

# Bank Analysis and Supervision School

9-13 July 2012  
Manila, Philippines

## Type of Participant Targeted

This seminar is designed for individuals with approximately 18 to 24 months of relevant experience. Attendees are involved in supervision, evaluation of risk management processes, bank examinations, and off-site surveillance.

## Prerequisites

Attendees should have a basic understanding of the Basel Core Principles for Effective Banking Supervision, and should be familiar with the other resources and best practices presented by the Basel Committee for Banking Supervision. Class discussions and speakers will give specific attention to concepts associated with internal credit risk rating systems, Internal Capital Adequacy Assessment Process, and other important current issues. Attendees should have some knowledge of credit, liquidity, and operational risks and be able to provide comments about how those risks are examined and monitored in their home economies.

## Course Overview

This is an intensive, intermediate-level course based on risk-management and analytical concepts that apply across most all of financial supervision. The program emphasizes risk-focused supervision of banking organizations as well as common analytical and supervisory techniques. Presentations, case studies, and small group discussions form the centre of this course. Keynote speakers offer timely and relevant discussions of current issues facing supervisors.

Participants should arrive prepared to discuss some of their employer's current practices regarding the examination and monitoring of credit, liquidity, and operational risks. Brief supervisory presentations on these topics lasting no more than 15 minutes each will be delivered Tuesday, Wednesday, and Thursday during the course. A presentation time slot will be assigned to each supervisor on Monday.

## Learning Objectives

Upon completion of this 5-day course, the participant will be able to:

- Discuss and apply risk-focused supervision techniques to a bank
- Demonstrate a basic understanding of internal credit risk rating systems and ICAAP concepts with a proportional approach appropriate for various sized banking institutions
- Analyze the financial condition of a bank using a Uniform Bank Performance Report (UBPR)
- Use background information and a UBPR to present an initial analysis of the bank's condition
- Describe some of the financial supervisory techniques used within the region to monitor credit, liquidity, and operational risks

## What you will receive on completion of this course

Participants who attend the full 5 days of sessions will receive a Certificate of Attendance under APEC Financial Regulators Training Initiative.

### CASE STUDIES

Case study work is a compulsory activity for this course.

**Case 1:** Asset Quality

**Case 2:** Earnings

**Case 3:** Capital

**Case 4:** Liquidity

**Case 5:** Sensitivity to Market Risk

**Case 6:** Other Risks

**Case 7:** Management

**Case 8:** Summary Level

**APEC Financial Regulators Training Initiative**  
**Seminar on Bank Analysis and Supervision School**  
 9 –13 July 2012, ADB Headquarters, Manila, Philippines

Hour	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 to 10:30	Participant Registrations (9:00 – 9:15) Welcome and Opening Remarks (9:15 – 9:45) Official Photo & Participant Introductions (9:45 – 10:15) 1. Introduction and Course Overview (10:15 – 10:30) Joel Hefty	5. Asset Quality and Credit Risk: principles, indicators, techniques, and ICRRS Joel Hefty	9. Keynote Speaker: Capital Standards: Why do they matter? Martin Guilfoyle	13. Other Risks: Operational, Strategic, Compliance: concepts and techniques Glenn Tasky	17. Summary Level Analysis: All issues in focus and risk-focused responses Joel Hefty
11:00 to 12:30	2. Banking business, corporate governance, and standards to uphold Joel Hefty	6. Keynote speaker: Why every bank needs an internal rating system Martin Guilfoyle	10. Capital Measurement Key ratios and Measurement Joel Hefty	Other Risks Group Discussion	18. Summary Level Group Discussions Joel Hefty
1:45 to 3:15	3. From Financial Statements to Analysis of Risk: Data and the Supervisory Cycle Joel Hefty	7. Earning Analysis Indicators and Techniques Glenn Tasky	11. Liquidity analysis indicators, techniques & contingency funding Glenn Tasky	14. Macro-Prudential Supervisory issue Joel Hefty	19. Group Presentations Joel Hefty
3:30 to 5:00	4. First Look at Case Banks Joel Hefty	7. Earnings (continued) Glenn Tasky	12. Sensitivity to Market Risk Principles, tools, Indicators and techniques Mary Jane Chiong BSP	15. Supervisory Presentations (Round 3) Joel Hefty	Group Presentations (continued) Joel Hefty
	Supervisory Presentation Demo and Schedule	8. Earnings Group Discussions Glenn Tasky	Sensitivity to Market Risk Group Discussions	16. Management principles, issues and summary points	Program Review, conclusion and evaluation
					FREE TIME

How do we deal with risk levels?

How do we deal with risk levels?

5-15 mins

## Resource Persons/Presenters

- **JOEL HEFTY**

Mr. Hefty has 23 years experience in bank examinations, 18 years experience in training and consulting and 12 years experience in international supervisory consulting in many countries. He is a consultant, adviser, trainer and facilitator with a global perspective. He is an accomplished course designer and presenter with multicultural experience on four continents. He specializes in risk-based banking supervision and design, training and implementation of risk-based processes, tasks and reports. He has a wide experience with International Development (IMF, World Bank, USAID, CIDA) and banker training programs. Proven to be a national project leader, he is an active contributor in policy-making, and effective regional manager (San Francisco, Los Angeles, and Salt Lake City) in the Federal Reserve System's supervisory education program.

- **GLENN TASKY**

Mr. Tasky has over 16 years of experience as an international consultant, specializing in financial sector reform and development in emerging market, transitional, and post-conflict countries, including more than 7 years in the former USSR. On USAID projects, he has extensive managing experience, having served for 4 years as Chief of Party on a large economic governance project in Afghanistan; 2 years as Financial Sector Component Leader in Jordan, and a year as Financial Sector Component Leader on another large economic governance program in Afghanistan. Prior to relocating overseas, he worked for 9 years in wholesale banking and bank supervision in a United States government-sponsored entity and regulatory agency, specializing in financial analysis, management information systems, and statistical studies. He is currently on a long-term assignment as the IMF-supported Banking Supervision Advisor in Bangladesh Bank (the central bank).

- **MARTIN GUILFOYLE**

Mr. Guilfoyle has worked both as a commercial banker and as a banking sector supervisor. He started his career with the Office of the Comptroller of the Currency, the supervisor of national banks in the United States. His supervisory career continued with the Federal Reserve Bank of San Francisco, where he served as an international examiner as well as a member of the capital markets specialty team. In the private sector, Mr. Guilfoyle worked in various credit functions within Bank of America for 8 years. Since 2001, Mr. Guilfoyle has served as an advisor to banking supervisory authorities in a number of countries: 5 countries as a long-term advisor and many others as a short-term technical specialist. He currently serves as the IMF's advisor to the supervision and examination sector of the Bangko Sentral ng Pilipinas.

- **MARY JANE CHIONG**

As deputy director and group head in the examination department, Ms. Chiong is responsible for the examination of banks and banking groups, from large banks with complex financial markets activities to small rural banks. Prior to joining the examination department in 2009, Ms. Chiong headed the Capital Markets Specialist Group (CMSG) at the Supervision and Examination Sector of BSP. The CMSG is a unit that provides technical support for the supervision and examination of capital markets activities of financial institutions under the BSP's jurisdiction.

Ms. Chiong serves as chair of the risk management course committee at the BSP and sits as a member of other various course committees. She likewise serves as a resource speaker in various seminars/training courses.

Ms. Chiong completed her MSc in Capital Markets, Regulation and Compliance from the University of Reading, United Kingdom in 2010. In 2005, Ms. Chiong was awarded the right to use the CFA designation. The CFA charter is a global designation for investment professionals. Prior to completing the CFA Program, Ms. Chiong finished her MBA major in Finance at the De La Salle University with high distinction in 2001. In 1997, she ranked 5<sup>th</sup> in the CPA board exams after graduating cum laude, salutatorian at the Ateneo de Zamboanga University.

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**Regional Seminar on Bank Analysis and Examination School**  
**9-13 July 2012, ADB Headquarters, Manila, Philippines**  
**Hosted by ADB, Bangko Sentral ng Pilipinas and Philippine Deposit Insurance Corporation**

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*Ms. Aida  
S. Ismail*

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	52	<b>Ms. Lesley Lin</b> Specialist Div. of Financial Holding Companies , Banking Bureau Financial Supervisory Commission

## **Bank Analysis and Supervision School**

### **APEC-Financial Regulators Training Initiative**

**Pre-course reading** includes basic definitions of risks, the Basel Core Principles, and several recent news articles of interest. We will discuss most of these items during class.

#### **Risk definitions:**

Many financial supervisors have adopted specific terminology for risks which they use throughout the organizations. A common language for risks is essential in a classroom context too. The Bank Analysis and Supervision School will use the following risk terminology. (7 primary risks) Participants in the school should be familiar with and prepared to discuss risk using the terms defined below. There is no need to memorize the definitions.

Credit Risk is the inherent risk to earnings or capital arising when a borrower or counterparty fail to meet the terms of a contract or do not fully perform as agreed by provision of contracts.

Market risk is the risk that movements in market rates, including foreign exchange rates, interest rates, equity, and commodity prices will reduce the bank's income, capital, or the value of its portfolios. (Market risk includes three sub-types.)

Interest rate risk is the inherent risk of adverse effects on earnings or capital arising from movements in interest rates.

Foreign exchange risk is the inherent risk to earnings or capital arising from movements in foreign exchange rates.

*Exposure to this risk mainly occurs during a period in which the credit institution has an open position, either on- and off-balance sheet, and/or in spot and forward markets.*

Price risk means the inherent risk of negative effects on earnings or capital due to adverse changes in the values of financial instruments and other investments or assets owned by the bank or any of its subsidiaries, whether on- or off-balance sheet, as a result of changes in market prices or values.

Liquidity Risk is the risk arising from the inability to meet obligations on time without incurring unacceptable losses.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. (This risk category includes "legal risk" which does not fit within compliance risk.)

Strategic risk is the inherent risk to earnings or capital arising from strategies, improper implementation of strategies, or inability to adapt to changes in the bank's business environment.

Reputation risk is the inherent risk to earnings or capital arising from negative public opinion of the image, trademark, or products of the credit institution.

Compliance risk is the inherent risk to earnings or capital arising from nonconformance with, laws, rules, regulations, prescribed practices, internal policies and procedures, or ethical standards.

Pre-course reading assignment



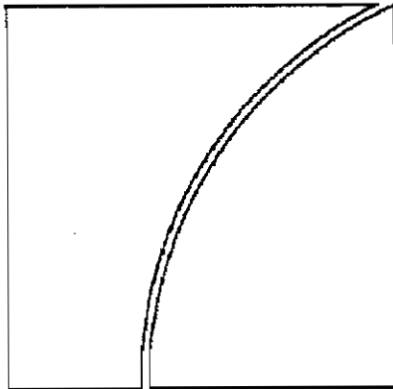
Basel Committee  
on Banking Supervision

Consultative Document

**Core Principles for Effective  
Banking Supervision**

*Issued for comment by 20 March 2012*

December 2011



**BANK FOR INTERNATIONAL SETTLEMENTS**

This publication is available on the BIS website ([www.bis.org](http://www.bis.org)).

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ISBN 92-9131-075-1 (print)

ISBN 92-9197-075-1 (online)

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1. Supervisory tools: mandate, risks, cycle docs, data
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## **Core Principles for Effective Banking Supervision (The Basel Core Principles)**

**The Basel Committee welcomes comments on all aspects of this consultative document by 20 March 2012. Comments should be sent by e-mail to [baselcommittee@bis.org](mailto:baselcommittee@bis.org). Alternatively, comments may be addressed to the following address: Basel Committee on Banking Supervision, Bank for International Settlements, Centralbahnplatz 2, CH-4002 Basel, Switzerland. All comments may be published on the BIS website unless a commenter specifically requests confidential treatment.**

### **Executive summary**

1. The *Core Principles for Effective Banking Supervision* (Core Principles) are the *de facto* minimum standard for sound prudential regulation and supervision of banks and banking systems. Originally issued by the Basel Committee on Banking Supervision (the Committee)<sup>1</sup> in 1997, they are used by countries as a benchmark for assessing the quality of their supervisory systems and for identifying future work to achieve a baseline level of sound supervisory practices. The Core Principles are also used by the International Monetary Fund (IMF) and the World Bank, in the context of the Financial Sector Assessment Programme (FSAP), to assess the effectiveness of countries' banking supervisory systems and practices.

2. The Core Principles were last revised by the Committee in October 2006 in cooperation with supervisors around the world. In its October 2010 *Report to the G20 on response to the financial crisis*, the Committee announced its plan to review the Core Principles as part of its ongoing work to strengthen supervisory practices worldwide.

3. In March 2011, the Core Principles Group<sup>2</sup> was mandated by the Committee to review and update the Core Principles. The Committee's mandate was to conduct the review taking into account significant developments in the global financial markets and regulatory landscape since October 2006, including post-crisis lessons<sup>3</sup> for promoting sound supervisory systems. The intent was to ensure the continued relevance of the Core Principles for promoting effective banking supervision in all countries over time and changing environments.

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<sup>1</sup> The Basel Committee on Banking Supervision consists of senior representatives of bank supervisory authorities and central banks from Argentina, Australia, Belgium, Brazil, 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.

<sup>2</sup> The Core Principles Group consisted of members from the Committee and the Basel Consultative Group, which comprises representatives from both Committee and non-Committee member countries and regional groups of banking supervisors, as well as the IMF and World Bank.

<sup>3</sup> See, for example, the November 2010 Financial Stability Board report on *Intensity and Effectiveness of SIFI Supervision*; the January 2010 Joint Forum report on *Review of the Differentiated Nature and Scope of Financial Regulation – Key Issues and Recommendations*; and the October 2009 Senior Supervisors Group report on *Risk Management Lessons from the Global Banking Crisis of 2008*.

4. In conducting the review, the Committee has sought to achieve the right balance in raising the bar for sound supervision while retaining the Core Principles as a flexible, globally applicable standard. By reinforcing the proportionality concept, the revised Core Principles and their assessment criteria accommodate a diverse range of banking systems. The proportionate approach also allows assessments of compliance with the Core Principles that are commensurate with the risk profile and systemic importance of a broad spectrum of banks (from large internationally active banks to small, non-complex deposit-taking institutions).

5. Both the existing Core Principles and the associated *Core Principles Methodology*<sup>4</sup> (assessment methodology) have served their purpose well in terms of helping countries to assess their supervisory systems and identify areas for improvement. While conscious efforts were made to maintain continuity and comparability as far as possible, the Committee has merged the Core Principles and the assessment methodology into a single comprehensive document. The revised set of twenty-nine Core Principles have also been reorganised to foster their implementation through a more logical structure starting with supervisory powers, responsibilities and functions, and followed by supervisory expectations of banks, emphasising the importance of good corporate governance and risk management, as well as compliance with supervisory standards. For comparability with the preceding version, a mapping table is provided in Annex 1.

