as follows:

- 75% of deposits are stable
- 25% of securities are less than 1 year in maturity
- 25% of corporate loans are less than 1 year in maturity
- 25% of retail loans are less than 1 year in maturity
- 25% debt is less than 1 year in maturity
- government debt initially makes up 25% of investments

The calculation of the cost to meet the NSFR is very sensitive to these assumptions, as well as the relative size of these categories on banks' balance sheets.

#### Formulae used in calculations of cost of capital and liquidity

- 1.Assets = Liabilities + Equity
- 2.Assets = Cash + IBclaims + TradAssets + Loans + Investments + OtherAssets
- 3. Liabilities = Deposits + IBfund + TradLiabs + Debt + OtherLiabs
- 4.  $NetIncome = [(IncomeLoans + OtherIntIncome IntExp) + NonIntIncome OpExp] \cdot (1 tax)$

$$5.r_{equity} = \overline{ROE} = \frac{NetIncome}{Equity}$$

$$6.r_{deposits} = x\%$$

$$7.r_{SiDebt} = x\% + 0.01$$

$$8.r_{titlebe} = (x + 0.02)$$

$$9.rp = r_{inv} - r_{free}$$

$$10.Debt_i = Debt_i \cdot \rho_i + Debt_i \cdot (1 - \rho_i)$$

11. 
$$IntExp_i = r_{denosits} \cdot Deposits + r_{SiDebt} \cdot (IBfund + TradLiabs + Debt_i \cdot \rho_i) + r_{LiDebt} \cdot Debt_i \cdot (1 - \rho_i)$$

12. Investments, = Investments, 
$$\cdot \theta_i$$
 + Investments,  $\cdot (1 - \theta_i)$ 

13. Other Intlincome_{i+1} = Other Intlincome_i + Investments_{i+1} 
$$\cdot \Delta(1-\theta) \cdot rp + \Delta Other Assets \cdot rp - \Delta Cash \cdot r_{nov}$$

$$14.Tier1 = \frac{E}{RWA}$$

$$15.E_{t+1} = E_t + \Delta Tier1 \cdot RWA_{t+1}$$

$$16.\Delta Debt = -\Delta Equity$$

17. IncomeLoans_{i+1} = IncomeLoans_i +  $\alpha$  · Loans_{i+1}

$$18.\alpha = \frac{\left[\frac{(ROE_{i+1} \cdot E_{i+1})}{(1 - tax)} - (OtherIntIncome_{i+1} - IntExp_{i+1} + NonIntIncome_{i+1} - OpExp_{i+1})\right] - IncomeLoans_{i+1}}{Loans_{i+1}}$$

$$19. NSFR = \frac{ASF}{RSF} = \frac{Equity + Debt_{ziyr} + Liabs_{ziyr} + (StableDeposits_{$$

$$20.\Delta RWA = (Investments_i \cdot \theta_i - Investments_{i+1} \cdot \theta_{(i+1)}) \cdot riskweight_{OtherAssets}$$

## Summary of assumptions and impact on results

Assumptions	Sensitivity of results				
Cost of deposits < cost of short-term debt < cost of long- term debt, where the cost of short-term debt is the cost of deposits + 100 basis points, and the cost of long-term debt is the cost of deposits + 200 basis points. Interest rates for these liabilities are then calibrated to the long-run average interest expense based on observed balance sheet quantities.	A flat or downward-sloping yield curve would reduce the cost to meet the NSFR.				
Cost of equity in steady-state = long-term average of ROE	The results are sensitive to the gap between the cost of debt and equity.				
Marginal tax rate = 25%	Historical average across sample = 33%				
Steady-state balance sheet and income statements can be approximated by the long-term historical average.	The cost of meeting the higher capital and liquidity requirements is conditional on the structure of banks' balance sheets. For this reason, results are reported for 13 different countries with different balance sheet structures.				
ROE and the cost of debt do not change with changes in capital levels. In theory, a rise in capital levels and a fall in financial leverage should be associated with a decline in both the cost of equity (ROE) and the cost of debt.	Reductions in ROE and cost of debt would reduce the cost of meeting capital requirements.				
The relative shares of the following items on bank balance sheets do not change with changing capital levels: interbank claims and funding, trading assets and liabilities, loans, deposits and other liabilities.	Changes in these quantities would require an estimate of the change in the related income items (eg trading income), or the cost of different sources of funding (eg deposits).				
All items in shareholders' equity qualify as Tier 1 capital. The cost of preferred shares and other hybrid instruments is assumed to be the same as the cost of equity.	The estimate of the marginal cost to increase Tier 1 capital is not affected by the levels of these items. Reducing their relative cost would reduce the impact on lending spreads.				
All increases in the quantity of Tier 1 equity are offset by reductions in the quantity of long-term debt.	Reducing short-term debt instead would raise the cost of capital by more, as the cost of short-term debt is below long-term debt. But this option would worsen the NSFR.				
Off-balance sheet items are not included, except contingent liabilities. Committed but undrawn credit lines and other contingent liabilities are each assumed to be 3% of total assets.	Excluding contingent liabilities would reduce the cost of meeting the NSFR, as these items are in the denominator of the NSFR.				
The relative shares of the following items on bank income statements do not change: trading income, non-interest income excluding trading (eg fees and commissions), operating expenses and taxes payable.	Increases in sources of income or reductions in expenses would reduce the cost of meeting capital and liquidity requirements.				
The opportunity cost of reducing risky investments and holding more government bonds is 1pp per annum.	An increase in the opportunity cost raises the cost of meeting the NSFR linearly.				
The starting value of NSFR is based on a series of assumptions.	Reducing (raising) the starting value would increase (reduce) the cost of meeting the NSFR.				
A 50% risk weight is applied to (i) other assets and (ii) investments other than government bonds.	An increase in this risk weight would reduce the cost of meeting the NSFR, as the fall in RWA from holding more government bonds would be greater.				
The Initial average lending rate is the average rate over 10 years based on data from the IMF IFS.	The results are not sensitive to the level of this rate.				

#### Annex 4

# Description of the models used to assess the long-term cost of the new regulatory framework

Table A4.1 reports the list of the models that have been used in the LEI group to assess the long term cost of the new regulatory framework and a summary of their key features. The models differ in many respects. First, they refer to different countries or areas. Second, some are almost fully estimated, whereas others are largely or entirely calibrated (the value of the coefficients are taken from unrelated, generally microeconomic, studies casting light on the specific parameter). Finally, and more importantly for our purposes, some models explicitly feature a banking sector and a role for bank capital and liquidity, while others do not. Specifically, eight models feature bank capital, only five feature both bank capital and bank liquidity.

Table A4.1

Key features of the models used in the analysis

Model	Model type	Reference country/ area	Estimated/ calibrated	Features bank capital	Features bank liquidity	Key lending spread
(1) Gerali et al (2010)	DSGE	euro area	largely estimated	yes	по	lı- la
(2) Roger and Vicek (2010)	DSGE	euro area	calibrated	yes	yes	li-ta
(3) Roeger ² (2010)	DSGE	euro area	calibrated	yes	yes	iı - i _d
(4) Christiano et al (2010)	DSGE	euro area	estimated	yes	yes	ir ia
(5) Antipa et al (2010)	DSGE	euro area	estimated	no	no	$\dot{h} = \dot{l}_{d}$
(6) Roger and Vicek (2010)	DSGE	ŲŞ	calibrated	yes	yes	li- la
(7) Van den Heuvel (2008)	DGE	US	calibrated	yes	no	h-ta to-ta
(8) Curdia and Woodford (2009)	DSGE	US	estimated	no	no	$\dot{t}_i - \dot{t}_{ci}$
(9) Dellas et al (2010)	DSGE	US	calibrated	no	yes	ĥ- la
(10) Meh and Moran (2008)	DSGE	us	calibrated	yes	no	4- ls
(11) Locamo (2004)	Semi- structural	Italy	estimated	กอ	по	h-la la-la
(12) Bank of England	Semi- structural	UK	estimated	no	по	n.ə.
(13) Gambacorta (2010)	VECM	US	estimated	yes	yes	$i_l - i_m$

 $[\]frac{1}{16}$  in interest rate on loans to firms;  $i_0$ : interest rate on long-term bonds;  $i_0$ : interest rate on bank deposits;  $i_0$ : return on bank equity;  $i_0$ : monetary policy rate.  $\frac{1}{16}$  Model calibrated based on eight euro area countries.

The main channel through which changes in capital and liquidity regulation affect economic activity is via an increase in the cost of bank intermediation. More specifically, for given assets banks must hold more capital, ie they must deleverage. This reduces banks' margins. Banks can adopt a whole array of reactions to this reduction. ⁴⁷ In this report, in those models not featuring bank capital and/or liquidity we assume that they increase lending spreads. In

⁴⁷ Banks can issue new equity, increase retained earnings (by reducing dividend payments, by increasing operating efficiency, by raising average margins between borrowing and lending rates, by increasing non-interest income). They can also reduce RWA, by cutting the overall size of their portfolios of loan and/or non-loan assets, or by shifting the composition of portfolios towards less risky assets.

the models in which bank capital and/or liquidity are explicitly modelled, the increase in lending spreads arises endogenously as the response to the new regulation. Owing to imperfect substitutability between bank credit and other forms of market financing (such as bonds), this leads to lower investment and consumption, which then affects employment and output.