6. Important enhancements have been introduced into the individual Core Principles, particularly in those areas that are necessary to strengthen supervisory practices and risk management. Various additional criteria have been upgraded to essential criteria as a result, while new assessment criteria were warranted in other instances. Close attention was given to addressing many of the significant risk management weaknesses and other vulnerabilities highlighted in the last crisis. In addition, the review has taken account of several key trends and developments that emerged during the last few years of market turmoil: the need for greater intensity and resources to deal effectively with systemically important banks; the importance of applying a system-wide, macro perspective to the microprudential supervision of banks to assist in identifying, analysing and taking pre-emptive action to address systemic risk; and the increasing focus on effective crisis management, recovery and resolution measures in reducing both the probability and impact of a bank failure. The Committee has sought to give appropriate emphasis to these emerging issues by embedding them into the Core Principles, as appropriate, and including specific references under each relevant Principle.

7. In addition, sound corporate governance underpins effective risk management and public confidence in individual banks and the banking system. Given fundamental deficiencies in banks' corporate governance that were exposed in the last crisis, a new Core Principle on corporate governance has been added in this review by bringing together existing corporate governance criteria in the assessment methodology and giving greater emphasis to sound corporate governance practices. Similarly, the Committee reiterated the key role of robust market discipline in fostering a safe and sound banking system by expanding an existing Core Principle into two new ones dedicated respectively to greater public disclosure and transparency, and enhanced financial reporting and external audit.

8. At present, the grading of compliance with the Core Principles is based solely on the essential criteria. To provide incentives to jurisdictions, particularly those that are important

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<sup>4</sup> The *Core Principles Methodology* was separately developed in 1999 and subsequently revised in 2006 to provide further details and guidance on the assessment criteria and the assessment of compliance with the Core Principles.

financial centres, to lead the way in the adoption of the highest supervisory standards, the revised Core Principles will allow countries the additional option of voluntarily choosing to be assessed and graded against the essential and additional criteria. In the same spirit of promoting full and robust implementation, the Committee has retained the existing four-grade scale of assessing compliance with the Core Principles. This includes the current "materially non-compliant" grading that helps provide a strong signalling effect to relevant authorities on remedial measures needed for addressing supervisory and regulatory shortcomings in their countries.

9. As a result of this review, the number of Core Principles has increased from 25 to 29. There are a total of 36 new assessment criteria, comprising 31 new essential criteria and 5 new additional criteria. In addition, 33 additional criteria from the existing assessment methodology have been upgraded to essential criteria that represent minimum baseline requirements for all countries.

10. The revised Core Principles will continue to provide a comprehensive standard for establishing a sound foundation for the regulation, supervision, governance and risk management of the banking sector. Given the importance of consistent and effective standards implementation, the Committee stands ready to encourage work at the national level to implement the revised Core Principles in conjunction with other supervisory bodies and interested parties.

## I. Foreword to the review

11. The Basel Committee on Banking Supervision (the Committee) has revised the *Core Principles for Effective Banking Supervision* (Core Principles). In conducting its review, the Committee has sought to balance the objectives of raising the bar for banking supervision (incorporating the lessons learned from the crisis and other significant regulatory developments since the Core Principles were last revised in 2006<sup>5</sup>) against the need to maintain the universal applicability of the Core Principles and the need for continuity and comparability. By raising the bar, the practical application of the Core Principles should improve banking supervision worldwide.

12. The revised Core Principles strengthen the requirements for supervisors, the approaches to supervision and supervisors' expectations of banks. This is achieved through a greater focus on effective risk-based supervision and the need for early intervention and timely supervisory actions. Supervisors should assess the risk profile of banks, in terms of the risks they run, the efficacy of their risk management and the risks they pose to the banking and financial systems. This risk-based process targets supervisory resources where they can be utilised to the best effect, focusing on outcomes as well as processes, moving beyond passive assessment of compliance with rules.

13. The Core Principles set out the powers that supervisors should have in order to address safety and soundness concerns. It is equally crucial that supervisors use these powers once weaknesses or deficiencies are identified. Adopting a forward-looking approach to supervision through early intervention can prevent an identified weakness from developing into a threat to safety and soundness. This is particularly true for highly complex and bank-specific issues (eg liquidity risk) where effective supervisory actions must be tailored to a bank's individual circumstances.

14. In its efforts to strengthen, reinforce and refocus the Core Principles, the Committee has nonetheless remained mindful of their underlying purpose and use. The Committee's intention is to ensure the continued relevance of the Core Principles in providing a benchmark for supervisory practices that will withstand the test of time and changing environments. For this reason, this revision of the Core Principles builds upon the preceding versions to ensure continuity and comparability as far as possible.

15. In recognition of the universal applicability of the Core Principles, the Committee conducted its review in close cooperation with members of the Basel Consultative Group which comprises representatives from both Committee and non-Committee member countries and regional groups of banking supervisors, as well as the IMF and the World Bank. The Committee consulted the industry and public before finalising the text.

### General approach

16. The first Core Principle sets out the promotion of safety and soundness of banks and the banking system as the primary objective for banking supervision. Jurisdictions may assign other responsibilities to the banking supervisor provided they do not conflict with this

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<sup>5</sup> Most notably, elements of the enhanced international regulatory standards for capital and the new international liquidity standards, both designed to promote a more resilient banking sector, have been incorporated.



primary objective<sup>6</sup>. It should not be an objective of banking supervision to prevent bank failures. However, supervision should aim to reduce the probability and impact of a bank failure, including by working with resolution authorities, so that when failure occurs, it is in an orderly manner.

17. To fulfil their purpose, the Core Principles must be capable of application to a wide range of jurisdictions whose banking sectors will inevitably include a broad spectrum of banks (from large internationally active banks to small, non-complex deposit-taking institutions). Banking systems may also offer a wide range of products or services and the Core Principles are aligned with the general aim of catering to different financial needs. To accommodate this breadth of application, a proportionate approach is adopted, both in terms of the expectations on supervisors for the discharge of their own functions and in terms of the standards that supervisors impose on banks. Consequently, the Core Principles acknowledge that supervisors typically use a risk-based approach in which more time and resources are devoted to larger, more complex or riskier banks. In the context of the standards imposed by supervisors on banks, the proportionality concept is reflected in those Principles focused on supervisors' assessment of banks' risk management, where the Principles prescribe a level of supervisory expectation commensurate with a bank's risk profile<sup>7</sup> and systemic importance<sup>8</sup>.

18. It should be borne in mind that successive revisions to standards and guidance issued by the Committee will be designed to strengthen the regulatory regime. Supervisors are encouraged to move towards the adoption of updated international supervisory standards as they are issued.

## **Approach toward emerging trends and developments**

### **(i) Systemically important banks (SIBs)**

19. In the aftermath of the crisis, much attention has been focused on SIBs, and the regulations and supervisory powers needed to deal with them effectively. Consideration was given by the Committee to including a new Core Principle to cover SIBs. However, it was concluded that SIBs, which require greater intensity of supervision and hence resources, represent one end of the supervisory spectrum of banks. Each Core Principle applies to the supervision of all banks. The expectations on, and of, supervisors will need to be of a higher order for SIBs, commensurate with the risk profile and systemic importance of these banks. Therefore, it is unnecessary to include a specific stand-alone Core Principle for SIBs.

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<sup>6</sup> The banking supervisor might, for instance, in some jurisdictions be tasked with responsibilities for: (i) depositor protection, which is closely related to safety and soundness and the establishment and operation of effective deposit insurance schemes; (ii) financial stability, which will also tend to be highly dependent on the health of the banking sector; (iii) consumer protection, an area where damages, claims and reputational risk can adversely affect safety and soundness; or (iv) financial inclusion, where care needs to be taken to avoid deleterious effects on safety and soundness.

<sup>7</sup> In this document, "risk profile" refers to the nature and scale of the risk exposures undertaken by a bank.

<sup>8</sup> In this document, "systemic importance" is determined by the size, interconnectedness, substitutability, global or cross-jurisdictional activity (if any), and complexity of the bank, as set out in the November 2011 BCBS paper *Global systemically important banks: assessment methodology and the additional loss absorbency requirement*.

**(ii) Macprudential issues and systemic risks**

20. The recent crisis highlighted the interface between, and the complementary nature of, the macroprudential and microprudential elements of effective supervision. In their application of a risk-based supervisory approach, supervisors and other authorities need to assess risk in a broader context than that of the balance sheet of individual banks. For example, the prevailing macroeconomic environment, business trends, and the build-up and concentration of risk across the banking sector and, indeed, outside of it, inevitably impact the risk exposure of individual banks. Bank-specific supervision should therefore consider this macro perspective. Individual bank data, where appropriate, data at sector level and aggregate trend data collected by supervisors should be incorporated into the deliberations of authorities relevant for financial stability purposes (whether part of, or separate from, the supervisor) to assist in identification and analysis of systemic risk. The relevant authorities should have the ability to take pre-emptive action to address systemic risks. Supervisors should have access to relevant financial stability analyses or assessments conducted by other authorities that affect the banking system.

21. This broad financial system perspective is integral to many of the Core Principles. For this reason, the Committee has not included a specific stand-alone Core Principle on macroprudential issues.

22. In supervising an individual bank which is part of a corporate group, it is essential that supervisors consider the bank and its risk profile from a number of perspectives: on a solo basis (but with both a micro and macro focus as discussed above); on a consolidated basis (in the sense of supervising the bank as a unit together with the other entities within the "banking group"<sup>9</sup>) and on a group-wide basis (taking into account the potential risks to the bank posed by other group entities outside of the banking group). Group entities (whether within or outside the banking group) may be a source of strength but they may also be a source of weakness capable of adversely affecting the financial condition, reputation and overall safety and soundness of the bank. The Core Principles include a specific Core Principle on the consolidated supervision of banking groups, but they also note the importance of parent companies and other non-banking group entities in any assessment of the risks run by a bank or banking group. This supervisory "risk perimeter" extends beyond accounting consolidation concepts. In the discharge of their functions, supervisors must observe a broad canvas of risk, whether arising from within an individual bank, from its associated entities or from the prevailing macro financial environment.

23. Supervisors should also remain alert to the movement, or build-up, of financial activities outside the regulated banking sector (the development of "shadow banking" structures) and the potential risks this may create. Data or information on this should also be shared with any other authorities relevant for financial stability purposes.

**(iii) Crisis management, recovery and resolution**

24. Although it is not a supervisor's role to prevent bank failures, supervisory oversight is designed to reduce both the probability and impact of such failures. Banks will, from time to time, run into difficulties, and to minimise the adverse impact both on the troubled bank

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<sup>9</sup> In this document, "banking group" includes the holding company, the bank and its offices, subsidiaries, affiliates and joint ventures, both domestic and foreign. Risks from other entities in the wider group, for example non-bank (including non-financial) entities, may also be relevant. This group-wide approach to supervision goes beyond accounting consolidation.

and on the banking and financial sectors as a whole, effective crisis preparation and management, and orderly resolution frameworks and measures are required.

25. Such measures may be viewed from two perspectives: (i) the measures to be adopted by supervisory and other authorities (including developing resolution plans and in terms of information sharing and cooperation with other authorities, both domestic and cross-border, to coordinate an orderly restructuring or resolution of a troubled bank); and (ii) those to be adopted by banks (including contingency funding plans and recovery plans) which should be subject to critical assessment by supervisors as part of their ongoing supervision.

26. To reflect, and to emphasise, the importance of crisis management, recovery and resolution measures, certain Core Principles include specific reference to the maintenance and assessment of contingency arrangements. The existing Core Principle on home-host relationships has also been strengthened to require cooperation and coordination between home and host supervisors on crisis management and resolution for cross-border banks.

**(iv) Corporate governance, disclosure and transparency**

27. Corporate governance shortcomings in banks, examples of which were observed during the crisis, can have potentially serious consequences both for the bank concerned and, in some cases, for the financial system as a whole. A new Core Principle, focused on effective corporate governance as an essential element in the safe and sound functioning of banks, has therefore been included in this revision. The new Principle brings together existing corporate governance criteria in the assessment methodology and gives greater emphasis to sound corporate governance practices.

28. Similarly, the crisis served to underline the importance of disclosure and transparency in maintaining confidence in banks by allowing market participants to understand better a bank's risk profile and thereby reduce market uncertainties about the bank's financial strength. In recognition of this, a new Core Principle has been added to provide more direction on supervisory practices in this area.

## **Structure and assessment of Core Principles**

### ***Structure***

29. The preceding versions of the Core Principles were accompanied by a separate assessment methodology that set out the criteria to be used to gauge compliance with the Core Principles. In this revision, the assessment methodology has been merged into a single document with the Core Principles reflecting the essential interdependence of Core Principles and Assessment Criteria and their common usage. The Core Principles have also been reorganised: Principles 1-13 address supervisory powers, responsibilities and functions, and Principles 14-29 cover supervisory expectations of banks, emphasising the importance of good corporate governance and risk management, as well as compliance with supervisory standards. This re-ordering highlights the difference between what supervisors do themselves and what they expect banks to do. For comparability with the preceding version, a mapping table is provided in Annex 1.

### ***Assessment***

30. The Core Principles establish a level of sound supervisory practice that can be used as a benchmark by supervisors to assess the quality of their supervisory systems. They are also used by the IMF and the World Bank, in the context of the Financial Sector Assessment

Programme (FSAP), to assess the effectiveness of countries' banking supervisory systems and practices.

31. This revision of the Core Principles retains the previous practice of including both essential criteria and additional criteria as part of the assessment methodology. Essential criteria set out minimum baseline requirements for sound supervisory practices and are of universal applicability to all countries. An assessment of a country against the essential criteria must, however, recognise that its supervisory practices should be commensurate with the risk profile and systemic importance of the banks being supervised. In other words, the assessment must consider the context in which the supervisory practices are applied. The concept of proportionality underpins all assessment criteria even if it is not always directly referenced.

32. Effective banking supervisory practices are not static. They evolve over time as lessons are learned and banking business continues to develop and expand. Supervisors are often swift to encourage banks to adopt "best practice" and supervisors should demonstrably "practice what they preach" in terms of seeking to move continually towards the highest supervisory standards. To reinforce this aspiration, the additional criteria in the Core Principles set out supervisory practices that exceed current baseline expectations but which will contribute to the robustness of individual supervisory frameworks. As supervisory practices evolve, it is expected that upon each revision of the Core Principles, a number of additional criteria will migrate to become essential criteria as expectations on baseline standards change. The use of essential criteria and additional criteria will, in this sense, contribute to the continuing relevance of the Core Principles over time.

33. In the past, countries were graded only against the essential criteria, although they could volunteer to be assessed against the additional criteria too and benefit from assessors' commentary on how supervisory practices could be enhanced. In future, countries undergoing assessments by the IMF and/or the World Bank can elect to be graded against the essential and additional criteria. It is anticipated that this will provide incentives to jurisdictions, particularly those that are important financial centres, to lead the way in the adoption of the highest supervisory standards. As with the essential criteria, any assessment against additional criteria should recognise the concept of proportionality as discussed above.

34. Moreover, it is important to bear in mind that some tasks, such as a correct assessment of the macroeconomic environment and the detection of the build-up of dangerous trends, do not lend themselves to a rigid compliant/non-compliant structure. Although these tasks may be difficult to assess, supervisors should make assessments that are as accurate as possible given the information available at the time and take reasonable actions to address and mitigate such risks.

35. While the publication of the assessments of jurisdictions affords transparency, an assessment of one jurisdiction will not be directly comparable to that of another. First, assessments will have to reflect proportionality. Thus, a jurisdiction that is home to many SIBs will naturally have a higher hurdle to obtain a "Compliant" grading<sup>10</sup> versus a jurisdiction which only has small, non-complex deposit-taking institutions. Second, with this version of the Core Principles, jurisdictions can elect to be graded against essential criteria only or against both essential criteria and additional criteria. Third, assessments will inevitably be country-specific and time-dependent to varying degrees. Therefore, the description provided

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<sup>10</sup> See paragraph 61 on grading definitions.

for each Core Principle and the qualitative commentary accompanying the grading for each Core Principle should be reviewed in order to gain an understanding of a jurisdiction's approach to the specific aspect under consideration and the need for any improvements. Seeking to compare countries by a simple reference to the number of "Compliant" versus "Non-Compliant" grades they receive is unlikely to be informative.

36. From a broader perspective, effective banking supervision is dependent on a number of external elements, or preconditions, which may not be within the direct jurisdiction of supervisors. Thus, in respect of grading, the assessment of preconditions will remain qualitative and distinct from the assessment (and grading) of compliance with the Core Principles.

37. Core Principle 29 dealing with the Abuse of Financial Services includes, among other things, supervision of banks' anti-money laundering/combating the financing of terrorism (AML/CFT) controls. The Committee recognises that assessments against this Core Principle will inevitably, for some countries, involve a degree of duplication with the mutual evaluation process of the Financial Action Task Force (FATF). To address this, where an evaluation has recently been conducted by the FATF on a given country, FSAP assessors may rely on that evaluation and focus their own review on the actions taken by supervisors to address any shortcomings identified by the FATF. In the absence of any recent FATF evaluation, FSAP assessors will continue to assess countries' supervision of banks' AML/CFT controls.

### Consistency and implementation

38. The banking sector is only a part, albeit an important part, of a financial system and in conducting this review of its Core Principles, the Committee has sought to maintain consistency, where possible, with the corresponding standards for securities and insurance (which have themselves been the subject of recent reviews), as well as those for anti-money laundering and transparency. Differences will, however, inevitably remain as key risk areas and supervisory priorities differ from sector to sector. In implementing the Core Principles, supervisors should take into account the role of the banking sector in supporting and facilitating productive activities for the real economy.

## ✓ II. The Core Principles 全球-双语言原则

39. The Core Principles are a framework of minimum standards for sound supervisory practices and are considered universally applicable.<sup>11</sup> The Committee issued the Core Principles as its contribution to strengthening the global financial system. Weaknesses in the banking system of a country, whether developing or developed, can threaten financial stability both within that country and internationally. The Committee believes that implementation of the Core Principles by all countries would be a significant step towards improving financial stability domestically and internationally, and provide a good basis for further development of effective supervisory systems. The vast majority of countries have endorsed the Core Principles and have implemented them.

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<sup>11</sup> The Core Principles are conceived as a voluntary framework of minimum standards for sound supervisory practices; national authorities are free to put in place supplementary measures that they deem necessary to achieve effective supervision in their jurisdictions.

40. The revised Core Principles define 29 principles that are needed for a supervisory system to be effective. Those principles are broadly categorised into two groups: the first group (Principles 1 to 13) focus on powers, responsibilities and functions of supervisors, while the second group (Principles 14 to 29) focus on prudential regulations and requirements for banks. The original Principle 1 has been divided into three separate Principles, while new Principles related to corporate governance, and disclosure and transparency, have been added. This accounts for the increase from 25 to 29 Principles.

41. The 29 Core Principles are:

#### **Supervisory powers, responsibilities and functions**

- **Principle 1 – Responsibilities, objectives and powers:** An effective system of banking supervision has clear responsibilities and objectives for each authority involved in the supervision of banks and banking groups. A suitable legal framework for banking supervision is in place to provide each responsible authority with the necessary legal powers to authorise banks, conduct ongoing supervision, address compliance with laws and undertake timely corrective actions to address safety and soundness concerns.
- **Principle 2 – Independence, accountability, resourcing and legal protection for supervisors:** The supervisor possesses operational independence, transparent processes, sound governance and adequate resources, and is accountable for the discharge of its duties. The legal framework for banking supervision includes legal protection for the supervisor.
- **Principle 3 – Cooperation and collaboration:** Laws, regulations or other arrangements provide a framework for cooperation and collaboration with relevant domestic authorities and foreign supervisors. These arrangements reflect the need to protect confidential information.
- **Principle 4 – Permissible activities:** The permissible activities of institutions that are licensed and subject to supervision as banks are clearly defined and the use of the word “bank” in names is controlled.
- **Principle 5 – Licensing criteria:** The licensing authority has the power to set criteria and reject applications for establishments that do not meet the criteria. At a minimum, the licensing process consists of an assessment of the ownership structure and governance (including the fitness and propriety of Board members and senior management) of the bank and its wider group, and its strategic and operating plan, internal controls, risk management and projected financial condition (including capital base). Where the proposed owner or parent organisation is a foreign bank, the prior consent of its home supervisor is obtained.
- **Principle 6 – Transfer of significant ownership:** The supervisor has the power to review, reject and impose prudential conditions on any proposals to transfer significant ownership or controlling interests held directly or indirectly in existing banks to other parties.
- **Principle 7 – Major acquisitions:** The supervisor has the power to approve or reject (or recommend to the responsible authority the approval or rejection of), and impose prudential conditions on, major acquisitions or investments by a bank, against prescribed criteria, including the establishment of cross-border operations, and to determine that corporate affiliations or structures do not expose the bank to undue risks or hinder effective supervision.
- ✓ • **Principle 8 – Supervisory approach:** An effective system of banking supervision requires the supervisor to develop and maintain a forward-looking assessment of

Indicator  
Monitor  
Measure  
Control  
Evaluate  
Report

RM: BO  
PL  
MIS  
ICA - Timely regulation

Internal control before transition to market

the risk profile of individual banks and banking groups, proportionate to their systemic importance; identify, assess and address risks emanating from banks and the banking system as a whole; have a framework in place for early intervention; and have plans in place, in partnership with other relevant authorities, to take action to resolve banks in an orderly manner if they become non-viable.

**Principle 9 – Supervisory techniques and tools:** The supervisor uses an appropriate range of techniques and tools to implement the supervisory approach and deploys supervisory resources on a proportionate basis, taking into account the risk profile and systemic importance of banks.

**Principle 10 – Supervisory reporting:** The supervisor collects, reviews and analyses prudential reports and statistical returns from banks on both a solo and a consolidated basis, and independently verifies these reports, through either on-site examinations or use of external experts.

**Principle 11 – Corrective and sanctioning powers of supervisors:** The supervisor acts at an early stage to address unsafe and unsound practices or activities that could pose risks to banks or to the banking system. The supervisor has at its disposal an adequate range of supervisory tools to bring about timely corrective actions. This includes the ability to revoke the banking licence or to recommend its revocation.

**Principle 12 – Consolidated supervision:** An essential element of banking supervision is that the supervisor supervises the banking group on a consolidated basis, adequately monitoring and, as appropriate, applying prudential standards to all aspects of the business conducted by the banking group worldwide.

**Principle 13 – Home-host relationships:** Home and host supervisors of cross-border banking groups share information and cooperate for effective supervision of the group and group entities, and effective handling of crisis situations. Supervisors require the local operations of foreign banks to be conducted to the same standards as those required of domestic banks.

**Prudential regulations and requirements**

**Principle 14 – Corporate governance:** The supervisor determines that banks and banking groups have robust corporate governance policies and processes covering, for example, strategic direction, group and organisational structure, control environment, responsibilities of the banks' Boards and senior management, and compensation. These policies and processes are commensurate with the risk profile and systemic importance of the bank.

**Principle 15 – Risk management process:** The supervisor determines that banks have a comprehensive risk management process (including effective Board and senior management oversight) to identify, measure, evaluate, monitor, report and control or mitigate all material risks on a timely basis and to assess the adequacy of their capital and liquidity in relation to their risk profile and market and macroeconomic conditions. This extends to development and review of robust and credible recovery plans, which take into account the specific circumstances of the bank. The risk management process is commensurate with the risk profile and systemic importance of the bank.

**Principle 16 – Capital adequacy:** The supervisor sets prudent and appropriate capital adequacy requirements for banks that reflect the risks undertaken by, and presented by, a bank in the context of the markets and macroeconomic conditions in which it operates. The supervisor defines the components of capital, bearing in mind their ability to absorb losses.

esp. off-site supervision

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- **Principle 17 – Credit risk:** The supervisor determines that banks have an adequate credit risk management process that takes into account their risk appetite, risk profile and market and macroeconomic conditions. This includes prudent policies and processes to identify, measure, evaluate, monitor, report and control or mitigate credit risk (including counterparty credit risk) on a timely basis. The full credit lifecycle should be covered including credit underwriting, credit evaluation, and the ongoing management of the bank's loan and investment portfolios.
- **Principle 18 – Problem assets, provisions and reserves:** The supervisor determines that banks have adequate policies and processes for the early identification and management of problem assets, and the maintenance of adequate provisions and reserves.
- **Principle 19 – Concentration risk and large exposure limits:** The supervisors determines that banks have adequate policies and processes to identify, measure, evaluate, monitor, report and control or mitigate concentrations of risk on a timely basis. Supervisors set prudential limits to restrict bank exposures to single counterparties or groups of connected counterparties.
- ✓ • **Principle 20 – Transactions with related parties** (related transaction): In order to prevent abuses arising in transactions with related parties and to address the risk of conflict of interest, the supervisor requires banks to enter into any transactions with related parties on an arm's length basis; to monitor these transactions; to take appropriate steps to control or mitigate the risks; and to write off exposures to related parties in accordance with standard policies and processes.
- **Principle 21 – Country and transfer risks:** The supervisor determines that banks have adequate policies and processes to identify, measure, evaluate, monitor, report and control or mitigate country risk and transfer risk in their international lending and investment activities on a timely basis. credit cards
- **Principle 22 – Market risks:** The supervisor determines that banks have an adequate market risk management process that takes into account their risk appetite, risk profile, and market and macroeconomic conditions and the risk of a significant deterioration in market liquidity. This includes prudent policies and processes to identify, measure, evaluate, monitor, report and control or mitigate market risks on a timely basis.
- **Principle 23 – Interest rate risk in the banking book:** The supervisor determines that banks have adequate systems to identify, measure, evaluate, monitor, report and control or mitigate interest rate risk in the banking book on a timely basis. These systems take into account the bank's risk appetite, risk profile and market and macroeconomic conditions.
- **Principle 24 – Liquidity risk:** The supervisor sets prudent and appropriate liquidity requirements (which can include either quantitative or qualitative requirements or both) for banks that reflect the liquidity needs of the bank. The supervisor determines that banks have a strategy that enables prudent management of liquidity risk and compliance with liquidity requirements. The strategy takes into account the bank's risk profile as well as market and macroeconomic conditions and includes prudent policies and processes, consistent with the bank's risk appetite, to identify, measure, evaluate, monitor, report and control or mitigate liquidity risk over an appropriate set of time horizons.
- **Principle 25 – Operational risk:** The supervisor determines that banks have an adequate operational risk management framework that takes into account their risk appetite, risk profile and market and macroeconomic conditions. This includes prudent policies and processes to identify, assess, evaluate, monitor, report and control or mitigate operational risk on a timely basis.



- **Principle 26 – Internal control and audit:** The supervisor determines that banks have adequate internal controls to establish and maintain a properly controlled operating environment for the conduct of their business taking into account their risk profile. These include clear arrangements for delegating authority and responsibility; separation of the functions that involve committing the bank, paying away its funds, and accounting for its assets and liabilities; reconciliation of these processes; safeguarding the bank's assets; and appropriate independent internal audit and compliance functions to test adherence to these controls as well as applicable laws and regulations.
- **Principle 27: Financial reporting and external audit:** The supervisor determines that banks and banking groups maintain adequate and reliable records, prepare financial statements in accordance with accounting policies and practices that are widely accepted internationally and annually publish information that fairly reflects their financial condition and performance and bears an independent external auditor's opinion. The supervisor also determines that banks and parent companies of banking groups have adequate governance and oversight of the external audit function.
- **Principle 28 – Disclosure and transparency:** The supervisor determines that banks and banking groups regularly publish information on a consolidated and, where appropriate, solo basis that is easily accessible and fairly reflects their financial condition, performance, risk exposures, risk management strategies and corporate governance policies and processes.
- **Principle 29 – Abuse of financial services:** The supervisor determines that banks have adequate policies and processes, including strict customer due diligence rules to promote high ethical and professional standards in the financial sector and prevent the bank from being used, intentionally or unintentionally, for criminal activities.

42. The Core Principles are neutral with regard to different approaches to supervision, so long as the overriding goals are achieved. They are not designed to cover all the needs and circumstances of every banking system. Instead, specific country circumstances should be more appropriately considered in the context of the assessments and in the dialogue between assessors and country authorities.

43. National authorities should apply the Core Principles in the supervision of all banking organisations within their jurisdictions.<sup>12</sup> Individual countries, in particular those with advanced markets and banks, may expand upon the Core Principles in order to achieve best supervisory practice.

44. A high degree of compliance with the Core Principles should foster overall financial system stability; however, this will not guarantee it, nor will it prevent the failure of banks. Banking supervision cannot, and should not, provide an assurance that banks will not fail. In a market economy, failures are part of risk-taking.

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<sup>12</sup> In countries where non-bank financial institutions provide deposit and lending services similar to those of banks, many of the Principles set out in this document would also be appropriate to such non-bank financial institutions. However it is also acknowledged that some of these categories of institutions may be regulated differently from banks as long as they do not hold, collectively, a significant proportion of deposits in a financial system.

45. The Committee stands ready to encourage work at the national level to implement the Core Principles in conjunction with other supervisory bodies and interested parties. The Committee invites the international financial institutions and donor agencies to use the Core Principles in assisting individual countries to strengthen their supervisory arrangements. The Committee will continue to collaborate closely with the IMF and the World Bank in their monitoring of the implementation of the Committee's prudential standards. The Committee also remains committed to further enhancing its interaction with supervisors from non-member countries.