The reduction of investment activity induces a one-off loss of output in the long run as the marginal product of capital has to rise in line with the lending rate spreads. Over the long run monetary policy is assumed to be neutral. By contrast, the short-term monetary policy reaction is important to assess the effect of the new regulation on output variability (see Section II.B).

Most of the models used in the simulations carried out specifically for this exercise belong to the **Dynamic Stochastic General Equilibrium (DSGE)** family. These models have a number of advantages for the purpose at hand. By choice, most of the models feature banks' balance sheets and credit markets explicitly. This permits us to analyse in a unified framework how changes in capital and liquidity requirements affect banking conditions (spreads and lending) and ultimately output. In addition, DSGE models allow counterfactual policy experiments in a conceptually consistent manner. As agents' expectations are explicitly modelled, so is their reaction to the simulated policy change. Finally, DSGE models allow us to study the effect of the policy changes not only on the steady-state values of the key macroeconomic variables, but also on their long-term variability. That said, DSGE models have disadvantages too. Many of the available models are fully or partially calibrated, since estimation is often daunting. As a result, quantitative results from some of these models might be questionable. And the variants used here are still experimental, so that they are not fully integrated in the policy-making process.

In a few cases it has been possible to use **semi-structural models**. Most central banks and many other economic agencies have one or more, regularly updated, macroeconomic models that have demonstrated their usefulness over time for forecasting and policy analysis. For the most part, however, these models do not directly incorporate balance sheet conditions and income statements of banks as input variables. Instead, these effects must be incorporated into other variables, such as lending spreads. This means that the first step of the transmission channel highlighted above (the impact of bank capital and liquidity on lending spreads) is not included. Moreover, the computation of steady-state effects is in many cases difficult due to the size of the models, and long-term effects can be approximated only by simulations over a reasonably large number of years. For this reason, we had to restrict the use to only two models of this class, those of the Bank of Italy and Bank of England. The mechanism at work in the semi-structural models is similar to the one outlined above. ⁴⁹

In stylised macro models that do not differentiate between deposit and lending rates the long-run real rate is unique and it is not affected by monetary policy (long-run neutrality). The spread between lending and deposit rates present in all the models used for this report is determined by regulation and by bank-specific factors (efficiency, competition, etc), and is independent of the monetary policy stance. Tighter regulation increases the spread. In principle, this can happen via an increase in the lending rate for a given deposit rate, or via a decline in the deposit rate for a given lending rate, or via a combination of both. A looser monetary policy could keep the lending rate constant. In this case, the deposit rate would fall below its level prevailing before the new regulation. Other things equal, this would cause a decline in the demand for bank deposits, and hence a decline in banks' liabilities, and therefore affect loans as well. The final effect on steady-state output need not be identical in the two cases, and is likely to be model-specific.

Specifically, an increase in the spread leads to higher bank lending rates, which translates into a higher cost of capital. The latter typically implies a reduction of the optimal capital-output ratio, leading to a decrease in equipment investment (in the Bank of Italy model the increase in bank lending rates directly affects also

Finally, we also present results obtained with a **Vector Error Correction Model** (VECM) that estimates long-run relationships among a small set of macro variables (these include bank ROE, interest rates, lending, bank liquidity and capitalisation). The main advantage of this approach is that it helps to disentangle loan demand and loan supply factors in the steady state. The main disadvantage is that it does not allow us to conduct counterfactual experiments, such as the introduction of countercyclical capital buffers.

residential investment in the short run). In the steady state, the lower capital-labour ratio following a permanent modification of the relative price of factor inputs would be associated with a lower output per head.

#### Annex 5

# Translating TCE/RWA into different bank capital ratios and modelling the link between the NSFR and banking crises

This Annex provides a mapping from the ratio of tangible common equity to risk-weighted assets (TCE/RWA) to different capital measures, and describes in detail how meeting the NSFR is mapped into the models assessing the probability of systemic banking crises.

#### A5.1 Translating TCE/RWA into different bank capital measures

The mapping from TCE/RWA to different bank capital ratios is based on a simple regression using Bankscope data for US and euro area banks.

The baseline specification is a weighted OLS regression of the form:

(1) 
$$X_i = \beta * TCE/RWA_i + \varepsilon$$

where i = 1,...N and N is the number of banks. The variable X represents the specific bank capital adequacy ratio that we want to map into the TCE/RWA ratio. The regressions are weighted based on total assets. Pooled OLS regressions are run for all years, with and without clustering by firm (eg firm dummies). Note that all regressions are run without a constant and  $\beta$  represents the simple estimated proportion between the selected ratios.

Prior to running the regressions, the data had to be cleaned to remove outliers. The final sample after cleaning was composed of 10,718 banks (6,082 US and 4,636 euro area) and 73,662 observations (41,191 US and 32,471 euro area).

Table A5.1 provides a translation from a 6%, 9% and 12% TCE/RWA into each capital ratio using estimated coefficients.

The Bankscope data contain a number of outliers that need to be removed prior to running the regressions. We drop all observations that do not meet the following conditions: tangible common equity ≤ common equity ≤ Tier 1 ≤ Tier 1+2. Moreover, in order to rule out other possible outliers, in the regressions we do not use observations below 1% and above 99% of the distribution for these ratios.

Table A5.1

Translation of target TCE/RWA ratios into other capital ratios
(in percentage points)

	US banks										
TCE/	Tier1/	Tier1/	(Tier1+Tier2)/	(Tier1+Tier2)/	Shareholders'	Common	Average				
RWA	TA	RWA	TA	RWA	equity/TA	equity/TA					
6	3.8	6.6	5.4	7.8	5.3	3.8	5.5				
9	5.7	9,9	8.1	11.7	8.0	5.7	8.3				
12	7.6	13.2	10.8	15.6	10.6	7.6	11.1				
				Euro-area banks							
6	3.7	8.1	5.5	9.6	3.3	2.8	5.6				
9	5.6	12.2	8.3	14.4	5.0	4.2	8.4				
12	7.4	16.2	11.0	19.2	6.6	5.6	11.1				

Note: Shareholders' equity = total assets - total liabilities = common equity + preferred + minority interest + other equity and reserves; common equity = common stock + additional paid-in capital + retained earnings - treasury shares; tangible common equity = common equity - intangibles - goodwill.

## A5.2 Modelling the link between meeting the NSFR and the probability of systemic banking crises

Estimating the impact of meeting the NSFR on the probability of banking crises requires mapping the balance sheet adjustments necessary to meet the NSFR onto the specific liquidity ratios used in models that estimate those probabilities.

The liquidity ratios used in these models are either the ratio of deposits to total liabilities or the ratio of liquid assets to total assets. Liquid assets are defined as the sum of cash, deposits with the central bank and total securities holdings. (This is a broader definition of liquid assets than that used in macro models employed to estimate the output costs of the requirements or the benefits in terms of lower output volatility.)

The mapping is consistent with the approach followed in the analysis of the impact of meeting the NSFR on bank lending spreads (Annex 3):

- Banks that fall short of the NSFR are assumed to first lengthen the maturity of their wholesale funding.
- If this is not sufficient, banks are assumed to substitute non-qualifying bonds with highly rated, liquid securities.
- Finally, banks are assumed to reduce their holdings of other assets, which are illiquid.

None of these actions changes the ratio of deposits relative to total liabilities. This implies that only three models (the FSA model and both Bank of Japan models) can be used to assess the impact of meeting the NSFR on the probability of systemic banking crises.⁵¹

The ratio of liquid assets, as defined in these models, is unaffected by step 1 but also by step 2 because the substitution of one security for the other does not change the total

In principle, this analysis could also include the results of the stress testing exercise conducted by the Bank of Canada. However, the fact that these results reflect the links between liquidity, capital and crises under stressful scenarios sets them apart from the results of models that are more geared to average relationships. Had these results been included in the averages reported in Table 4 in the main text, the conclusions would have been qualitatively identical but the marginal impact of liquidity would have been smaller.

volume of securities. The liquidity ratio will only increase when the holdings of other (non-liquid) assets are reduced to the benefit of (more liquid) securities. Using the stylised balance sheets used throughout Section II, the required reduction in other assets in order to meet the NSFR amounts to roughly a 12.5% increase in the ratio of liquid assets over total assets. Increasing the liquid asset ratio by 50% implies that the NSFR equals 1.12.

#### Annex 6

### Impact of tighter regulatory constraints on consumption

This annex outlines an alternative approach to macro models to measure potential effects of higher capital and liquidity requirements on output (see Van den Heuvel (2008)). In this model welfare can be reduced if higher capital requirements result in less liquidity provision by the banking system to households and firms, a type of cost which is analogous to the welfare cost of inflation. Under standard assumptions the welfare cost per unit change in the capital requirement can be measured by the product of two indicators; (i) the spread between the cost of bank equity and deposits, and (ii) the ratio of total bank debt to consumption. Intuitively, the spread captures the value of liquidity creation by banks, which in turn allows them to lend at lower rates to firms and households, while the bank debt-to-consumption ratio captures the importance of bank-intermediated finance in the economy.

This methodology is applied to a panel of OECD countries and results are shown in Table A6.1 (expressed in terms of the percentage deviation of consumption from the baseline steady state). Consistent with the results of the macro models reported in Table 8, a 2 percentage point increase in the capital results, on average, in a long-run consumption loss of approximately 0.2%.

Table A6.1

Steady-state welfare loss due to higher capital requirements in terms of consumption equivalents: formula-based measures¹

Increase in capital ratio relative to current level	Canada	France	Germany	italy	Nether- lands	Spain	IJK	us	Japan	Avg	St. Dev.
(percentage points)		(percentage deviation from [2008 nominal] consumption)									
2	0.2	0.1	Ω.1	0.1	D.4	0.2	0.2	0.1	0.1	0.2	0.1
4	0.5	0.1	0.2	0.3	8.0	0.4		0.3	0.2	0.4	0.3
6	0.7	0.2	0.3	0.4	1,1	0.6		0.4	0.3	0.5	0.4

Welfare loss due to tightening of capital requirement as computed in Van den Heuvel (2008).

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Co-Chairmen Mr Claudio Borio

Mr Thomas Huertas

Canada Mr Graydon Paulin

Mr Neville Arjani

China Ms Jingchun Zhang

France Mr Laurent Clerc

Mr Jean Pierre Villetelle

Germany Mr Thilo Pausch

Italy Mr Paolo Angelini

Mr Andrea Gerali Mr Alberto Locarno

Japan Mr Ryo Kato

Korea Mr Byungchil Kim

Netherlands Mr Jan Kakes

Mr Jan Willem van den End

Spain Ms Isabel Argimon

United Kingdom Ms Maria-Jose Barbero

Mr Sujit Kapadia

United States Mr Hamid Mehran

Mr Simon Potter

Mr Skander Vandenheuvel

European Central Bank Mr Florian Heider

International Monetary Fund Mr Scott Roger

Mr Jan Vicek

Bank for International Settlements Mr Kostas Tsatsaronis

Mr Mathias Drehmann Mr Leonardo Gambacorta

Mr Michael King

Basel Committee Secretariat Mr Neil Esho



#### FEDERAL DEPOSIT INSURANCE CORPORATION, Washington, DC 20429

OFFICE OF THE CHAIRMAN

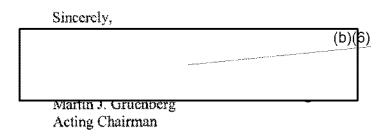
November 27, 2012

Honorable Tim Johnson Chairman Committee on Banking, Housing, and Urban Affairs United States Senate Washington, D.C. 20510

Dear Chairman Johnson:

Thank you for your letter concerning the results of the recent FDIC Inspector General's audit report entitled, "The FDIC's Examination Process for Small Community Banks." Enclosed are our responses to your follow up questions.

If you have additional questions or require further information, please contact me at (202) 898-3888 or Eric Spitler, Director of the Office of Legislative Affairs, at (202) 898-7140.



Enclosure

#### Response to Questions from The Honorable Tim Johnson

Q1: While I understand that many exam issues are resolved informally, I would appreciate your feedback of the reasons for the low usage of formal appeals by regulated institutions, including whether your agency ensures that institutions are routinely made aware of the ability to appeal examination results.

Response: We would attribute the low usage of the FDIC's formal appeals process to two critical factors documented in the Audit Report.

- The FDIC's quality control process that ensures consistency in examination policy while considering the unique circumstances of each institution and the community in which it operates; and
- The FDIC's emphasis on communication with bank management at all stages of the examination process, including the regional office review and the initial stages of a formal appeal.

As part of the examination process, examiners or field management serve as the first-level of review in an attempt to resolve disputed or unresolved examination issues. Issues that remain unresolved after the conclusion of an on-site examination are elevated to the appropriate regional office for a second-level review. If the regional office and the institution are unable to resolve the disputed issues, it is standard practice for the FDIC's regional management to verbally notify the institution's management and board of directors of the bank's appeal rights during exit meetings with the bank. The bank also may be provided written notification of its right to appeal as part of correspondence discussing the specific issue in dispute.

If an institution chooses to formally appeal a material supervisory determination, the first stage of the appeals process is to request a review of the disputed finding by the appropriate Division Director in the FDIC's Washington Office. The Division convenes a panel of subject-matter experts who are familiar with the relevant policy issue and are independent of the examining region's reporting chain to review the request. At the conclusion of the division-level review, the bank receives a comprehensive response to its request that summarizes the bank's position and supporting arguments, the regional office's support for its findings, a discussion of the applicable policies and examination guidance, and the Division's final decision and rationale. Given the comprehensive nature of the Division's response, many banks choose not to pursue the second-stage appeal to the FDIC's Supervisory Appeals Review Committee (SARC). Alternatively, some institutions narrow the scope of their appeal to the SARC in light of the divisional response.

Q2: Describe how your agency ensures the deadlines for filing appeals are communicated effectively to regulated institutions.

Response: Details on the FDIC's supervisory appeals process, including deadlines for filing, are documented in the Guidelines for Appeals of Material Supervisory Determinations (Guidelines). The Guidelines were established in 1994 and most recently updated in 2010. The Guidelines specify timelines for each step of the appeals process. FDIC-supervised institutions have most recently been reminded of these Guidelines in a Financial Institution Letter dated March 1, 2011, and in an article published in the Summer 2012 issue of the FDIC's Supervisory Insights journal. Links to the Guidelines are posted in several places on the FDIC website (www.FDIC.gov), including the FDIC Ombudsman's web page and under the Quick Links for Bankers web page.

Q3: Please comment on your plans to implement the Audit Report's recommendations and any planned enhancements to the examination and supervisory processes, particularly those plans geared toward ensuring that examinations are well-calibrated to smaller institutions. Also, please comment on any plans your agency may have to improve awareness of the examination appeals process and the dialogue between agency and regulated institution staff.

Response: As the primary federal supervisor for the vast majority of the nation's community banks, the FDIC ensures that the banking agencies' rules, policies, and guidelines consider the implementation challenges facing community banks. Similarly, our examination program has been calibrated to the community bank model. Although the Audit Report contains no recommendations, we are reviewing our communication methods regarding the appeals process as part of the FDIC's Community Banking Initiatives, through which we are undertaking a comprehensive review of our examination, rulemaking, and guidance processes. The FDIC's goal in undertaking these initiatives is to identify ways to make the supervisory process more efficient, consistent, and transparent. The activities under review fall into three broad categories: Communication and Outreach, Examination Processes, and Analytics and Reporting. As we proceed, we will incorporate input received from the FDIC's Advisory Committee on Community Banking, whose members represent community banks of various sizes, charter types, and geographic regions, as well as from the participants in our seven community banking roundtable events held across the country during 2012.

¹ FIL-13-2011, "Reminder on FDIC Examination Findings," March 1, 2011. http://www.fdic.gov/news/news/financial/2011/fil11013.html.

² "The Risk Management Examination and Your Community Bank," Supervisory Insights, Summer 2012. http://www.fdie.gov/news/news/finaneial/2012/fil12022.html.

The Quidelines are available at http://www.fdic.gov/regulations/laws/sarc/

## Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation Office of the Comptroller of the Currency

November 28, 2012

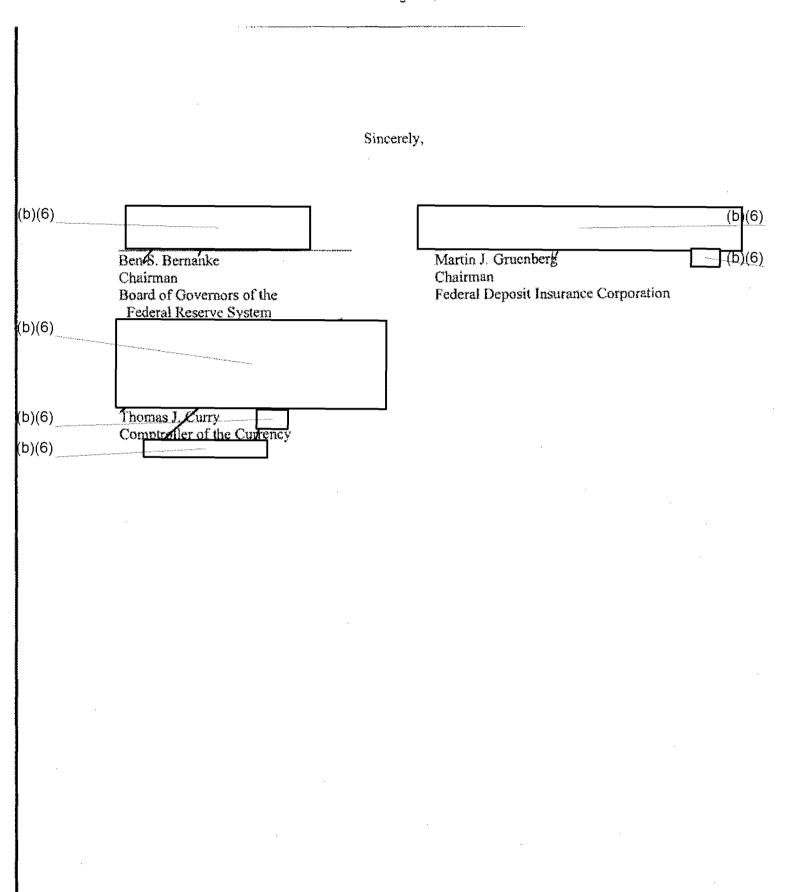
Honorable Randy Neugebauer Chairman Subcommittee on Oversight and Investigations Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter expressing concern about the potential effect of the federal banking agencies' recent regulatory capital proposals on community banking organizations. The agencies recognize the important role that community banking organizations play in the financial system and local economies, which includes providing credit to small businesses and local communities throughout the country.