### **III. Preconditions for effective banking supervision**

46. An effective system of banking supervision needs to be able to effectively develop, implement, monitor and enforce supervisory policies under normal and stressed economic and financial conditions. Supervisors need to be able to respond to external conditions that can negatively affect banks or the banking system. There are a number of elements or preconditions that have a direct impact on the effectiveness of supervision in practice. These preconditions are mostly outside the direct or sole jurisdiction of banking supervisors. Where supervisors have concerns that the preconditions could impact the efficiency or effectiveness of regulation and supervision of banks, supervisors should make the government and relevant authorities aware of them and their actual or potential negative repercussions for supervisory objectives. Supervisors should work with the government and relevant authorities to address concerns that are outside the direct or sole jurisdiction of the supervisors. Supervisors should also, as part of their normal business, adopt measures to address the effects of such concerns on the efficiency or effectiveness of regulation and supervision of banks.

47. The preconditions include:

- sound and sustainable macroeconomic policies;
- a well established framework for financial stability policy formulation;
- a well developed public infrastructure;
- a clear framework for crisis management, recovery and resolution;
- an appropriate level of systemic protection (or public safety net); and
- effective market discipline.

#### **Sound and sustainable macroeconomic policies**

48. Sound macroeconomic policies (mainly fiscal and monetary policies) are the foundation of a stable financial system. Without sound policies, imbalances such as high government borrowing and spending, and an excessive shortage or supply of liquidity, may arise and affect the stability of the financial system. Further, certain government policies<sup>13</sup> may specifically use banks and other financial intermediaries as instruments, which may inhibit effective supervision.

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<sup>13</sup> Examples of such policies include accumulation of large quantities of government securities; reduced access to capital markets due to government controls or growing imbalances; degradation in asset quality after loose monetary policies; and government-directed lending or forbearance requirements as an economic policy response to deteriorating economic conditions.

### **Well established framework for financial stability policy formulation**

49. In view of the impact and interplay between the real economy and banks and the financial system, it is important that there exists a clear framework for macroprudential surveillance and financial stability policy formulation. Such a framework should set out the authorities or those responsible for identifying systemic risk in the financial system, monitoring and analysing market and other financial and economic factors that may lead to accumulation of systemic risks, formulating and implementing appropriate policies, and assessing how such policies may affect the banks and the financial system. It should also include mechanisms for effective cooperation and coordination among the relevant agencies.

### **Well developed public infrastructure**

50. A well developed public infrastructure needs to comprise the following elements, which, if not adequately provided, can contribute to the weakening of financial systems and markets, or frustrate their improvement:

- a system of business laws, including corporate, bankruptcy, contract, consumer protection and private property laws, which is consistently enforced and provides a mechanism for the fair resolution of disputes;
- an efficient and independent judiciary;
- comprehensive and well defined accounting principles and rules that are widely accepted internationally;
- a system of independent external audits, to ensure that users of financial statements, including banks, have independent assurance that the accounts provide a true and fair view of the financial position of the company and are prepared according to established accounting principles, with auditors held accountable for their work;
- availability of competent, independent and experienced professionals (eg accountants, auditors and lawyers), whose work complies with transparent technical and ethical standards set and enforced by official or professional bodies consistent with international standards, and who are subject to appropriate oversight;
- well defined rules governing, and adequate supervision of, other financial markets and, where appropriate, their participants;
- secure, efficient and well regulated payment and clearing systems (including central counterparties) for the settlement of financial transactions where counterparty risks are effectively controlled and managed;
- efficient and effective credit bureaus that make available credit information on borrowers; and
- public availability of basic economic, financial and social statistics.

### **Clear framework for crisis management, recovery and resolution**

51. Effective crisis management frameworks and resolution regimes help to minimise potential disruptions to financial stability arising from banks and financial institutions that are in distress or failing. A sound institutional framework for crisis management and resolution requires a clear mandate and an effective legal underpinning for each relevant authority (such as banking supervisors, national resolution authorities, finance ministries and central banks). The relevant authorities should have a broad range of powers and appropriate tools provided in law to resolve a financial institution that is no longer viable and where there is no

reasonable prospect of it becoming viable. There should also be agreement among the relevant authorities on their individual and joint responsibilities for crisis management and resolution, and how they will discharge these responsibilities in a coordinated manner. This should include the ability to share confidential information among one another to facilitate planning in advance to handle recovery and resolution situations and to manage such events when they occur.

#### **Appropriate level of systemic protection (or public safety net)**

52. Deciding on the appropriate level of systemic protection is a policy question to be addressed by the relevant authorities, including the government and central bank, particularly where it may result in a commitment of public funds. Supervisors will have an important role to play because of their in-depth knowledge of the financial institutions involved. In handling systemic issues, it is necessary to balance several factors: addressing the risks to confidence in the financial system and contagion to otherwise sound institutions and, minimising the distortion to market signals and discipline. A key element of the framework for systemic protection is a system of deposit insurance. Provided such a system is transparent and carefully designed, it can contribute to public confidence in the system and thus limit contagion from banks in distress.

#### **Effective market discipline**

53. Effective market discipline depends, in part, on adequate flows of information to market participants, appropriate financial incentives to reward well managed institutions, and arrangements that ensure that investors are not insulated from the consequences of their decisions. Among the issues to be addressed are corporate governance and ensuring that accurate, meaningful, transparent and timely information is provided by borrowers to investors and creditors. Market signals can be distorted and discipline undermined if governments seek to influence or override commercial decisions, particularly lending decisions, to achieve public policy objectives. In these circumstances, it is important that, if governments or their related entities provide or guarantee the lending, such arrangements are disclosed and there is a formal process for compensating financial institutions when such loans cease to perform.

### **IV. Assessment methodology**

54. The Core Principles are mainly intended to help countries assess the quality of their systems and to provide input into their reform agenda. An assessment of the current situation of a country's compliance with the Core Principles can be considered a useful tool in a country's implementation of an effective system of banking supervision. In order to achieve objectivity and comparability in the different country assessments of compliance with the Core Principles,<sup>14</sup> supervisors and assessors should refer to this assessment methodology, which does not eliminate the need for both parties to use their judgment in assessing compliance. Such an assessment should identify weaknesses in the existing system of supervision and regulation, and form a basis for remedial measures by government authorities and banking supervisors.

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<sup>14</sup> The aim of assessments is, however, not for ranking supervisory systems. Please refer to paragraph 35.

55. Although Committee members individually collaborate in assessment missions, these are conducted primarily by the IMF and the World Bank. The Committee has decided not to make assessments of its own to maintain the current division of labour between the Committee's standard-setting and the international financial institutions' assessment functions. However, the Committee, together with the Financial Stability Institute, is prepared to assist in other ways, for example by providing training.

### **Use of the methodology**

56. The methodology can be used in multiple contexts: (i) self-assessment performed by banking supervisors themselves;<sup>15</sup> (ii) IMF and World Bank assessments of the quality of supervisory systems, for example in the context of FSAP; (iii) reviews conducted by private third parties such as consulting firms; or (iv) peer review conducted, for instance, within regional groupings of banking supervisors. At the time of writing, assessments of compliance have already been conducted in more than 150 countries and others are under way.<sup>16</sup>

57. Whatever the context, the following factors are crucial:

- In order to achieve full objectivity, compliance with the Core Principles is best assessed by suitably qualified external parties consisting of two individuals with strong supervisory backgrounds who bring varied perspectives so as to provide checks and balances; however, experience has shown that a recent self-assessment is a highly useful input to an outside party assessment.
- A fair assessment of the banking supervisory process cannot be performed without the genuine cooperation of all relevant authorities.
- The process of assessing each of the 29 Core Principles requires a judgmental weighing of numerous elements that only qualified assessors with practical, relevant experience can provide.
- The assessment requires some legal and accounting expertise in the interpretation of compliance with the Core Principles; these legal and accounting interpretations must be in relation to the legislative and accounting structure of the relevant country. They may also require the advice of additional legal and accounting experts, which can be sought subsequent to the on-site assessment.
- The assessment must be comprehensive and in sufficient depth to allow a judgment on whether criteria are fulfilled in practice, not just in theory. Laws and regulations need to be sufficient in scope and depth, and be effectively enforced and complied with. Their existence alone does not provide enough indication that the criteria are met.

### **Assessment of compliance**

58. The primary objective of an assessment should be the identification of the nature and extent of any weaknesses in the banking supervisory system and compliance with individual Core Principles. While the process of implementing the Core Principles starts with

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<sup>15</sup> The Committee has issued guidelines for performing self-assessments: *Conducting a supervisory self-assessment – practical application*, Basel, April 2001.

<sup>16</sup> The regular reports by the IMF and the World Bank on the lessons drawn from assessment experiences as part of FSAP exercises constitute a useful source of information which has been used as an input to improve the Principles.

the assessment of compliance, assessment is a means to an end, not an objective in itself. Instead, the assessment will allow the supervisory authority (and in some instances the government) to initiate a strategy to improve the banking supervisory system, as necessary.

59. To assess compliance with a Principle, this methodology proposes a set of essential and additional assessment criteria for each Principle. By default, for the purposes of grading, the essential criteria are the only elements on which to gauge full compliance with a Core Principle. The additional criteria are suggested best practices which countries having advanced banks should aim for. Going forward, countries will have the following three assessment options:

- (i) Unless the country explicitly opts for any other option, compliance with the Core Principles will be assessed and graded only with reference to the essential criteria;
- (ii) A country may voluntarily choose to be assessed against the additional criteria, in order to identify areas in which it could enhance its regulation and supervision further and benefit from assessors' commentary on how it could be achieved. However, compliance with the Core Principles will still be graded only with reference to the essential criteria; or
- (iii) To accommodate countries which further seek to attain best supervisory practices, a country may voluntarily choose to be assessed and graded against the additional criteria, in addition to the essential criteria.

60. For assessments of the Core Principles by external parties,<sup>17</sup> the following four-grade scale will be used: compliant, largely compliant, materially non-compliant, and non-compliant. A "not applicable" grading can be used under certain circumstances as described in paragraph 62.

61. Brief description of gradings and their applicability:

- Compliant – A country will be considered compliant with a Principle when all essential criteria<sup>18</sup> applicable for this country are met without any significant deficiencies. There may be instances, of course, where a country can demonstrate that the Principle has been achieved by other means. Conversely, due to the specific conditions in individual countries, the essential criteria may not always be sufficient to achieve the objective of the Principle, and therefore other measures may also be needed in order for the aspect of banking supervision addressed by the Principle to be considered effective.
- Largely compliant – A country will be considered largely compliant with a Principle whenever only minor shortcomings are observed which do not raise any concerns about the authority's ability and clear intent to achieve full compliance with the Principle within a prescribed period of time. The assessment "largely compliant" can be used when the system does not meet all essential criteria, but the overall effectiveness is sufficiently good, and no material risks are left unaddressed.
- Materially non-compliant – A country will be considered materially non-compliant with a Principle whenever there are severe shortcomings, despite the existence of

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<sup>17</sup> in the case of self-assessments, gradings have virtually no relevance.

<sup>18</sup> For the purpose of grading, references to the term "essential criteria" in this paragraph would include additional criteria in the case of a country that has volunteered to be assessed and graded against the additional criteria.

formal rules, regulations and procedures, and there is evidence that supervision has clearly not been effective, that practical implementation is weak, or that the shortcomings are sufficient to raise doubts about the authority's ability to achieve compliance. It is acknowledged that the "gap" between "largely compliant" and "materially non-compliant" is wide, and that the choice may be difficult. On the other hand, the intention has been to force the assessors to make a clear statement.

- **Non-compliant** – A country will be considered non-compliant with a Principle whenever there has been no substantive implementation of the Principle, several essential criteria are not complied with or supervision is manifestly ineffective.

62. In addition, a Principle will be considered not applicable when, in the view of the assessor, the Principle does not apply given the structural, legal and institutional features of a country. In some instances countries have argued that in the case of certain embryonic or immaterial banking activities, which were not being supervised, an assessment of "not applicable" should have been given, rather than "non-compliant". This is an issue for judgment by the assessor, although activities which are relatively insignificant at the time of assessment may later assume greater importance and authorities need to be aware of, and prepared for, such developments. The supervisory system should permit such activities to be monitored, even if no regulation or supervision is considered immediately necessary. "Not applicable" would be an appropriate assessment if the supervisors are aware of the phenomenon, and would be capable of taking action, but there is realistically no chance that the activities will grow sufficiently in volume to pose a risk.

63. Grading is not an exact science and the Core Principles can be met in different ways. The assessment criteria should not be seen as a checklist approach to compliance but as a qualitative exercise. Compliance with some criteria may be more critical for effectiveness of supervision, depending on the situation and circumstances in a given jurisdiction. Hence, the number of criteria complied with is not always an indication of the overall compliance rating for any given Principle. Emphasis should be placed on the commentary that should accompany each Principle grading, rather than on the grading itself. The primary goal of the exercise is not to apply a "grade" but rather to focus authorities on areas needing attention in order to set the stage for improvements and develop an action plan that prioritises the improvements needed to achieve full compliance with the Core Principles.

64. The assessment should also include the assessors' opinion on how weaknesses in the preconditions for effective banking supervision, as discussed in paragraphs 46-53, hinder effective supervision and how effectively supervisory measures mitigate these weaknesses. This opinion should be qualitative rather than providing any kind of graded assessment. Recommendations with regard to the preconditions should not be part of the action plan associated with the Core Principles assessment, but should be included for instance in other general recommendations for strengthening the environment of financial sector supervision.

65. The Core Principles are minimum standards to be applied by all banking supervisors. In implementing some of them, supervisors will need to take into account the risk profile and systemic importance of individual banks, particularly for those Core Principles where supervisors have to determine the adequacy of banks' risk management policies and processes.

### **Practical considerations in conducting an assessment**

66. While the Committee does not have a specific role in setting out detailed guidelines on the preparation and presentation of assessment reports, it believes there are a few considerations that assessors should take into account when conducting an assessment and

preparing the assessment report. By way of example, Annex 2 to this document includes the format developed by the IMF and the World Bank for conducting their own assessments of the state of implementation of the Core Principles in individual countries. This annex also includes structured guidance to the assessors on how to form an opinion on the preconditions for effective banking supervision, how weaknesses in these external elements may hinder supervision, as mentioned in paragraph 64, and how effectively supervisory measures can mitigate shortcomings in the preconditions for effective banking supervision.

67. First, when conducting an assessment, the assessor must have free access to a range of information and interested parties. The required information may include not only published information, such as the relevant laws, regulations and policies, but also more sensitive information, such as any self-assessments, operational guidelines for supervisors and, where possible, supervisory assessments of individual banks. This information should be provided as long as it does not violate legal requirements for supervisors to hold such information confidential. Experience from assessments has shown that secrecy issues can often be solved through ad hoc arrangements between the assessor and the assessed authority. The assessor will need to meet with a range of individuals and organisations, including the banking supervisory authority or authorities, other domestic supervisory authorities, any relevant government ministries, bankers and bankers' associations, auditors and other financial sector participants. Special note should be made of instances when any required information is not provided, as well as of what impact this might have on the accuracy of the assessment.