As you know, our agencies published two notices of proposed rulemaking (NPR) that would potentially affect community banks. The first, often referred to as the Basel III NPR, focuses primarily on strengthening the level of regulatory capital requirements and improving the quality of capital, and the other, commonly referred to as the Standardized Approach NPR, proposes a number of enhancements to the risk-sensitivity of the agencies' capital standards. The agencies have taken a number of steps to help community bankers to better understand the proposals and to help the agencies, in turn, to better understand the concerns of community bankers. Specifically, the agencies have conducted informational sessions for community bankers across the country, and also have developed an estimation tool that was posted to each agency's public website to help community banking organizations identify the potential effect of the proposals on their capital ratios. These efforts were designed to facilitate bankers' understanding of the proposals and to help them identify issues of specific concern.

Your letter raises specific concerns about potential difficulties for community banking organizations in complying with the proposed rules, many of which also have been raised by commenters. The agencies recognize that these are serious issues and we will take them fully into consideration as we finalize the rules.



## Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation Office of the Comptroller of the Currency

November 28, 2012

Honorable Jeb Hensarling Vice Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

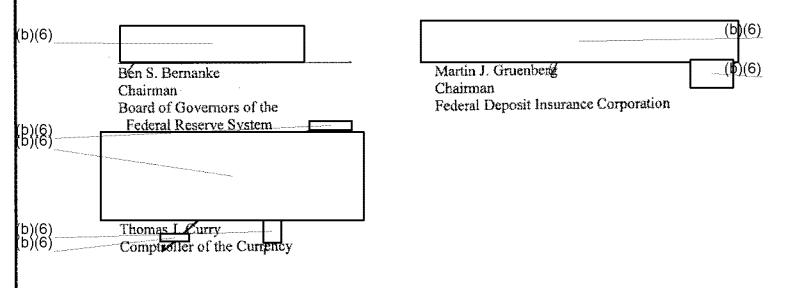
Dear Congressman Hensarling:

Thank you for your letter expressing concern about the potential effect of the federal banking agencies' recent regulatory capital proposals on community banking organizations. The agencies recognize the important role that community banking organizations play in the financial system and local economies, which includes providing credit to small businesses and local communities throughout the country.

As you know, our agencies published two notices of proposed rulemaking (NPR) that would potentially affect community banks. The first, often referred to as the Basel III NPR, focuses primarily on strengthening the level of regulatory capital requirements and improving the quality of capital, and the other, commonly referred to as the Standardized Approach NPR, proposes a number of enhancements to the risk-sensitivity of the agencies' capital standards. The agencies have taken a number of steps to help community bankers to better understand the proposals and to help the agencies, in turn, to better understand the concerns of community bankers. Specifically, the agencies have conducted informational sessions for community bankers across the country, and also have developed an estimation tool that was posted to each agency's public website to help community banking organizations identify the potential effect of the proposals on their capital ratios. These efforts were designed to facilitate bankers' understanding of the proposals and to help them identify issues of specific concern.

Your letter raises specific concerns about potential difficulties for community banking organizations in complying with the proposed rules, many of which also have been raised by commenters. The agencies recognize that these are serious issues and we will take them fully into consideration as we finalize the rules.

Sincerely,



## Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation Office of the Comptroller of the Currency

November 28, 2012

Honorable Shelley Moore Capito Chairman Subcommittee on Financial Institutions and Consumer Credit Committee on Financial Services House of Representatives Washington, D.C. 20515

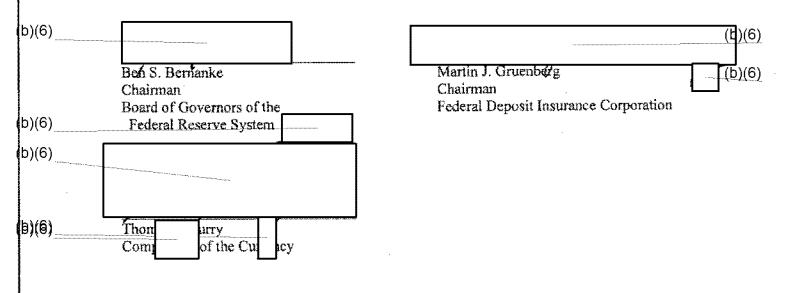
#### Dear Madam Chairman:

Thank you for your letter expressing concern about the potential effect of the federal banking agencies' recent regulatory capital proposals on community banking organizations. The agencies recognize the important role that community banking organizations play in the financial system and local economies, which includes providing credit to small businesses and local communities throughout the country.

As you know, our agencies published two notices of proposed rulemaking (NPR) that would potentially affect community banks. The first, often referred to as the Basel III NPR, focuses primarily on strengthening the level of regulatory capital requirements and improving the quality of capital, and the other, commonly referred to as the Standardized Approach NPR, proposes a number of enhancements to the risk-sensitivity of the agencies' capital standards. The agencies have taken a number of steps to help community bankers to better understand the proposals and to help the agencies, in turn, to better understand the concerns of community bankers. Specifically, the agencies have conducted informational sessions for community bankers across the country, and also have developed an estimation tool that was posted to each agency's public website to help community banking organizations identify the potential effect of the proposals on their capital ratios. These efforts were designed to facilitate bankers' understanding of the proposals and to help them identify issues of specific concern.

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Sincerely,



#### Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation Office of the Comptroller of the Currency

November 28, 2012

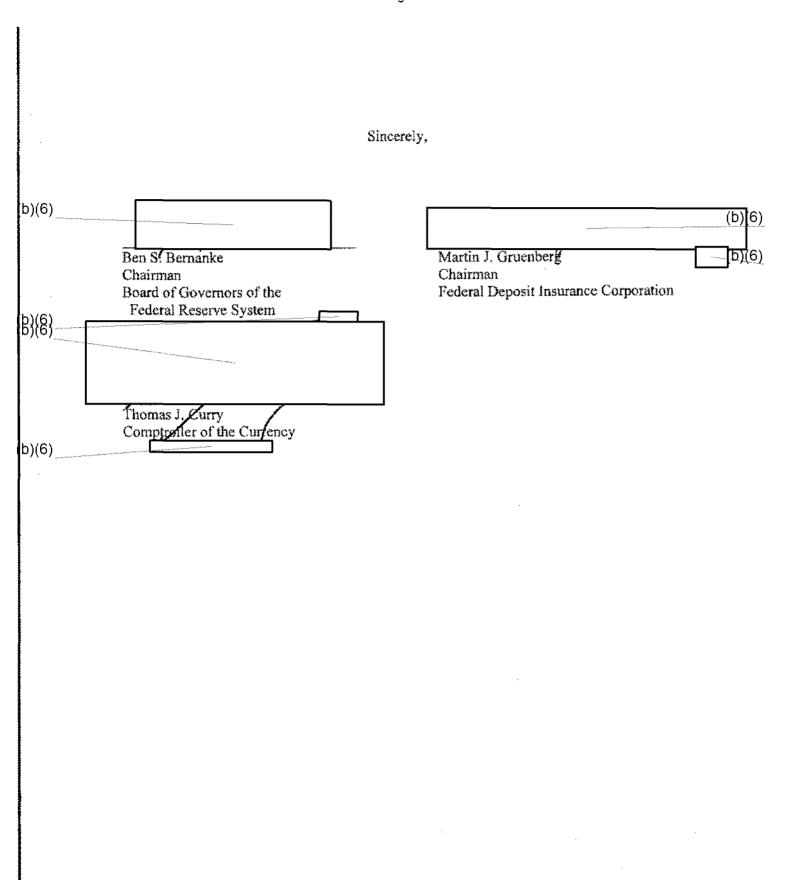
Honorable Spencer Bachus Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter expressing concern about the potential effect of the federal banking agencies' recent regulatory capital proposals on community banking organizations. The agencies recognize the important role that community banking organizations play in the financial system and local economies, which includes providing credit to small businesses and local communities throughout the country.

As you know, our agencies published two notices of proposed rulemaking (NPR) that would potentially affect community banks. The first, often referred to as the Basel III NPR, focuses primarily on strengthening the level of regulatory capital requirements and improving the quality of capital, and the other, commonly referred to as the Standardized Approach NPR, proposes a number of enhancements to the risk-sensitivity of the agencies' capital standards. The agencies have taken a number of steps to help community bankers to better understand the proposals and to help the agencies, in turn, to better understand the concerns of community bankers. Specifically, the agencies have conducted informational sessions for community bankers across the country, and also have developed an estimation tool that was posted to each agency's public website to help community banking organizations identify the potential effect of the proposals on their capital ratios. These efforts were designed to facilitate bankers' understanding of the proposals and to help them identify issues of specific concern.

Your letter raises specific concerns about potential difficulties for community banking organizations in complying with the proposed rules, many of which also have been raised by commenters. The agencies recognize that these are serious issues and we will take them fully into consideration as we finalize the rules.





OFFICE OF THE CHAIRMAN

December 18, 2012

Honorable Barney Frank Ranking Minority Member Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Congressman Frank:

Pursuant to the provisions of the Federal Advisory Committee Act (5 U.S.C. App.) (the Act), the Federal Deposit Insurance Corporation is renewing the FDIC Advisory Committee on Economic Inclusion.

Section 9(c) of the Act (5 U.S.C. App., 9(c)) requires each federal agency that establishes a new advisory committee to file a charter "with the standing committees of the Senate and of the House of Representatives having legislative jurisdiction of such agency." Section 14(b)(1) of the Act requires that any established advisory committee file a charter upon its renewal. Enclosed is the charter for the FDIC Advisory Committee on Economic Inclusion. Notice of the renewal of the committee will be published in the Federal Register.

If you have any questions, please do not hesitate to contact me at (202) 898-3888 or Eric J. Spitler, Director, Office of Legislative Affairs, at (202) 898-7140.

	Sincerely.		
(b)(6)			
	Martin J. Cruenberg	<del></del>	
	Chairman		

Enclosure

#### FEDERAL DEPOSIT INSURANCE CORPORATION

### CHARTER OF THE FDIC ADVISORY COMMITTEE ON ECONOMIC INCLUSION

- 1. Committee's Official Designation (Title): FDIC Advisory Committee on Economic Inclusion ("the Committee").
- 2. Authority: Discretionary committee established under agency authority and in accordance with the provisions of the Federal Advisory Committee Act, as amended, 5 U.S.C. App.
- 3. Objectives and Scope of Activities: The Committee will provide advice and recommendations on initiatives to expand access to banking services for underserved populations. The Committee will review various issues that may include, but not be limited to, basic retail financial services such as check cashing, money orders, remittances, stored value cards, short-term loans, savings accounts, and other services to promote asset accumulation and financial stability.
- 4. Description of Duties: The Committee will provide advice and recommendations only. It will have no formal decision-making role, will have no access to confidential supervisory or other confidential information, and will not have access to or discuss any non-public information regarding specific financial companies.
- 5. Agency or Official to Whom the Committee Reports: The Committee reports to the Chairman of the Board of Directors of the Federal Deposit Insurance Corporation ("Chairman").
- 6. Support: The FDIC will establish such operating procedures as required to support the Committee, consistent with the Federal Advisory Committee Act, as amended. In addition, the FDIC will provide whatever support is required for the Committee's activities, to the extent permitted by law and subject to the availability of resources.
- 7. Estimated Annual Operating Costs and Staff Years: The annual operating costs associated with supporting the Committee's functions are estimated to be \$300,000 per year, including staff time. It is estimated that two staff-years per year, of FDIC personnel time, will be required to support the Committee on a continuing basis. Committee members will be reimbursed for expenses for travel, per diem, and other miscellaneous expenses incurred in the performance of their duties for the Committee subject to FDIC approval.
- 8. Designated Federal Officer: A full-time or permanent part-time employee, appointed in accordance with agency procedures and designated as such by the Chairman, will serve as the Designated Federal Official (DFO). The DFO will approve or call all of the Committee's and subcommittees' meetings, prepare and approve all meeting agendas, attend all Committee and subcommittee meetings, adjourn any meeting when the DFO

determines adjournment to be in the public interest, and chair meetings when directed to do so by the official to whom the Committee reports.

- 9. Estimated Number and Frequency of Meetings: The Committee shall meet at such intervals as are necessary to carry out its functions. It is anticipated that the Committee will meet at least 2 times per year.
- 10. Duration: The Committee will exist for two years from the date of the Charter, unless earlier renewed.
- 11. Termination: The Committee will terminate two years from the date of charter filing, unless some renewed.
- 12. Membership and Designation: The groups represented in order to achieve a fairly balanced membership are the federal government, banking industry, state regulatory authorities, consumer or public advocacy organizations, community-based groups, academia, philanthropic organizations, as well as others impacted by banking-related practices. Members will serve for a term of two years, which may be renewed, and the number of members of the Committee will not exceed 25. The Chairman of the Committee, to the extent one is desired by the FDIC, will be selected from among the members of the Committee by the Chairman of the Board of Directors of the FDIC. No Special Government Employees are expected to be on the Committee; the Committee will be composed exclusively of representatives of the above-described groups. Committee members will not receive compensation for their services.
- 13. Subcommittees: The Chairman is authorized to create any subcommittees that may be necessary to fulfill the Committee's mission. Any subcommittee created will report back to the Committee and will not provide advice or work products directly to the FDIC.
- 14. Recordkeeping: The records of the Committee will be handled in accordance with the FDIC's records disposition schedule. These records will be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. § 552.
- 15. Filing Date: This charter has been filed with the Chairman of the FDIC, the Senate Committee on Banking, Housing, and Urban Affairs, the House Committee on Financial Services, and the General Services Administration's Committee Management Secretariat, and furnished to the Library of Congress on December 18, 2012.

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	12/18/12		
	Dated	Martin J. Gruenborg	(b)(6)
		Chairman	(b)(o)
		Federal Deposit Insurance Co	rnoration

#### October 26, 2012

The Honorable Joseph Lieberman
Chairman
Committee on Homeland Security and Governmental Affairs
United States Senate
340 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Susan Collins
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate
340 Dirksen Senate Office Building
Washington, DC 20510

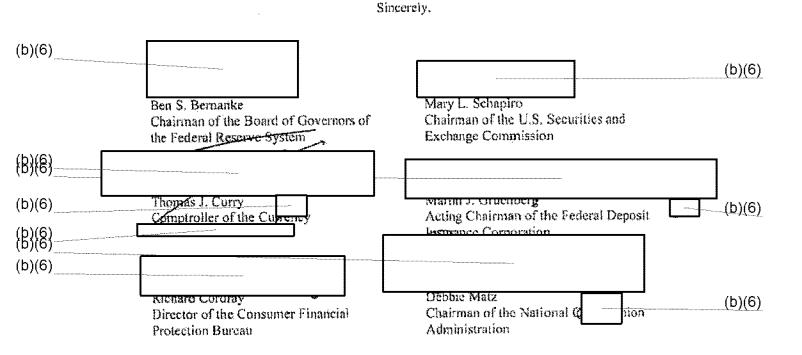
Dear Chairman Lieberman and Ranking Member Collins:

We are writing to express our concerns with S. 3468, the "Independent Agency Regulatory Analysis Act of 2012," which we understand is being considered for possible mark-up by the Committee on Homeland Security and Governmental Affairs.

Independent regulatory agencies were established by Congress to exercise policymaking functions – and in particular, rulemaking functions – independent of the control of any Administration. Independent regulatory agencies have sought to implement statutes in a manner faithful to the statutory language and consistent with our respective missions without imposing unnecessary costs. S. 3468 authorizes the President to require independent regulatory agencies to submit their rulemakings to OMB's Office of Information and Regulatory Affairs for prior review. This would give any President unprecedented authority to influence the policy and rulemaking functions of independent regulatory agencies and would constitute a fundamental change in the role of independent regulatory agencies. Beyond injecting an Administration's influence directly into our rulemaking, the bill also would interfere with our ability to promulgate rules critical to our missions in a timely manner and would likely result in unnecessary and unwarranted litigation in connection with our rules.

The Honorable Joseph Lieberman The Honorable Susan Collins Page 2

We urge you to consider the potential negative consequences of this bill before proceeding with it legislatively, and would be happy to discuss it in more detail at your convenience.



cc: All Other Members of the U.S. Senate Committee on Homeland Security and Governmental Affairs



Office of Legislative Affairs

December 21, 2012

Honorable Tim Johnson Chairman Committee on Banking, Housing, and Urban Affairs United States Senate Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for your letter enclosing questions subsequent to testimony by George French, Deputy Director of Policy, Division of Risk Management Supervision, at the Committee's November 14, 2012 hearing "Oversight of Basel III: Impact of Proposed Capital Rules."

Enclosed are our responses. If we can provide further information, please let us know. The Office of Legislative Affairs can be reached at (202) 898-7055.

Sincerely,	(b)(6)

Eric J. Spitler Director Office of Legislative Affairs

Enclosure

#### Response to questions from the Honorable Mark Warner by George French, Deputy Director of Policy, Division of Risk Management Supervision, Federal Deposit Insurance Corporation

Q1: I, and many other Members, have brought up concerns about the need to tailor rules to the size and type of entity. However, I recognize the U.S.'s leadership role on the Basel Committee, and the need to move through this period of regulatory uncertainty so that businesses can make investment decisions. How can the Committee provide regulated entities more certainty about the timeline of rules being re-proposed or finalized in the future?

A1: Basel Committee capital standards are not legally binding, and implementing any Basel Committee standard is ultimately a matter of national discretion. The federal banking agencies have chosen to apply many Basel standards to large banking organizations, in part to promote internationally consistent regulatory capital standards. The banking agencies have not proposed to apply a number of important Basel standards to small banks. Basel II, Basel II.5 and important parts of Basel III, for example, do not apply to small U.S. banks. However, the agencies have proposed to apply the aspects of Basel III dealing with the definition and level of capital to all banks, along with aspects of the so-called Basel II Standardized Approach.