68. Second, the assessment of compliance with each Core Principle requires the evaluation of a chain of related requirements which, depending on the Principle, may encompass law, prudential regulation, supervisory guidelines, on-site examinations and off-site analysis, supervisory reporting and public disclosures, and evidence of enforcement or non-enforcement. Further, the assessment must ensure that the requirements are put into practice. This also requires assessing whether the supervisory authority has the necessary operational autonomy, skills, resources and commitment to implement the Core Principles.

69. Third, assessments should not focus solely on deficiencies but should also highlight specific achievements. This approach will provide a better picture of the effectiveness of banking supervision.

70. Fourth, there are certain jurisdictions where non-bank financial institutions that are not part of a supervised banking group engage in some bank-like activities; these institutions may make up a significant portion of the total financial system and may be largely unsupervised. Since the Core Principles deal specifically with banking supervision, they cannot be used for formal assessments of these non-bank financial institutions. However, the assessment report should, at a minimum, mention those activities where non-banks have an impact on the supervised banks and the potential problems which may arise as a result of non-bank activities.

71. Fifth, the development of cross-border banking leads to increased complications when conducting Core Principles assessments. Improved cooperation and information sharing between home and host country supervisors is of central importance, both in normal times and in crisis situations. The assessor must therefore determine that such cooperation and information sharing actually takes place to the extent needed, bearing in mind the size and complexity of the banking links between the two countries.



## Annex 1

### Comparison between the revised and 2006 versions of the Core Principles

Revised structure	2006 structure
<b>Supervisory Powers, Responsibilities and Functions</b>	
CP 1: Responsibilities, objectives and powers	CP 1: Objectives, independence, powers, transparency and cooperation
CP 2: Independence, accountability, resourcing and legal protection for supervisors	
CP 3: Cooperation and collaboration	
CP 4: Permissible activities	CP 2: Permissible activities
CP 5: Licensing criteria	CP 3: Licensing criteria
CP 6: Transfer of significant ownership	CP 4: Transfer of significant ownership
CP 7: Major acquisitions	CP 5: Major acquisitions
CP 8: Supervisory approach	CP 19: Supervisory approach
CP 9: Supervisory techniques and tools	CP 20: Supervisory techniques
CP 10: Supervisory reporting	CP 21: Supervisory reporting
CP 11: Corrective and sanctioning powers of supervisors	CP 23: Corrective and remedial powers of supervisors
CP 12: Consolidated supervision	CP 24: Consolidated supervision
CP 13: Home-host relationships	CP 25: Home-host relationships
<b>Prudential Regulations and Requirements</b>	
CP 14: Corporate governance	
CP 15: Risk management process	CP 7: Risk management process
CP 16: Capital adequacy	CP 6: Capital adequacy
CP 17: Credit risk	CP 8: Credit risk
CP 18: Problem assets, provisions and reserves	CP 9: Problem assets, provisions and reserves
CP 19: Concentration risk and large exposure limits	CP 10: Large exposure limits
CP 20: Transactions with related parties	CP 11: Exposures to related parties
CP 21: Country and transfer risks	CP 12: Country and transfer risks
CP 22: Market risk	CP 13: Market risk
CP 23: Interest rate risk in the banking book	CP 16: Interest rate risk in the banking book
CP 24: Liquidity risk	CP 14: Liquidity risk

Credit Risk  
Supervision

Revised structure	2006 structure
CP 25: Operational risk	CP 15: Operational risk
CP 26: Internal control and audit	CP 17: Internal control and audit
CP 27: Financial reporting and external audit	CP 22: Accounting and disclosure
CP 28: Disclosure and transparency	
CP 29: Abuse of financial services	CP 18: Abuse of financial services

# Corporate Governance in Banks

July 2012

Asia Pacific Economic Cooperation Forum –  
*Financial Regulators Training Initiative* –  
Bank Analysis and Supervision Seminar

## Corporate Governance *Definition*

Corporate Governance involves the manner in which the business and affairs of a bank are governed by its board and senior management, including how they:

- set strategy and objectives;
- determine risk tolerance/appetite;
- operate business on a day-to-day basis;
- protect depositors, meet shareholder obligations, and consider interests of other stakeholders; and
- align corporate activities and behaviour to operate the bank in a safe and sound manner, with integrity, and in compliance with laws and regulations.

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2

How much

capital

should the bank had a  
/ depositor → 由存款人/ 储户  
/ shareholder → equity (and face the credit risk)  
/ managers  
/ supervisors (regulator) more of the capital

## Corporate Governance

### *A useful quote*

"A majority of business failures relate to what **people** in privileged or responsible positions actually **do** (or don't do) with **other people's** money."

*Gary Simmons, Partner  
PriceWaterhouse Coopers, Dubai*

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3

## Corporate Governance

### *new BCP 14 (paraphrased)*

Supervisors ensure that banks have robust policies and processes...

- Strategic direction
- Structure
- Control environment
- Responsibilities / Accountabilities
- Compensation *risk taking opportunities*

...appropriate for risk profile and standing.

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## Corporate Governance Key Aspects: Form & Function

Board Practices	Senior Management	Risk Management, Internal Control, Internal Audit
Compensation	Appropriate (noncomplex) Structure	Disclosure and Transparency

→ IC  
→ IA

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Shareholders want to know depositors 5

## Corporate Governance Board Practices

### High-level Strategies, Sound Judgment, Supported by RM, IC, IA

- Qualified [new BCP 5]; Exercise good judgment
- Overall strategy, vision, goals [14]
- Board's own rules sound and followed
- Code of conduct
- Supported by competent and funded RM, IC processes, IA function, Ext. Audit [15,26,27]

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internal audit  
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Board members must be qualified  
must show up!

## Corporate Governance Senior Management

### "Fit and Proper" Leadership

- Screening and approval by Board
- Disclosure of financial interests
- Implement strategy and policies within risk parameters set by Board
- Periodic performance assessment
- Succession planning [new BCP 5]

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## Corporate Governance Risk Management and IC/IA

### Excellent Communication and Direct Access

- Appropriate RM process (chief risk officer, authority, stature, independence, resources, access, ongoing review of whole and entities, broad view) [15]
- Internal control (mandate, functions, reports, responses) and Internal audit (charter, personnel, assessment, schedule, results, responses) [26]
- Financial reporting and External audit (selection, fees, engagement letter, opinion, management letter, responses) [27]

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It has no basket  
that interconnects  
take Internal Control?

(BPI) (2大)  
(BFD) (2大)

pillar 3

more details

## Corporate Governance Compensation

Compensation process ← risk outcomes

- Board oversight of compensation system
- Aligned with prudent risk taking AND actual risk outcomes

[new BCP 14]

risk taking  
↓  
take back

compensation structure  
↳ risk taking  
↳ release  
B: 12

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## Corporate Governance Appropriate (noncomplex) Structures

**Includes:** Activities, Risk Management Framework,  
and recent Financial Performance

- Board: “know your structure”
- Legal, organizational, and managerial structure [new BCP 14]
- Committee structure
- Overall financial performance

The more complex the  
more responsibility

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## Corporate Governance *Transparency*

Board, Employees, Regulator, Public

- Financial performance [new BCP 27, 28]
- Other financial indicators: nonperforming, reserves, concentrations, derivatives, etc. [27]
- Nonfinancial indicators: strategy, code of conduct, internal control certification, internal audit summary, external audit management letter [27-28]
- Structure: legal, managerial, board

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## Corporate Governance *\*Function\**

**“Does bank function as it says it does?”**

- Risk committees and activities [new BCP 14,15]
- Conflicts avoided [20]
- Risk Management, Internal Audit, and Internal Control fully funded and functional [15,26]
- Reliable records, subject to external audit [27]
- Financial performance (vs. budget and other quality benchmarks) reviewed and transparent [27-28]

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## Corporate Governance

# Function vs Form

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## Corporate Governance *BCBS and others*

### Basel Committee on Banking Supervision

- Excellent international guidance
- **BCBS 168 on corporate governance**
- ✓ **BCBS 223 on internal audit in banks** (*www.bcbs.org*)

### Financial Stability Board

- International standards and best practices
- **Principles for sound compensation practices**

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How to measure

unexpected losses?

exposure  
statistic

Capital for unexpected losses  
exp. of stress  
risk appetite & activity  
reputation & contagion  
~~potential~~ volatility of interest  
stress testing & evaluate all possible sources of loss

## Corporate Governance Some examples

- Board authorizes additional advance to large customer in excess of legal lending limit. CB\* cites for lending limit violation.
- Following 90 days to correct violation by reducing exposure or increasing capital, CB\* determines bank still doesn't comply.
- Lending to fishing industry exceeds 10% of total loans limit established by Board.

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非預期損失：  
確信擁有足夠  
資產以支撐10%  
反映  
多餘資產

## Corporate Governance Examples



- **Discussion**
  - In three previous examples, how well did corporate governance function?
  - Is it possible to have good corporate governance and still violate laws? No.
  - Is it possible to have good corporate governance and inadequate risk management? No.

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1-0

Information

Introduction

This uniform bank performance report covers the operations of a bank and that of a comparable group of peer banks. It is provided as a bank management tool by the Federal Financial Institutions Examination Council. Detailed information concerning the content of this report is provided in the Users Guide for the Uniform Bank Performance Report found online at www.ffiec.gov. This report has been produced for the use of the federal regulators of financial institutions in carrying out their supervisory responsibilities. All information contained herein was obtained from sources deemed reliable however no guarantee is given as to the accuracy of the data. The information contained in this report is not to be construed as a rating or other evaluation of a financial institution by a federal banking regulator. The quarterly report of condition and income is the principal source of information for this report. Please refer to that document for additional financial information and an explanation of the accounting standards that underlie data shown herein. For questions regarding content of reports contact:  
1-988-237-3111 or email: cdr.help@ffiec.gov

Financial Institution Address:

**BANK 1**

The Current Federal Regulator is:

The bank was established on:

The current peer group for this bank is: 3

Insured commercial banks having assets between \$300 million and \$1 billion medium size institutions.

Footnotes:

Financial data in the Uniform Bank Performance Report may have been adjusted as a result of information shown in footnotes below. Please refer to the Uniform Bank Performance Report Users Guide online for details.

Liquidity Risk

	Bank 1	Bank 2
Core Deposit	8467	77-56
ST Non-Core Funding	000	4.15
ST Inventory	2699.2	> 18.01
ST Non-Core Loans/Deposits	75.99	86.18
Over Due from Banks	093	2.08
Bank Balance (w/Comp Bearing)	2028	1360
(Income Bearing)		

which bank has stronger position in liquidity risk? Bank 1  
Look trends over the sections  
C A M E L S / C  
3 3 3 2 2 3

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State Average

Bank Holding Company Information:

	3/31/2012			3/31/2011			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
<b>Earnings and Profitability</b>															
Percent of Average Assets:															
Interest Income (TE)	4.10	4.30	34	4.71	4.53	62	4.26	4.50	31	5.20	4.82	76	5.74	5.22	84
- Interest Expense	0.24	0.24	4	0.42	0.99	6	0.36	0.90	6	0.55	1.18	6	0.82	1.65	6
Net Interest Income (TE)	3.86	3.56	71	4.29	3.53	90	3.90	3.60	72	4.65	3.65	94	4.92	3.58	97
+ Noninterest Income	1.71	0.75	91	1.67	0.69	92	1.48	0.71	90	1.95	0.64	96	1.93	0.67	96
- Noninterest Expense	3.90	2.89	89	3.96	2.93	90	4.05	2.93	91	4.37	3.34	88	4.37	3.30	89
- Provision: Loan & Lease Losses	0.37	0.29	68	0.42	0.42	62	0.39	0.52	52	0.34	0.78	34	0.56	0.94	47
Pretax Operating Income (TE)	1.31	1.18	54	1.55	0.91	75	0.93	0.90	43	1.89	0.20	94	1.92	0.01	95
+ Realized Gains/Losses Sec	0.00	0.05	61	0.00	0.01	68	0.00	0.05	36	0.00	0.05	44	0.00	0.04	46
Pretax Net Operating Income (TE)	1.31	1.26	50	1.55	0.93	75	0.93	0.96	40	1.89	0.26	93	1.92	0.03	95
Net Operating Income	0.97	0.92	55	1.12	0.67	74	0.78	0.69	49	1.40	0.13	90	1.23	-0.01	88
Adjusted Net Operating Income	1.34	0.97	71	1.20	0.70	72	0.80	0.69	48	1.54	0.24	91	1.54	0.24	91
Net Inc Attrib to Min Ints	0.00	0.00	98	0.00	0.00	98	0.00	0.00	98	0.00	0.00	99	0.00	0.00	99
Net Income Adjusted Sub S	0.97	0.83	60	1.12	0.60	80	0.78	0.61	51	1.40	0.07	96	1.23	-0.06	94
Net Income	0.97	0.92	55	1.12	0.67	74	0.78	0.69	49	1.40	0.13	90	1.23	-0.01	88
<b>Margin Analysis:</b>															
Avg Earning Assets to Avg Assets	85.49	93.17	3	85.49	93.24	3	85.66	93.16	4	87.10	92.32	8	86.54	92.93	10
Avg Int-Bearing Funds to Avg Assets	78.72	79.25	43	78.88	80.64	37	78.77	79.79	40	77.90	77.11	51	77.68	77.38	47
Int Inc (TE) to Avg Earn Assets	4.80	4.84	60	5.51	4.87	86	4.97	4.85	59	5.97	5.24	87	6.48	5.52	91
Int Expense to Avg Earn Assets	0.28	0.79	4	0.50	1.06	7	0.42	0.96	6	0.64	1.28	7	0.93	1.78	7
Net Int Inc-TE to Avg Earn Assets	4.52	3.83	88	5.01	3.80	95	4.56	3.88	87	5.33	3.96	97	5.56	3.86	97
<b>Loan &amp; Lease Analysis:</b>															
Net Loss to Average Total LN&LS	0.00	0.40	16	0.54	0.62	61	0.57	0.80	50	0.27	0.98	26	0.31	0.99	30
Earnings Coverage of Net Losses (X)	N/A	1.79	N/A	5.04	1.98	55	3.27	7.50	45	11.08	4.81	82	9.74	4.95	80
LN&SL Allowance to LN&LS Not HFS	1.86	1.91	55	1.77	2.00	48	1.73	1.93	49	1.73	1.96	46	1.44	1.71	44
LN&SL Allowance to Net Losses (X)	N/A	1.76	N/A	3.17	8.82	43	3.04	4.84	51	6.29	3.92	78	4.49	3.98	70
LN&LS Allowance to Total LN&LS	1.86	1.89	56	1.77	1.98	48	1.72	1.90	50	1.71	1.94	46	1.43	1.70	44
Total LN&LS-90+ Days Past Due	0.01	0.08	47	0.01	0.10	48	0.01	0.08	46	0.00	0.13	50	0.27	0.17	73
-Nonaccrual	5.59	2.50	85	3.63	3.08	67	5.17	2.64	82	4.35	3.09	71	4.58	2.68	78
-Total	5.59	2.67	84	3.65	3.23	66	5.18	2.78	82	4.35	3.30	70	4.85	2.97	77
<b>Liquidity</b>															
Net Non Core Fund Dep New \$250M	(-28.3)	4.27	2	-27.40	7.54	1	-25.59	5.82	3	-22.07	3.28	4	7.77	21.89	17
Net Loans & Leases to Assets	64.50	61.60	56	66.58	64.04	55	65.95	62.82	56	69.36	65.41	60	77.29	68.03	79
<b>Capitalization</b>															
Tier One Leverage Capital	12.67	9.54	92	12.98	9.17	94	12.35	9.41	91	13.34	9.16	94	12.78	9.09	92
Cash Dividends to Net Income	37.78	19.71	71	46.08	19.48	76	51.47	26.22	72	37.28	20.96	70	38.34	25.26	64
Retained Earnings to Avg Total Equity	4.72	5.79	40	4.63	3.50	31	3.03	2.87	39	6.68	-2.07	82	5.91	-3.32	82
Rest+Nonec+RE Acq to Eqcap+ALL	45.10	28.37	77	45.88	35.13	71	43.19	31.07	73	47.10	41.30	68	45.60	32.77	73
<b>Growth Rates</b>															
Total Assets	16.29	4.98	62	8.35	2.16	77	6.19	4.10	65	5.35	1.14	70	4.37	4.87	49
Tier One Capital	3.14	6.88	30	6.99	3.50	63	3.11	5.92	31	7.22	2.02	71	6.24	2.32	66
Net Loans & Leases	2.98	1.17	62	-6.37	-2.57	34	0.98	-0.56	59	-5.47	-3.08	41	-0.62	0.25	47
Short Term Investments	6.25	32.33	43	146.78	36.70	86	11.25	36.82	48	499.32	52.32	94	206.28	167.72	75
Short Term Non Core Funding	-33.67	-3.51	19	-81.10	-51.99	9	-80.60	-48.51	9	-32.95	-11.34	20	-35.22	-1.47	13
<b>Average Total Assets</b>	327,423	309,981	1,155	326,697	295,094	1,170	326,697	295,094	326,697	295,094	768	286,886	37,611	3,521	
<b>Total Equity Capital</b>	42,121	40,600	888	41,567	40,215	888	41,567	40,215	41,567	40,215	768	37,611	3,521		
<b>Net Income</b>	7794	888	1,155	7794	888	1,155	7794	888	7794	888	1,155	7794	888		

Percent Change

	3/31/2012	3/31/2011	12/31/2011	12/31/2010	12/31/2009	1 Year
Interest and Fees on Loans	3,118	3,369	12,843	14,289	15,150	-7.45
Income from Lease Financing	0	0	0	0	0	N/A
Tax-Exempt	61	118	504	174	163	-48.31
Estimated Tax Benefit	31	60	259	89	83	-48.31
Income on Loans & Leases (TE)	3,149	3,429	13,102	14,378	15,233	-8.17
US Treas & Agency (Excl MBS)	14	32	92	144	128	-56.25
Mortgage Backed Securities	26	51	168	344	673	-49.02
Estimated Tax Benefit	35	26	102	108	105	33.33
All Other Securities	86	68	271	267	254	26.47
Tax-Exempt Securities Income	68	51	199	210	204	33.33
Investment Interest Income (TE)	161	177	633	863	1,160	-9.16
Interest on Due From Banks	47	43	184	97	21	9.30
Int on Fed Funds Sold & Resales	0	0	0	0	36	N/A
Trading Account Income	0	0	0	0	0	N/A
Other Interest Income	0	0	0	0	0	N/A
Total Interest Income (TE)	3,357	3,650	13,920	15,338	16,451	-6.02
Int on Deposits in Foreign Off	N/A	N/A	N/A	N/A	N/A	N/A
Interest on Time Dep Over \$100M	36	65	222	315	412	-44.62
Interest on All Other Deposits	158	264	946	1,296	1,813	-19.77
Int on Fed Funds Purch & Repos	0	0	0	0	0	N/A
Int Trad Liab & Oth Borrowings	0	0	0	22	129	N/A
Int on Sub Notes & Debentures	0	0	0	0	0	N/A
Total Interest Expense	189	329	1,169	1,633	2,354	-40.73
Net Interest Income (TE) (A-F)	3,162	3,321	12,752	13,705	14,097	-2.78
Non-Interest Income	1,397	1,293	4,841	5,733	5,545	8.04
Adjusted Operating Income (TE)	4,559	4,614	17,593	19,438	19,642	-1.18
Non-Interest Expense (people, building etc.)	3,191	3,066	13,274	12,888	12,530	4.08
Provision: Loan & Lease Losses (with 12/31/11)	300	350	1,275	1,000	1,600	-14.29
Pretax Operating Income (TE)	1,068	1,198	3,044	5,570	5,512	-10.82
Realized G/L Hid-to-Maturity Sec	0	0	0	0	0	N/A
Realized G/L Avail-for Sale Sec	2	0	0	0	0	N/A
Pretax Net Operating Inc (TE)	1,070	1,198	3,044	5,570	5,512	-10.65
Applicable Income Taxes	210	243	127	1,242	1,802	-13.58
Current Tax Equiv Adjustment	66	87	362	197	189	-23.67
Other Tax Equiv Adjustments	0	0	0	0	0	N/A
Applicable Income Taxes (TE)	276	330	489	1,439	1,991	-16.24
Net Operating Income	794	868	2,555	4,131	3,521	-8.53
Net Extraordinary Items	0	0	0	0	0	N/A
Net Inc Noncontrolling Minority Interests	0	0	0	0	0	N/A
Net Income	794	868	2,555	4,131	3,521	-8.53
Cash Dividends Declared	300	400	1,315	1,540	1,350	-25.00
Retained Earnings	494	468	1,240	2,591	2,171	5.56
Memo: Net International Income	N/A	N/A	N/A	N/A	N/A	N/A

1-2

*operational risk*  
*operational risk*  
*operational risk*

*people, building etc.*

*Trading*

INT. INC. related to BLS Asset Liquidation  
1/3

Non Int Inc, Exp, Yields  
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Noninterest Income, Expenses and Yields - Page 3

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Public Report

	3/31/2012			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG3	PCT	BANK	PG3	PCT	BANK	PG4	PCT	BANK	PG4	PCT
Percent of Average Assets												
Personnel Expense	2,229	1.54	93	2,400	1.50	95	2,300	1.50	96	2,160	1.55	95
Occupancy Expense	702	0.36	23	0.24	0.38	17	0.24	0.37	18	0.28	0.30	15
Other Oper Exp (Incl Intangibles)	1,355	0.97	84	1,320	1.03	80	1,520	1.04	75	1,490	1.21	83
Total Overhead Expense	3,900	2.89	89	3,960	2.93	90	4,060	2.93	88	4,370	3.34	89
Overhead Less Nonint Inc	2,190	2.09	58	2,190	2.20	56	2,580	2.19	74	2,420	2.65	44
Other Income & Expense Ratios:												
Efficiency Ratio	69.99	66.43	62	66.45	69.04	44	75.45	67.90	72	66.23	78.40	29
Avg Personnel Exp Per Emp(\$000)	5,305	68.81	42	60.89	65.48	46	61.72	65.25	47	63.48	60.57	65
Assets Per Employee (\$Million)	2.70	4.70	3	2.52	4.58	3	2.61	4.62	3	2.48	3.81	7
Yield on or Cost of:												
Total Loan & Leases (TE)	5.83	5.71	61	6.44	5.80	87	6.21	5.84	76	6.64	6.16	80
Loans in Domestic Offices	5.77	5.69	59	6.32	5.78	85	6.09	5.82	70	6.60	6.14	78
Real Estate	5.82	5.64	65	6.62	5.71	93	6.32	5.76	88	7.16	6.12	84
Secured by 1-4 Fam Resi Prop	7.09	5.63	91	6.77	5.71	88	6.87	5.76	84	7.14	6.12	84
All Other Loans Sec Real Estate	5.64	5.66	50	6.60	5.72	91	6.23	5.78	78	6.69	6.10	79
Commercial & Industrial	5.63	5.79	47	6.09	5.88	63	6.24	5.93	67	5.71	6.42	24
Individual	5.22	7.34	13	5.89	7.37	20	5.58	7.50	15	5.49	7.90	9
Credit Card	7.51	9.88	33	8.02	9.30	39	7.29	9.71	31	8.45	9.35	43
Agricultural	1.92	5.94	1	N/A	6.10	N/A	N/A	6.02	N/A	N/A	6.36	N/A
Loans in Foreign Offices	4.49	4.49	N/A	N/A	4.45	N/A	N/A	4.62	N/A	N/A	5.63	N/A
Total Investment Securities (TE)	3.43	2.93	71	4.50	3.31	88	4.22	3.19	95	4.81	3.59	88
Total Investment Securities (Book)	2.68	2.59	57	3.83	2.97	82	3.54	2.87	82	4.21	3.31	86
US Treas & Agency (EXCL MB5)	2.96	1.90	85	3.67	2.15	90	3.41	2.10	89	4.17	2.64	90
Mortgage Backed Securities	1.42	2.63	6	3.73	3.31	66	3.16	3.10	55	4.56	3.64	80
All Other Securities	3.60	3.46	55	4.00	3.76	61	3.88	3.65	59	3.84	3.87	49
Interest-Bearing Bank Balances	0.42	0.29	79	0.49	0.33	77	0.35	0.33	70	0.44	0.51	60
Federal Funds Sold & Resales	N/A	0.15	N/A	N/A	0.18	N/A	N/A	0.18	N/A	N/A	0.20	N/A
Total Interest Bearing Deposits	0.30	0.84	4	0.54	1.14	6	0.45	1.03	5	0.70	1.43	5
Transaction accounts	0.20	0.33	38	0.32	0.44	47	0.27	0.41	43	0.26	0.47	33
Other Savings Deposits	0.23	0.39	28	0.40	0.56	33	0.35	0.50	32	0.53	0.75	29
Time Deps Over \$10.0M	1.02	1.36	22	1.37	1.68	29	1.29	1.57	29	1.60	1.98	22
All Other Time Deposits	0.69	1.39	6	1.16	1.74	11	0.97	1.63	7	1.40	2.04	10
Foreign Office Deposits	N/A	0.28	N/A	N/A	0.24	N/A	N/A	0.23	N/A	N/A	0.50	N/A
Federal Funds Purchased & Repos	N/A	0.55	N/A	N/A	0.64	N/A	N/A	0.61	N/A	N/A	0.53	N/A
Other Borrowed Money	N/A	2.92	N/A	N/A	2.83	N/A	N/A	2.68	N/A	N/A	2.77	N/A
Subord Notes & Debentures	N/A	4.81	N/A	N/A	5.17	N/A	N/A	4.86	N/A	N/A	9.98	N/A
All Interest-Bearing Funds	0.30	0.94	3	0.54	1.23	5	0.45	1.13	4	0.71	1.52	5
Non-interest Income & Expenses												
Inducery Activities	0	0	0	0	0	0	0	0	0	0	0	0
Deposit Service Charges	103	103	127	127	127	127	469	469	582	582	622	622
Trading, Vent Cap, Securiz Inc	0	0	0	0	0	0	0	0	0	0	0	0
Inv Banking, Advisory Inc	0	0	0	0	0	0	0	0	0	0	0	0
Net Servicing Fees	341	341	348	348	348	348	1,338	1,338	1,374	1,363	1,363	1,363
Loan & Lse Net Gains/Loss	219	219	129	129	129	129	617	617	960	724	724	724
Other Net Gains/Losses	-23	-23	4	4	4	4	-523	-523	2	-57	-57	-57
Other Non-interest Income	757	757	685	685	685	685	2,940	2,940	2,835	2,891	2,891	2,891
Non-interest Income	1,397	1,397	1,293	1,293	1,293	1,293	4,841	4,841	5,753	5,545	5,545	5,545
Personnel Expense	1,877	1,877	1,857	1,857	1,857	1,857	7,530	7,530	7,681	7,282	7,282	7,282
Occupancy Expense	207	207	183	183	183	183	781	781	818	859	859	859
Goodwill Impairment	0	0	0	0	0	0	0	0	0	0	0	0
Other Intangible Amortiz	0	0	0	0	0	0	0	0	0	0	0	0
Other Oper Exptl Intangibles)	1,107	1,107	1,026	1,026	1,026	1,026	4,963	4,963	4,389	4,409	4,409	4,409
Non-interest Expense	3,191	3,191	3,066	3,066	3,066	3,066	13,274	13,274	12,888	12,530	12,530	12,530
Domestic Branches (#)	10	10	10	10	10	10	10	10	10	10	10	10
Foreign Branches (#)	0	0	0	0	0	0	0	0	0	0	0	0
Assets Per Domestic Office	32,636	32,636	30,704	30,704	30,704	30,704	31,815	31,815	29,959	28,437	28,437	28,437