In considering changes to regulatory capital requirements, it is incumbent on the federal banking agencies to make the process as transparent and understandable as possible, including reducing uncertainty about timelines to the extent we can. In the case of the Basel III and Standardized Approach proposed rules, the FDIC engaged in an intensive technical assistance effort to help small banks understand the proposals and identify aspects that are of concern to them. This included providing detailed but concise summaries of the proposed rules, conducting a series of regional outreach meetings and a national call-in, posting a video describing each rule on our website, and working with other agencies to post a capital estimation tool on our respective websites.

With regard to timelines, the Basel III NPR proposed a multi-year phase-in period that extends as far as ten years in the future for some aspects of the proposals. The phase-in period was proposed to begin January 1, 2013. In light of the large volume of comments received, the agencies have clarified that the proposed rules will not take effect on January 1, 2013. We are working expeditiously to finalize the rulemaking process and will pay close attention to the need to provide adequate time for institutions to comply with a final rule.

These NPRs provide an example where the proposed timeline was much less important than the need for careful deliberation about the issues raised by commenters. We nevertheless agree with your comment about the importance of minimizing uncertainty to the extent possible in the rulemaking process, including rulemaking processes that are proposing to implement Basel Committee capital standards.

- Q2. I've heard concerns that the proposed rules require unrealized gains and losses on available for sale assets to be recognized within AOCI. Insurers that are Savings & Loan Holding Companies are especially apprehensive about managing increased asset-liability mismatches. Can you discuss your broader goals to encourage a long-term focus in capital management, and address these AOCI concerns?
- A2: The Basel III NPR seeks comment on the proposed treatment of unrealized gains and losses on available-for-sale (AFS) debt securities. Specifically, the proposal seeks comments on the potential volatility of capital that could arise from the proposed treatment as well as the effects this potential volatility could have on the ability of institutions to manage liquidity and their investment portfolios. We recognize that some volatility in accumulated other comprehensive income (AOCI) occurs purely due to changing interest rates, as opposed to changing credit quality, and the NPR seeks comment on an alternative treatment for those instruments like U.S. government securities that have market risk but little to no credit risk.

Among the broader policy goals is to ensure the components of regulatory capital are available to absorb losses during a period of stress. In general, AOCI represents the difference between the book value and the market value of the AFS securities. As such, if an institution needed to sell securities from its AFS portfolio to absorb losses, the amount the institution would realize would be only the market value.

- Q3: We've seen some recent sales of MSRs from banks to non-banks since the proposal was released saying that MSRs may only be counted for up to 10% of CET1, and additional MSR holdings will be weighted at 250%. This is a significant change from allowing MSRs to be counted up to the equivalent of 100% of Tier 1 capital. The MSRs change comes in combination with more sophisticated risk-weights for mortgages that will require more capital for non-standard and high LTV mortgages. We also have QM and QRM on the way, which will have distinct definitions from Basel rules. I am supportive of a more nuanced approach to holding capital for mortgages, but is the panel concerned that the limited overlap in these regulations could cause much greater compliance difficulty for small institutions and negatively affect access to credit among low-to-middle income borrowers?
- A3: We share your concern about the need to coordinate regulations to ensure harmonization. Many of the comments we received have expressed concern about the proposed residential mortgage risk weights, including the overlap with other mortgage regulations. Therefore, we continue to carefully evaluate the relationship of the Basel III NPR and the Standardized Approach NPR with other rulemakings, including QM and QRM. For instance, the Standardized Approach NPR specifically requested comment on the appropriate interaction between the mortgage risk-weight proposals and the OM and ORM rulemakings.
- Q4. Trade finance transactions rely on letters of credit and other off-balance sheet items, and lenders will have to set aside 100% capital for these items if current proposals are implemented. This transition requires 5 times more capital compared to Basel II. Do you believe that these changes are likely to affect smaller companies and emerging countries to

a much greater extent? Can you respond to concerns that these proposals, as they are written, could constrict trade finance opportunities?

A4: The supplementary leverage ratio, which is applicable only to the largest banking organizations with total consolidated assets of \$250 billion or more, would require such banks to capitalize for off-balance sheet items, using a 100 percent credit conversion factor. This is not the same as a 100 percent capital requirement as the credit conversion factor is then multiplied by a minimum capital requirement of three percent. As such, large banking organizations would be required to hold three percent capital for letters of credit and other off-balance sheet items under the supplementary leverage ratio. Although we will continue to evaluate these comments, we would not expect a three percent capital requirement to materially affect trade finance opportunities.

#### Response to questions from the Honorable Robert Menendez by George French, Deputy Director of Policy, Division of Risk Management Supervision, Federal Deposit Insurance Corporation

- Q1: A fundamental objective of Dodd Frank was to reduce systemic risk. I am concerned that the Fed's Basel III proposal could result in bank clearing members having to hold significantly more capital when their customers use less-risky instruments. Some argue that this incentive will make it more expensive to use exchange-traded futures than bespoke swaps. Should the rule be designed to encourage the use of lower risk profile products, rather than potentially discourage it?
- A1: We recognize that the capital charge for exposures to exchanges has risen from zero under Basel II to a 2 percent risk weight under the proposed rule. However, notwithstanding this increase, the proposed rules continue to recognize the risk mitigating benefits of using centrally cleared or exchange-traded products. It is certainly not our intent to discourage the use of lower risk profile products, and we are carefully reviewing comments regarding this issue.
- Q2: With the proposed use of Loan-to-Value (LTV) ratios on home mortgages in Basel III, community banks would be required to recordkeep (or keep records of) the LTVs of future and existing mortgage. Some have argued that going back through their existing portfolios and determining each individual loan's LTV at origination would be burdensome and costly. Have you considered applying this standard prospectively for smaller banks and what thoughts have gone into that?
- A2: You are correct that the Standardized Approach NPR would require banks to review LTVs of each mortgage loan to determine the appropriate capital charge. Generally, we believe the LTV ratio of a residential mortgage is an important indicator of its risk of default. That being said, the compliance costs of the proposal is one issue among many that have been raised regarding the proposed Standardized Approach NPR treatment of residential mortgages. We take the concerns very seriously and are carefully reviewing these comments with our fellow regulatory agencies.
- Q3: Elizabeth Duke recently said that in her discussions with community bankers, more of them report that they are reducing or eliminating their mortgage lending due to regulatory burdens than are expanding their mortgage business. In fact, she says that even if the specific issues in capital proposals can be addressed, the lending regulations might still "seriously impair" the ability of community banks to offer traditional mortgages. How or what are you going to do to ensure that the fragile housing market does not take another hit as it relates to capital requirements and Basel implementation?
- A3: We have received many comments and concerns about the proposed changes to the regulatory capital rules and their impact on mortgage finance and the housing market. During the financial crisis, the U.S. housing market experienced unprecedented defaults, which negatively affected the banking system. The proposed changes to the regulatory capital rules

seek to increase the risk sensitivity with respect to residential mortgage loans. Furthermore, the proposals aim to increase the resiliency of the banking system so institutions are able to continue lending through periods of financial stress. However, we take very seriously the concerns of commenters about the proposed risk weights for residential mortgages in the Standardized Approach NPR. Concerns raised by commenters include compliance costs, effects of the higher risk weights on their willingness to offer established products in their communities, uncertainties about the interaction of the proposed rules with other mortgage regulations, and concerns about the fragility of the housing market. These concerns are receiving careful attention as we decide how to proceed with this aspect of the rulemakings.

#### Response to questions from the Honorable Richard Shelby by George French, Deputy Director of Policy, Division of Risk Management Supervision, Federal Deposit Insurance Corporation

## Q1. Is the U.S. banking system currently adequately capitalized? Please list any studies or data you relied upon to make this determination.

A1: FDIC-insured institutions' weighted average tier 1 capital as a percent of assets (the tier 1 leverage ratio) stood at 9.28 percent as of September 30, 2012. This is a high level of average capitalization relative to recent historical experience and reflects the industry's gradual recovery from the effects of the banking crisis. The regulatory capital NPRs are intended to ensure the industry's capital strength is maintained going forward.

From the FDIC's perspective as deposit insurer, it is very important that the regulatory capital rules provide a sufficient check against excessive leverage in the banking system. In this regard, regulatory capital rules that permitted institutions to enter the crisis with inadequate capital remain in effect. Since January 1, 2008, more than 460 banks have failed and hundreds more became problem banks, reflecting supervisory concern about the inadequacy of their capital relative to the risks they face. Although problem bank numbers are trending down, there were still 694 problem banks at September 30, 2012.

We do not believe the existing capital rules are adequate to prevent a recurrence of the excessive leverage in the banking industry that preceded the recent crisis. The NPRs are an attempt to strengthen the existing rules to better provide for an adequately capitalized industry in the future.

# Q2. If the proposed Basel III rules were implemented, would your agency consider the U.S. banking system to be adequately capitalized? Please explain how you made that determination and what studies and data you relied upon.

A2: The analysis attached to my November 14 testimony suggests that changing the capital rules as proposed in the NPRs would require a relatively small subset of insured banks, less than ten percent of insured banks, to increase their capital to comply with the proposed requirements. The vast majority of banks hold capital well in excess of the current rules and of the proposed rules.

This analysis suggests the actual capital held by insured banks would be in aggregate slightly more under the proposed rules than under the current rules. However, the key change is that, as compared to the current rules, the proposed rules would set a stronger floor under banks' actual capital levels. Compared to current rules, the proposed rules would serve to better maintain the capital strength of the industry going forward.