Bank people and very efficient

Very high

*Pls. keep this file in! (Date) → (Date)*

	3/31/2011	12/31/2011	12/31/2010	12/31/2009	1 Quarter	1 Year
<b>Assets:</b>						
Real Estate Loans	168,569	173,808	171,257	182,305	2.05	5.23
Commercial Loans	32,850	33,329	32,819	33,835	-7.01	-5.68
Individual Loans	6,707	6,595	7,260	7,662	-2.26	-3.89
Agricultural Loans	223	182	197	4	23.08	0.45
Other LNBLS in Domestic Offices	602	533	701	26	-22.51	-31.40
LNBLS in Foreign Offices	N/A	N/A	N/A	N/A	N/A	N/A
Loans Held for Sale	488	957	2,037	1,581	0.10	96.31
Loans not Held for Sale	207,609	212,543	209,364	271,416	0.46	2.85
VERBLS Allowance	3,674	3,678	3,614	3,189	8.18	8.30
Net Loans & Leases	204,423	209,822	207,787	219,808	0.33	2.98
U.S. Treasury & Agency Securities	9,082	9,930	9,212	11,611	-7.26	1.40
Municipal Securities	6,377	9,540	6,453	6,596	-2.23	46.26
Foreign Debt Securities	0	0	0	0	N/A	N/A
All Other Securities	2	1	3	3	0.00	-50.00
Interest-Bearing Bank Balances	62,078	62,445	53,008	9,002	9.34	9.99
Federal Funds Sold & Resales	0	0	0	0	N/A	N/A
Trading Account Assets	0	0	0	0	N/A	N/A
Total Investments	77,539	81,916	69,676	77,212	5.98	11.96
Total Earning Assets	281,962	291,738	276,463	247,020	1.91	5.45
Nonint. Cash & Due From Banks	2,229	2,347	1,593	17,063	0.81	6.15
Premises, Fix Assets, Cap Leases	5,956	5,867	6,011	6,246	-1.06	-2.54
Other Real Estate Owned	2,545	1,877	1,424	556	121.79	63.58
Dir & Indir Inv RE Ventures	0	0	0	0	N/A	N/A
Inv in Unconsolidated Subs	0	0	0	0	N/A	N/A
Acceptances & Oth Assets	14,352	16,329	14,108	13,492	2.34	16.44
Total Assets	307,044	318,158	299,599	284,377	2.58	6.29
Average Assets During Quarter	309,981	331,917	298,089	290,273	-1.35	5.63
<b>Liabilities:</b>						
Demand Deposits	9,868	9,878	11,833	12,101	-1.64	-1.54
All Now & A/T/S Accounts	14,563	17,190	16,485	15,744	-1.90	15.79
Money Market Deposit Accounts	69,676	73,123	65,571	66,526	4.42	9.58
Other Savings Deposits	122,992	136,107	112,773	96,908	3.74	14.81
Time Deps At Or Below Insurance Limit	40,391	32,398	42,834	23,993	-1.14	-20.70
Less: Fully Insured Brokered Deposits	0	0	1,001	246	N/A	N/A
Core Deposits	257,490	268,696	248,495	215,026	2.78	7.15
Fully Insured Brokered Deposits	0	0	1,001	246	N/A	N/A
Time Deps Above Insurance Limit	5,027	3,287	6,188	21,624	4.90	-31.41
Deposits in Foreign Offices	0	0	0	0	N/A	N/A
Total Deposits	262,519	271,983	255,693	236,897	2.80	6.51
Federal Funds Purch & Resale	0	0	0	0	N/A	N/A
Fed Home Loan Bor Mat < 1 Year	0	0	0	0	N/A	N/A
Fed Home Loan Bor Mat > 1 Year	0	0	0	0	N/A	N/A
Other Borrowing Mat < 1 Year	0	0	0	0	N/A	N/A
Other Borrowing Mat > 1 Year	0	0	0	0	N/A	N/A
Acceptances & Other Liabilities	3,924	4,608	3,701	3,869	0.59	18.12
Total Liabilities (Incl Mortg)	266,443	276,591	259,394	246,766	2.77	6.68
Subordinated Notes & Debentures	0	0	0	0	N/A	N/A
Total Bank Capital & Min Int	40,600	41,567	40,215	37,611	1.33	3.75
Total Liabilities & Capital	307,043	318,158	299,599	284,377	2.58	6.29
<b>Memoranda:</b>						
Officers, Shareholder Loans (#)	1	0	0	0	1039.68	1021.89
Officers, Shareholder Loans (\$)	718	63	66	439	N/A	N/A
Held-to-Maturity Securities	0	0	0	0	N/A	N/A
Available-for-Sale Securities	18,537	19,471	15,668	18,210	-4.80	19.90
All Brokered Deposits	0	0	1,001	3,104	N/A	N/A

*6-4*

*Assets:*  
 Real Estate Loans *177,328*  
 Commercial Loans *30,992*  
 Individual Loans *6,446*  
 Agricultural Loans *224*  
 Other LNBLS in Domestic Offices *413*  
 LNBLS in Foreign Offices *N/A*  
 Loans Held for Sale *958*  
 Loans not Held for Sale *213,526*  
 VERBLS Allowance *3,979*  
 Net Loans & Leases *-210,505*  
 U.S. Treasury & Agency Securities *9,209*  
 Municipal Securities *9,327*  
 Foreign Debt Securities *0*  
 All Other Securities *1*  
 Interest-Bearing Bank Balances *66,278*  
 Federal Funds Sold & Resales *0*  
 Trading Account Assets *0*  
 Total Investments *86,815*  
 Total Earning Assets *297,320*

*Liabilities:*  
 Demand Deposits *9,716*  
 All Now & A/T/S Accounts *16,863*  
 Money Market Deposit Accounts *76,352*  
 Other Savings Deposits *122,992*  
 Time Deps At Or Below Insurance Limit *41,201*  
 Less: Fully Insured Brokered Deposits *0*  
 Core Deposits *276,161*  
 Fully Insured Brokered Deposits *0*  
 Time Deps Above Insurance Limit *3,448*  
 Deposits in Foreign Offices *0*  
 Total Deposits *279,609*  
 Federal Funds Purch & Resale *0*  
 Fed Home Loan Bor Mat < 1 Year *0*  
 Fed Home Loan Bor Mat > 1 Year *0*  
 Other Borrowing Mat < 1 Year *0*  
 Other Borrowing Mat > 1 Year *0*  
 Acceptances & Other Liabilities *4,635*  
 Total Liabilities (Incl Mortg) *284,244*  
 Subordinated Notes & Debentures *0*  
 Total Bank Capital & Min Int *42,121*  
 Total Liabilities & Capital *326,365*

*Memoranda:*  
 Officers, Shareholder Loans (#) *1*  
 Officers, Shareholder Loans (\$) *718*  
 Held-to-Maturity Securities *0*  
 Available-for-Sale Securities *18,537*  
 All Brokered Deposits *0*

*Deposits*  
 Brokerings  
 (Subordinated Deposits)

*Other*  
 Other  
 Other

*Capital*  
 Capital  
 Capital

*Surplus*  
 Surplus  
 Surplus

1-5

	3/31/2012			3/31/2011			12/31/2011			12/31/2010			12/31/2009			Percent Change	
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT	1 Quarter	1 Year
Outstanding (% of Total)	1.43	1.50	54	2.26	1.80	66	1.42	1.53	52	2.20	1.35	71	2.10	1.39	69		
Home Equity (1-4 Family)	1.38	0.17	93	1.43	0.18	94	1.57	0.17	95	1.49	0.10	95	1.68	0.12	96		
Credit Card	0.05	0.33	16	0.83	0.62	74	0.85	0.36	42	0.71	0.25	35	0.42	0.27	65		
Commercial RE Secured by RE	2.73	1.57	79	2.18	1.46	73	1.22	1.52	48	2.46	1.25	60	0.83	1.58	35		
1-4 Family Residential	0.72	0.36	78	0.42	0.34	66	0.32	0.34	58	0.51	0.38	68	0.79	0.47	73		
Comm RE, Oth Const & Land	2.02	1.05	79	1.76	0.97	77	0.90	1.02	52	1.95	0.78	85	0.04	0.94	15		
Commercial RE Not Secured by RE	0.00	0.00	87	0.00	0.01	85	0.00	0.00	86	0.00	0.00	91	0.00	0.00	89		
All Other	7.76	5.79	70	7.63	5.41	72	7.78	5.47	73	9.57	4.08	89	6.45	4.32	75		
Total LH&LS Commitments	13.31	9.86	73	13.50	9.50	77	11.98	9.48	70	14.71	7.47	92	11.06	8.09	75		
Securities Underwriting	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99		
Standby Letters of Credit	0.20	0.34	42	0.23	0.37	45	0.23	0.35	45	0.29	0.25	54	0.31	0.28	62		
Amount Conveyed to Others	N/A	0.01	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A		
Commercial Letters of Credit	0.00	0.01	86	0.00	0.01	85	0.00	0.01	85	0.00	0.01	88	0.00	0.01	87		
Assets Securitized or Sold w/Roc	0.00	0.23	81	0.00	0.19	83	0.00	0.23	81	0.00	0.09	88	0.00	0.08	89		
Amount of Recourse Exposure	0.00	0.02	82	0.00	0.02	83	0.00	0.02	82	0.00	0.01	89	0.00	0.00	89		
Credit Derivatives Bank as Guarantor	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99		
Credit Derivatives Bank as Beneficiary	0.00	0.02	99	0.00	0.01	99	0.00	0.01	99	0.00	0.00	99	0.00	0.00	99		
All Oth Off-Balance Sheet Items	0.00	0.09	86	0.00	0.13	86	0.00	0.09	86	0.00	0.09	89	0.00	0.10	89		
Off-Balance Sheet Items	13.50	11.49	64	13.73	11.20	67	12.21	11.09	61	15.00	8.87	84	11.36	9.51	66		
Outstanding (\$000)																	
Home Equity (1-4 Family)		4,665			6,925			4,503			6,579			5,979		3.60	-12.64
Credit Card		4,505			4,395			4,989			4,455			4,772		-9.70	2.50
Commercial RE Secured by RE		8,917			6,699			3,870			7,374			2,367		130.41	33.11
1-4 Family Residential		2,336			1,289			1,016			1,538			2,252		129.92	81.23
Commercial RE, Oth Const & Land		N/A			N/A			N/A			N/A			N/A		130.59	21.65
Commercial RE Not Secured by RE		0			0			0			0			0		N/A	N/A
All Other		25,336			23,437			24,765			25,673			18,331		2.31	8.10
Securities Underwriting		0			0			0			0			0		N/A	N/A
Memo: Unused Commit w/mat GT 1 YR		22,243			20,229			22,378			17,437			14,073		-0.60	9.96
Standby Letters of Credit		644			713			721			858			870		-10.68	-9.68
Amount Conveyed to Others		N/A			N/A			N/A			N/A			N/A		N/A	N/A
Commercial Letters of Credit		0			0			0			0			0		N/A	N/A
Assets Securitized or Sold w/Recourse		0			0			0			0			0		N/A	N/A
Amount of Recourse Exposure		0			0			0			0			0		N/A	N/A
Credit Derivatives Bank as Guarantor		0			0			0			0			0		N/A	N/A
Credit Derivatives Bank as Beneficiary		0			0			0			0			0		N/A	N/A
All Oth Off-Balance Sheet Items		0			0			0			0			0		N/A	N/A
Off-Balance Sheet Items	44,067			42,169			38,848			44,939			32,319			13.43	4.50



to Total Assets  
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	3/31/2012			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
Percent of Average Assets	0.30	0.24	72	0.38	0.19	78	0.48	0.15	83	0.78	0.13	89
Loans Held For Sale	66.11	62.60	57	65.93	64.47	52	73.74	67.42	70	79.23	70.36	76
Loans Not Held For Sale	1.19	1.17	58	1.14	1.22	51	1.23	1.24	58	0.99	1.07	52
Less: LINALS Allowance	65.22	62.20	56	64.88	63.82	52	72.99	66.57	71	79.02	69.59	78
Interest-Bearing Bank Balances	20.28	5.71	96	4.91	5.13	98	12.11	4.61	87	0.94	2.31	40
Federal Funds Sold & Resales	0.00	0.55	49	0.00	0.72	43	0.00	1.65	23	1.21	1.98	40
Trading Account Assets	0.00	0.01	97	0.00	0.00	97	0.00	0.03	98	0.00	0.03	98
Held-to-Maturity Securities	0.00	0.66	62	0.00	0.72	61	0.00	0.82	63	0.00	0.98	61
Available-for-Sale Securities	5.90	20.09	13	17.89	18.88	11	6.12	14.99	21	7.86	13.38	32
Total Earning Assets	91.39	91.85	40	92.05	91.92	50	91.22	91.06	49	89.03	91.48	19
Nonmort Cash & Due From Banks	0.23	1.90	10	0.63	1.67	9	1.70	2.26	33	4.28	2.49	89
Premises, Fix Ass'ts & Cap Leases	1.81	1.75	54	1.97	1.80	57	2.11	2.25	50	2.29	2.31	51
Other Real Estate Owned	0.94	0.78	66	0.65	0.88	52	0.28	1.05	30	0.35	0.62	45
Dir & Indir Inv RE Ventures	0.00	0.01	96	0.00	0.01	96	0.00	0.01	98	0.00	0.01	95
Inv in Unconsolidated Subs	0.00	0.00	87	0.00	0.00	86	0.00	0.00	90	0.00	0.00	91
Acceptances & Other Assets	5.13	3.17	86	4.69	3.36	78	4.69	2.91	86	4.05	2.65	81
Total Non-Earning Assets	8.61	8.15	59	9.31	8.08	49	8.78	8.94	50	10.97	8.52	80
Total Assets	100.00	100.00	99	100.00	100.00	99	100.00	100.00	99	100.00	100.00	99
Standby Letters of Credit	0.21	0.35	43	0.26	0.37	47	0.24	0.26	63	0.36	0.32	63
Liabilities												
Demand Deposits	3.04	8.55	11	3.58	7.28	22	3.66	11.75	4	3.60	11.21	4
All NOW & AFS Accounts	5.28	5.96	56	5.12	5.28	60	5.21	9.31	29	4.94	8.39	31
Money Market Deposit Accounts	23.19	18.37	66	23.29	17.46	67	23.26	13.60	84	22.07	12.45	84
Other Savings Deposits	43.03	15.07	95	38.86	13.69	95	40.61	8.27	97	34.79	7.66	97
Time Deps At or Below Insurance Limit	10.00	27.05	5	13.72	30.56	6	11.74	30.76	5	9.91	22.58	8
Less: Fully Insured Brokered Deposits	0.00	2.01	39	0.17	2.80	36	0.59	1.98	55	1.16	2.37	58
Core Deposits	84.54	76.42	86	83.41	74.79	85	84.24	75.37	77	74.14	62.51	85
Fully Insured Brokered Deposits	0.00	2.01	39	0.17	2.80	39	0.06	2.43	36	0.59	1.16	58
Time Deps Above Insurance Limit	1.05	4.53	7	1.85	4.98	14	1.49	7.39	13	7.59	17.49	5
Deposits in Foreign Offices	0.00	0.08	99	0.00	0.11	99	0.00	0.02	99	0.00	0.02	99
Total Deposits	85.58	84.25	54	85.42	83.93	57	85.80	84.90	45	82.90	83.57	41
Federal Funds Purch & Repos	0.00	1.15	44	0.00	1.29	42	0.00	0.53	55	0.00	0.68	45
Total Fed Home Loan Borrowings	0.00	2.74	27	0.00	3.26	23	0.00	3.25	31	2.75	4.35	40
Total Other Borrowings	0.00	0.01	83	0.00	0.04	69	0.00	0.04	75	0.00	0.04	77
Memo: Sht Ter N Core Funding	0.91	7.47	7	3.43	12.26	3	2.06	16.14	7	10.61	18.44	15
Acceptances & Other Liabilities	1.43	0.63	92	1.26	0.60	90	1.31	0.63	92	1.25	0.57	93
Total Liabilities (Incl Mortg)	87.02	89.77	10	86.68	90.30	7	87.11	89.95	10	86.89	90.30	10
Subordinated Notes & Debentures	0.00	0.04	95	0.00	0.05	95	0.00	0.01	98	0.00	0.01	99
Total Bank Capital & Min Int	12.98	10.19	89	13.32	9.65	92	12.89	9.73	91	13.11	9.69	89
Total Liabilities & Capital	100.00	100.00	96	100.00	100.00	0	100.00	100.00	7	100.00	100.00	97
Memo: All Brokered Deposits	0.00	2.20	37	0.17	3.05	37	0.06	2.64	35	1.71	3.13	57
Insured Brokered Deposits	0.00	2.01	39	0.17	2.80	39	0.06	2.43	36	1.16	2.37	58
Loans HFS as a % Loans	0.45	0.38	70	0.60	0.27	80	0.57	0.30	77	0.64	0.22	83