If the NPRs were implemented, many specific aspects of our current capital rules would be strengthened to reduce the likelihood of future capital inadequacy, and increase the likelihood that the industry's current broad position of capital strength would be maintained. In particular,

the NPRs would strengthen the definition of regulatory capital to increase its ability to absorb losses in a number of specific respects; increase the level of minimum and well-capitalized tier 1 risk-based capital requirements by two percentage points; establish a graduated series of capital-distribution restrictions that become progressively more stringent as an institution approaches its minimum capital ratio; and, for the largest banks, establish a supplementary leverage requirement that addresses off-balance sheet activities and significant new capital requirements for derivatives.

Q3. At an FDIC meeting in July, FDIC Director Thomas Hoenig stated that "as proposed, the minimum capital ratios will not significantly enhance financial stability." Bank of England Governor Mervyn King and several prominent economists have said that Basel III capital standards are insufficient to prevent another crisis. Do you disagree with these assertions? If so, why?

A3: The proposed rules strengthen existing capital requirements in a number of specific respects as described in the answer to question 2. By definition, a stronger capital position means less reliance on debt and, correspondingly, a financing structure that is more flexible in times of adversity. Compliance with the new rules, coupled with strong supervision, should reduce the extent of excessive financial leverage at banking organizations and thereby mitigate the severity of future banking crises.

Q4. Given the cost and complexity of Basel III, do you have any concerns that Basel III will further tilt the competitive landscape in favor of big banks to the detriment of small banks? Have you studied the impact of Basel III on small institutions as compared to their larger counterparts?

A4: We do not believe that Basel III, or the three separate NPRs, collectively favor large banks. There are substantial additional capital requirements for large banks contained in these NPRs. These include a supplementary leverage ratio for advanced approach banks that incorporates off-balance sheet items, capital requirements for credit valuation adjustments associated with derivatives, a countercyclical buffer, and substantial new disclosures. The changes to the agencies' market risk capital requirements finalized in June 2012 further increase capital requirements for the largest organizations. Moreover, it is anticipated that so-called G-SIB capital buffers will be proposed and implemented in a future rulemaking ("G-SIB" refers to "global systemically important bank").

Each agency conducted a statutorily required Initial Regulatory Flexibility Act Analysis of the effect on each NPR on banks with assets less than \$175 million. The FDIC concluded that while the Basel III NPR would not have a substantial cost impact on a large number of small institutions, the Standardized Approach NPR would have a substantial cost impact on a large number of small institutions. For purposes of this analysis, a substantial cost impact was considered to be an initial year's expense of at least 2.5 percent of a bank's total non-interest expense or at least five percent of its annual salary and employee benefits expense. Our framework for this analysis was similar to that conducted by the OCC and Federal Reserve. Comments are shedding additional light on these costs, and the FDIC is carefully considering

with our fellow regulators how to address the concerns about implementation costs. As indicated in my testimony, these are proposed rules, not final rules, and we anticipate making changes in response to comments.

Q5. Recently, the agencies announced that they are pushing back the effective date of the proposed Basel III rules beyond January 1, 2013. This affords the agencies more time to carefully review comment letters, engage in additional outreach and collect additional data. Will the agencies use this extra time to conduct an analysis about the impact of the proposed rules on the U.S. economy and a quantitative impact study that covers all banks, regardless of size, before implementing the final rules?

A5: The agencies have conducted a great deal of analysis of the proposals and their potential effects. This includes, as an important part of our process, the review of over 2400 comment letters that have raised a number of substantive issues with specific parts of the proposals. The agencies have not reached decisions about how best to address the comments or whether additional analysis is needed.

#### Q6. What is the estimated impact of the Basel III rules, if finalized as proposed, on:

#### a: The U.S. GDP growth?

A6a: A better capitalized banking system should be less susceptible to severe crises. Experience with banking crises is that they have a severely negative effect on economic growth. A study that the agencies participated in developing with the Basel Committee concluded that the beneficial effects on GDP growth over time from reducing the severity of banking crises would be expected to outweigh any economic costs resulting from a modest increase in the cost of credit. In the U.S., where our analysis suggests that most banks' capital already well exceeds the proposed standards, capital-raising costs would not be expected to be substantial.

#### b. The probability of bank failure?

A6b: There is extensive literature that deals with how banks' financial ratios affect their probability of failure. In all such studies of which we are aware, the level of a bank's capital as a percentage of some measure of its assets is an important indicator of the probability of failure. This is to be expected, as capital is the shock absorber that allows a bank to absorb unexpected losses while continuing to operate.

In our view, the crisis demonstrated that the current capital rules allowed many institutions to operate with capital levels that were too low. Put another way, the rules allowed these institutions to operate at capital levels such that their probability of failure was inappropriately elevated. The proposed rules are intended to give comfort that banks could absorb a high level of losses relative to historical experience, and thereby reduce their probability of failure.

We have not performed numerical estimates of the probability of bank failure under the proposed rules. Such estimates would be bank specific and would depend on a number of factors, including whether a bank needed to raise capital under the proposed rules and the likelihood and severity of future economic shocks.

#### c. Availability and cost of mortgages, auto loans, student loans and small business credit?

A6c: In general terms, banks should be better able to provide these types of credit going forward, especially during times of economic stress, if they have a strong capital base.

We have received many comments regarding the potential effects of the proposed Standardized Approach rule on the availability and cost of mortgage credit. We are concerned with this potential impact and are carefully studying the comments.

The risk weight on consumer loans held directly by banks is unchanged in the Standardized Approach NPR. Thus, to the extent auto loans and student loans are directly held by banks, their risk weight would be unchanged. In regard to securitized loans, the Standardized Approach NPR proposes to remove references to credit ratings consistent with the Dodd-Frank Act, and the resulting changes may affect the risk weights for securitized auto loans. However, we believe that the senior positions of most securitized auto and student loans held by banks would continue to receive the same 20 percent risk weight they receive today. We continue to study the comments we received on this issue.

With regard to small business credit, the risk weight on commercial loans to small business would remain unchanged under the Standardized Approach NPR. We have heard concerns from commenters that small business loans are often structured as home equity loans. The proposed residential mortgage risk weights could increase the capital requirements for many small business loans structured as home equity loans. As noted above, we are concerned about the comments we received regarding the mortgage risk-weight framework in general and are carefully considering how to proceed. Another aspect of the Standardized Approach NPR that could affect the capital requirements for small business loans is the proposed risk weight for high-volatility commercial real estate (CRE). These are certain loans with CRE collateral that do not comply with the agencies' existing real estate lending standards or where the borrower does not have meaningful equity at risk. The agencies proposed the higher risk weight because imprudent concentrations in CRE lending have been associated with elevated risk of bank failure or problem-bank status.

#### d. The compliance costs for small, medium and large banks?

A6d: As noted in the answer to question 4, our analysis suggests that the Standardized Approach NPR would have an initial year's implementation cost that exceeds 2.5 percent of total non-interest expense or five percent of annual salary and employee benefits expense for a substantial number of small institutions (those with assets less than \$175 million). We have not conducted a similar analysis for larger institutions, but we are reviewing the comments in this respect.

We will carefully consider how to weigh the compliance costs and potential unintended consequences identified by commenters against the goal of a banking system that is more likely to maintain its capital strength going forward so that it can continue to serve as an engine for economic growth. We do expect to make changes to the proposed rules.

#### e. The cost of insurance for consumers?

A6e: The proposed rules for institutions supervised by the FDIC are not relevant for insurance activities. It is important to note, however, that the July 2011 final rule implementing the risk-based capital floors under the Collins Amendment (Section 171 of the Dodd-Frank Act) amended the FDIC's (and the other banking agencies') general risk-based capital rules to provide that for certain low risk exposures not typically held by banks, the agencies' general risk-based capital requirement would be the requirement established by the Federal Reserve for bank holding companies. This provision was intended to allow the Federal Reserve to appropriately tailor the risk-based capital requirement for certain insurance activities while remaining consistent with the requirements of Section 171.

Q7: Mr. French, in your prepared remarks you stated that the proposed rules "are intended to address identified deficiencies in the existing capital regime" and that "for most insured banks, the proposals would not result in a need to raise new capital." How would the proposed capital standards remedy existing deficiencies if most banks would not need to raise new capital? How do you reconcile your statement that most banks already meet the Basel III standards with your assertion that the proposed rules will improve the quality of capital?

A7: The current rules allowed some banks to enter the crisis with insufficient capital. Since the onset of the crisis, the industry in aggregate has rebuilt its capital strength, but the rules remain in place that would allow banks with a higher risk appetite to unduly increase their leverage, as some did pre-crisis. Strengthening the rules will help ensure the industry maintains its aggregate capital strength going forward.

We also would emphasize that according to the analysis attached to my testimony, roughly five percent to ten percent of insured institutions would need to raise capital to comply with the proposed rules. Although most banks are comfortably above the current and proposed regulatory capital requirements, those proposed requirements are highly relevant for the segment of the industry that drives the costs to the FDIC's Deposit Insurance Fund.

#### Response to questions from the Honorable Roger Wicker by George French, Deputy Director of Policy, Division of Risk Management Supervision, Federal Deposit Insurance Corporation

- Q1. In comment letters to federal regulators, the Conference of State Banking Supervisors raised concerns regarding the complexity of the approach proposed by federal banking agencies for implementing the Basel III capital accords. How has this input influenced your approach to the rulemaking process?
- A1: Many industry participants, including the Conference of State Banking Supervisors, have raised concerns regarding the complexity of the proposed changes to the regulatory capital framework. These concerns, as well as many others expressed through the comment process, are extremely important to the rulemaking process. The FDIC takes these concerns seriously, and we will strive to reduce complexity where feasible.
- Q2. In applying Basel III to community banks, did the regulators consider that most privately-held community banks have fewer options for sources of capital than large banks, making it especially challenging for them to raise additional capital in the current economic climate, and that the Basel III proposal could disproportionately impact such community banks?
- A2: The FDIC understands that privately held community banks generally have access to fewer sources of equity capital than do larger publicly traded banks. Small banks often raise capital from directors, large shareholders, or other members of their local communities. In part because of their more limited options for raising capital, smaller banking organizations typically hold higher levels of capital relative to their asset size than larger banks. The analysis attached to my testimony suggests that most small banking organizations already hold capital sufficient to meet the higher capital requirements under the proposed Basel III NPR. Further, the prolonged transition period contemplated in the proposal is intended to provide additional time for banks to comply with the changes to the regulatory capital requirements.

These observations are not intended to minimize or diminish the real concerns that many community bank commenters have with some aspects of the Basel III NPR or other NPRs. As I indicated in my testimony, we take these concerns seriously and will work to address concerns about unintended consequences as we consider how to finalize the NPRs.

- Q3. Will the implementation of the proposed Standardized Approach and the mandate that mortgage loan-to-values (LTVs) be tracked require many of the nation's smaller banks to make costly software upgrades? If so, have you considered the cost impact of such a requirement on community banks?
- A3: Generally, we believe that the loan-to-value ratio of a residential mortgage is a key risk driver that may enhance the risk sensitivity of the capital framework. Nonetheless, we understand the implementation of the proposed Standardized Approach may require many

institutions to make changes to their systems or software. We take very seriously the potential compliance burden of the proposed rules, along with many other concerns that have been raised about the residential mortgage proposals in the Standardized Approach NPR. These concerns are receiving careful attention as we decide how to proceed with this aspect of the NPRs.

- Q4. Did the regulators consider the effect on the economy and consumers if community banks reduce mortgage lending significantly due to Basel III?
- A4: We have received many comments indicating that the proposed risk weights in the Standardized Approach NPR would reduce mortgage lending significantly. This is not an outcome we desire, and we are giving a great deal of attention to this issue as we decide how to proceed with this aspect of the NPRs.
- Q5. Please explain whether or not the proposed higher capital requirements for past due loans are a form of "double accounting," given that banks already are supposed to reserve for these losses.
- A5: The proposed Standardized Approach NPR does include a higher risk weight for past-due loans in recognition that these loans are at a higher risk of loss to the banking institutions. Although banks do reserve against expected loan losses, past-due loans may still represent a heightened risk of loss. To the extent a past-due loan has been written down, only the remaining balance on a bank's balance sheet would be assigned the higher risk weight. That said, we understand the concern that commenters have raised about this issue and are carefully considering how to proceed.

# Office of the Comptroller of the Currency Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation Securities and Exchange Commission Commodity Futures Trading Commission

#### March 18, 2013

The Honorable Spencer Bachus Chairman Emeritus Committee on Financial Services House of Representatives Washington, D.C. 20515 The Honorable Jeb Hensarling Chairman Committee on Financial Services House of Representatives Washington, D.C. 20515

Dear Chairmen Bachus and Hensarling:

This correspondence is in response to your letter regarding section 619 of the *Dodd-Frank Wall Street Reform and Consumer Protection Act*. As you know, the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, and the Commodity Futures Trading Commission (collectively, "the Agencies") previously proposed rules to implement section 619.

The proposed rules invited comment on a multi-faceted regulatory framework to implement the statute consistent with the statutory language. In addition, the Agencies invited comments on the potential economic impacts of the proposed rule and posed a number of questions seeking information on the costs and benefits associated with each aspect of the proposal, as well as on any significant alternatives that would minimize the burdens or amplify the benefits of the proposal. The Agencies also encouraged commenters to provide quantitative information and data about the impact of the proposal not only on entities subject to section 619, but also on their clients, customers, and counterparties, specific markets or asset classes, and any other entities potentially affected by the proposed rule, including non-financial small and mid-size businesses. The Agencies received more than 18,000 comments regarding the proposed implementing rules and are carefully considering these comments as we work toward development of final rules.

As noted in your letter, by its terms, section 619 became effective on July 21, 2012. As provided by section 619, the Federal Reserve, in consultation with the other Agencies, issued rules governing the period for conforming with section 619 ("Conformance Rule") and, along with the other Agencies, indicated that banking entities are expected to fully conform their netivities to the statutory provisions and any final agency rules by the end of the statutory compliance period, which is July 21, 2014 unless extended by the Federal Reserve. The Federal Reserve also explained that it would revisit the Conformance Rule, as necessary, in light of the requirements of the final rules implementing the substantive provisions of section 619. In

The Honorable Spencer Bachus The Honorable Jeb Hensurling Page Two

doing so, the Federal Reserve will carefully consider your suggestions to extend the conformance period.

The Agencies continue to devote significant time and resources to reviewing the comments submitted during the rulemaking process and developing final rules consistent with the statutory language. To ensure, to the extent possible, that the rules implementing section 619 are comparable and provide for consistent application, the Agencies have been regularly consulting with each other and will continue to do so.

We will carefully consider the issues you note, including the economic impact of any implementing rules, as we continue to develop final rules consistent with the requirements of section 619.

Sincerely,

#### (B)(B) Martin J. Gruenborg Ben S. Bemanke (b)(6)Chairman Chairman Board of Governors of the Federal Deposit Insurance Corporation (b)(6)Federal Reserve System (b)(6)Elisse B. Walter Curry (b)(6)approfler of the Carrency Chairman (b)(6) (b)(6) Securities and Exchange Commission **Surrency** Gary sler (b)(6)Chair Com lty Futures Trading Commission



#### MARTIN J. GRUENBERG CHAIRMAN

April 23, 2013

Honorable Benjamin L. Cardin Co-Chair Bicameral Task Force on Climate Change Chairman Subcommittee on Water and Wildlife Committee on Environment & Public Works United States Senate Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for your recent letter requesting cooperation to facilitate a timely and comprehensive response to your letter of February 25, 2013 to the Federal Deposit Insurance Corporation Inspector General seeking input on how the FDIC is responding to the threat of climate change.

The FDIC Inspector General's Office, headed by Jon T. Rymer, is in the process of conducting a review to address the questions posed in your letter. I want to assure you that the FDIC is committed to full cooperation with the Inspector General so his office can accomplish that review as soon as possible. The FDIC's Division of Administration is working closely with the Office of Inspector General to provide information regarding our accomplishments and plans to meet the requirements of legislation, regulation, executive order, and other directives on climate change that apply to the FDIC.

Thank you for taking the time to write about this important topic. If you have further questions or comments, please do not hesitate to contact me at (202) 898-3888 or Eric Spitler, Director, Office of Legislative Affairs, at (202) 898-7140.

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	Martin J. Gruenberg



#### MARTIN J. GRUENBERG CHAIRMAN

April 23, 2013

Honorable Edward J. Markey Co-Chair Bicameral Task Force on Climate Change Ranking Member Committee on Natural Resources House of Representatives Washington, D.C. 20515

Dear Congressman Markey:

Thank you for your recent letter requesting cooperation to facilitate a timely and comprehensive response to your letter of February 25, 2013 to the Federal Deposit Insurance Corporation Inspector General seeking input on how the FDIC is responding to the threat of climate change.

The FDIC Inspector General's Office, headed by Jon T. Rymer, is in the process of conducting a review to address the questions posed in your letter. I want to assure you that the FDIC is committed to full cooperation with the Inspector General so his office can accomplish that review as soon as possible. The FDIC's Division of Administration is working closely with the Office of Inspector General to provide information regarding our accomplishments and plans to meet the requirements of legislation, regulation, executive order, and other directives on climate change that apply to the FDIC.

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#### MARTIN J. GRUENBERG CHAIRMAN

April 23, 2013

Honorable Henry A. Waxman Co-Chair Bicameral Task Force on Climate Change Ranking Member Committee on Energy & Commerce House of Representatives Washington, D.C. 20515

Dear Congressman Waxman:

Thank you for your recent letter requesting cooperation to facilitate a timely and comprehensive response to your letter of February 25, 2013 to the Federal Deposit Insurance Corporation Inspector General seeking input on how the FDIC is responding to the threat of climate change.

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	Martin J. Gruenberg	



#### MARTIN J. GRUENBERG CHAIRMAN

April 23, 2013

Honorable Sheldon Whitehouse Co-Chair Bicameral Task Force on Climate Change Chairman Subcommittee on Oversight Committee on Environment & Public Works United States Senate Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for your recent letter requesting cooperation to facilitate a timely and comprehensive response to your letter of February 25, 2013 to the Federal Deposit Insurance Corporation Inspector General seeking input on how the FDIC is responding to the threat of climate change.

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Martin J. Gruenberg