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	3/31/2011			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
Analysis Ratios												
Loss Provision to Average Assets	0.37	0.29	68	0.39	0.52	52	0.34	0.78	34	0.56	0.94	47
Recoveries to Prior Credit Loss	0.63	13.03	8	6.95	12.59	41	23.47	11.04	83	45.69	18.10	87
Net Loss to Average Total LN&LS	0.00	0.40	16	0.57	0.80	50	0.27	0.98	26	0.31	0.99	30
Gross Loss to Average Total LN&LS	0.00	0.47	6	0.60	0.91	47	0.35	1.08	28	0.35	1.06	30
Recoveries to Average Total LN&LS	0.00	0.08	9	0.03	0.09	25	0.09	0.07	68	0.04	0.05	56
LN&LS Allowance to LN&LS Not HFS	1.86	1.91	55	1.73	1.93	49	1.73	1.96	46	1.44	1.71	44
LN&LS Allowance to Total LN&LS	1.86	1.89	56	1.72	1.90	50	1.71	1.94	46	1.43	1.70	44
LN&LS Allowance to Net Losses (X)	N/A	12.76	N/A	3.04	4.84	51	6.29	3.92	78	4.49	3.98	70
LN&LS Allowance to Nonaccrual LN&LS (X)	0.33	1.36	8	0.33	1.33	9	0.39	1.20	19	0.31	1.34	12
Earnings Coverage of Net Losses (X)	N/A	17.79	N/A	3.27	7.50	45	11.08	4.81	82	9.74	4.95	80
Net Losses by Type of LN&LS												
Real Estate Loans	0.00	0.35	15	0.65	0.74	59	0.34	0.83	42	0.12	0.81	29
Loans to Finance Comm'l Real Estate	0.00	2.82	96	0.00	0.03	92	0.00	0.01	93	0.00	0.23	90
Construction & Land Development	0.00	0.54	68	1.15	1.99	56	0.75	2.24	54	0.62	1.99	52
1-4 Family Construction	0.00	0.09	88	3.24	1.35	82	3.10	1.39	81	2.61	1.80	75
Other Construction & Land	0.00	0.50	72	0.63	1.92	55	0.00	2.26	49	0.00	1.76	52
Secured by Farmland	0.00	0.00	92	0.00	0.05	82	0.00	0.01	90	0.00	0.00	93
Single & Multifamily Mortgage	-0.01	0.33	11	0.55	0.61	60	0.82	0.65	68	0.04	0.59	30
Home Equity Loans	0.00	0.17	75	0.00	0.45	49	0.00	0.39	62	0.00	0.36	67
1-4 Family Non-Revolving	-0.02	0.34	10	0.99	0.63	74	0.83	0.65	70	0.07	0.57	39
Multifamily Loans	0.00	0.01	92	0.00	0.32	75	1.06	0.15	90	0.00	0.10	88
Non-Farm Non-Residential Mtg	0.00	0.20	60	0.67	0.47	71	0.07	0.42	47	0.00	0.34	48
Owner Occupied Nonfarm Nonresidential	0.00	0.13	73	0.00	0.36	40	0.10	0.32	62	0.00	0.19	65
Other Nonfarm Nonresidential	0.00	0.14	75	1.72	0.48	86	0.03	0.39	62	0.00	0.39	65
RE Loans in Foreign Offices	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A
Agricultural Loans	0.00	-0.04	95	N/A	0.02	N/A	N/A	0.04	N/A	N/A	0.12	N/A
Commercial and Industrial Loans	-0.02	0.38	28	0.27	0.59	61	0.01	1.45	4	1.37	1.62	59
Lease Financing	N/A	-0.06	N/A	N/A	0.00	N/A	N/A	1.02	N/A	N/A	0.64	N/A
Loans to Individuals	0.06	0.39	47	0.30	0.69	40	0.55	0.89	51	0.33	1.06	34
Credit Card Plans	0.47	1.48	53	2.27	2.00	65	4.40	2.11	82	2.15	2.76	51
All Other Loans & Leases	0.00	0.08	79	0.00	0.20	65	0.00	0.19	75	0.00	0.25	74
Loans to Foreign Governments	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A
Change: Credit Allowance (\$000)												
Beginning Balance		3,678		3,614		3,614			3,189			2,309
Gross Credit Losses		1		323		1,264			763			501
Memo: Loans HFS Write-down		0		0		0			0			0
Recoveries		2		33		53			188			90
Net Credit Losses		-1		290		1,211			575			711
Provision: Loan & Lease Losses		300		350		1,275			1,000			1,500
Other Adjustments		0		0		0			0			0
LN&LS Allowance		3,979		3,674		3,678			3,614			3,199
Average Total Loans & Leases		215,980		213,187		210,874			216,445			226,366

Handwritten notes: "Tried to credit this" and "Prohibit Nonaccrual Loans".

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	3/31/2012			3/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
Loan Mix, % Average Gross LN&LS												
Construction & Development	9.26	7.16	67	10.83	8.61	67	10.93	7.95	71	11.20	9.47	62
1-4 Family Construction	1.71	1.38	64	2.22	1.59	69	1.98	1.52	66	2.72	2.34	62
Other Const & Land Development	7.55	5.45	69	8.61	6.65	67	8.94	6.08	72	8.48	6.41	64
1-4 Family Residential	11.09	24.70	15	11.99	24.24	15	11.82	24.39	16	12.68	26.90	14
Home Equity Loans	1.17	3.36	29	1.88	3.56	37	1.73	3.43	36	1.90	3.28	38
Other Real Estate Loans	61.34	42.44	90	57.86	41.84	87	58.14	41.97	89	55.18	37.12	89
Farmland	0.39	3.44	34	0.33	3.13	34	0.36	3.39	33	0.50	2.79	36
Multifamily	7.95	3.06	90	5.78	2.90	84	6.31	2.94	86	6.39	2.26	89
Non-Farm Non-Residential	53.00	33.96	89	51.75	33.92	89	51.46	33.70	88	51.87	32.79	89
Owner Occupied Non-Farm Non-Residential	30.77	16.83	93	31.41	16.96	93	31.55	16.87	94	31.51	18.16	90
Other Non-Farm Non-Residential	22.23	16.44	73	20.34	16.25	68	19.91	16.16	66	20.36	14.02	77
Total Real Estate	81.69	76.92	59	80.68	77.57	54	80.88	77.02	57	82.62	78.58	60
Financial Institution Loans	0.00	0.00	93	0.00	0.00	94	0.00	0.00	92	0.00	0.00	94
Agricultural Loans	0.09	1.96	45	0.10	1.71	46	0.07	2.00	42	0.04	1.41	46
Commercial & Industrial Loans	10.74	13.63	41	10.34	13.25	39	10.07	13.38	37	11.61	13.01	47
Loans to Individuals	3.03	3.41	57	3.32	3.54	59	3.19	3.51	57	3.25	3.86	53
Credit Card Loans	0.54	0.07	92	0.47	0.07	91	0.49	0.07	92	0.49	0.04	95
Municipal Loans	4.17	0.57	95	5.25	0.56	97	5.52	0.59	97	2.77	0.32	92
Foreign Office Loans & Leases	0.00	0.07	99	0.00	0.06	99	0.00	0.06	99	0.00	0.01	99
All Other Loans	0.22	0.27	68	0.31	0.29	70	0.27	0.28	69	0.22	0.17	75
Lease Financing Receivables	0.00	0.05	79	0.00	0.04	80	0.00	0.05	77	0.00	0.04	83
Supplemental:												
Loans to Foreign Governments	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99
Loans to Finance Comm'l Real Est	0.00	0.12	72	0.00	0.12	71	0.00	0.12	71	0.02	0.08	78
Memorandum (% of Avg Tot Loans):												
Loans & Lease Commitments	20.11	16.25	69	19.45	14.93	73	18.07	15.33	66	21.10	11.42	91
Officer, Shareholder Loans	0.33	1.64	22	0.03	1.60	8	0.03	1.60	7	0.03	1.93	7
Officer, Shareholder Loans to Assets	0.22	1.01	24	0.02	1.03	8	0.02	1.00	8	0.02	1.27	7
Other Real Estate Owned % Assets												
Construction & Land Development	0.12	0.32	51	0.14	0.39	49	0.15	0.35	51	0.10	0.40	47
Farmland	0.00	0.00	87	0.00	0.00	86	0.00	0.00	81	0.00	0.00	91
1-4 Family	0.35	0.12	85	0.41	0.14	85	0.42	0.14	86	0.11	0.19	53
Multifamily	0.00	0.01	82	0.00	0.01	80	0.00	0.01	74	0.00	0.01	81
Non-Farm Non-Residential	0.47	0.23	79	0.10	0.23	47	0.10	0.23	42	0.07	0.24	43
Foreclosed GRNA	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99	0.00	0.00	99
Foreign Offices	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A
Subtotal	0.94	0.78	66	0.65	0.88	52	0.67	0.82	55	0.28	1.05	30
Direct and Indirect Inv	0.00	0.01	96	0.00	0.01	96	0.00	0.01	95	0.00	0.01	98
Total	0.94	0.79	65	0.65	0.89	52	0.67	0.88	54	0.28	1.05	30
Asset Servicing % Assets												
Mortgage Servicing w/ Recourse	0.00	0.05	88	0.00	0.05	89	0.00	0.05	88	0.00	0.01	93
Mortgage Servicing w/o Recourse	107.82	2.83	99	116.89	2.37	99	110.91	2.81	99	118.74	1.05	99
Other Financial Assets	98.39	0.28	99	105.47	0.24	99	98.98	0.28	99	109.56	0.05	99
Total	206.22	4.49	99	222.36	4.08	99	209.90	4.50	99	228.30	2.83	99

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	3/31/2012			3/31/2011			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
Loan & Leases as a % of Total Capital	41.96	44.18	53	51.81	57.37	52	48.22	47.23	57	54.24	59.32	52	61.82	75.69	47
Construction & Development	8.75	8.60	59	10.38	10.68	58	7.90	9.03	54	11.33	13.18	54	14.66	18.35	50
1-4 Family Construction	33.21	33.56	55	41.43	44.47	54	40.31	36.10	61	42.91	41.22	57	47.16	50.97	53
Other Const & Land Development	52.44	155.70	11	55.98	163.38	12	55.54	159.82	12	61.51	187.39	9	70.13	192.68	11
1-4 Family Residential	4.65	21.44	25	8.36	24.95	31	6.72	22.58	29	10.10	23.97	35	9.98	24.17	35
Home Equity Loans	306.78	264.39	66	282.02	280.91	53	290.35	270.68	60	284.72	278.22	56	322.46	277.93	57
Other Real Estate Loans	1.62	20.73	31	1.38	20.42	30	2.15	21.04	33	1.85	18.46	31	3.00	18.40	37
Farm/land	43.90	19.55	85	30.07	20.07	73	33.47	19.90	78	26.55	16.82	72	31.97	16.43	82
Multifamily	261.25	211.86	70	250.37	228.45	61	254.72	217.71	67	256.33	230.98	62	281.49	231.04	68
Non-Farm Non-Residential	148.46	105.25	77	152.96	114.30	74	151.15	108.53	77	154.66	129.31	66	165.55	129.21	71
Owner Occupied Non-Farm Non-Residential	112.79	103.44	58	97.61	110.60	49	103.58	105.70	52	101.67	100.08	56	111.93	98.54	51
Other Non-Farm Non-Residential	401.18	473.29	33	389.81	512.77	24	394.10	486.53	30	400.47	530.34	24	454.41	554.83	30
Total Real Estate	0.00	0.00	94	0.00	0.00	94	0.00	0.00	94	0.00	0.27	95	0.00	0.28	97
Financial Institution Loans	0.51	10.83	45	0.52	10.15	45	0.41	11.87	43	0.46	8.94	50	0.01	9.39	42
Agricultural Loans	57.45	84.81	35	49.78	89.09	25	47.63	86.09	26	51.54	90.80	28	75.57	97.39	43
Commercial & Industrial Loans	14.58	19.76	49	15.51	22.05	46	14.95	20.55	48	16.98	24.46	47	19.10	27.30	45
Loans to Individuals	2.67	0.39	91	2.30	0.43	88	2.55	0.41	89	2.31	0.23	92	3.41	0.25	94
Credit Card Loans	12.65	3.35	87	26.70	3.54	94	27.94	3.47	96	25.21	1.99	96	6.77	1.92	87
Municipal Loans	0.00	0.24	99	0.00	0.29	99	0.00	0.32	99	0.00	0.04	99	0.00	0.03	99
Foreign Office Loans & Leases	0.93	1.61	65	1.39	1.89	66	1.21	1.71	66	1.64	1.20	76	0.96	1.13	29
All Other Loans	0.00	0.27	79	0.00	0.26	80	0.00	0.27	79	0.00	0.26	84	0.00	0.29	83
Lease Financing Receivables	0.00	0.00	89	0.00	0.00	89	0.00	0.00	89	0.00	0.02	89	0.00	0.02	89
Supplemental:	0.01	0.72	73	0.02	0.79	72	0.01	0.73	73	0.02	0.49	79	0.13	0.48	81
Loans to Foreign Governments	198.66	175.91	61	179.51	198.02	48	185.27	181.60	55	182.48	185.26	53	211.86	201.09	56
Loans to Finance Commercial Real Estate	347.12	284.39	69	322.47	316.29	56	336.42	293.32	64	337.13	317.13	59	381.42	334.32	62
Commercial Real Estate Loans as a % of Total Capital:	8.65	7.10	64	10.77	8.50	67	9.96	7.33	70	10.97	8.63	66	13.12	10.44	57
Non-owner OCC Commercial Real Estate	40.95	28.28	79	37.30	29.50	71	38.27	28.35	75	36.91	27.02	76	38.12	27.80	77
Total Commercial Real Estate	71.55	46.12	92	69.09	47.75	88	69.49	46.32	89	68.20	46.57	87	68.62	46.54	87

See problem with one account  
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PD, Nonacc & Rest Loans-a  
6/29/2012 10:00:20 AM

Analysis of Past Due, Nonaccrual & Restructured--Page 8

FDIC Certificate +  
OCC Charter # 0  
Public Report

	3/31/2011				12/31/2010				12/31/2009			
	BANK	PG 3	PCT	PCT	BANK	PG 4	PCT	PCT	BANK	PG 4	PCT	PCT
FRB District/ID_RSL Count												
% of Non-Current LN&LS by Loan Type												
Real-Estate LNS-90+ Days P/D	0.00	0.07	55	50	0.00	0.12	60	54	0.31	0.17	75	75
-Nonaccrual	16.60	2.80	86	86	5.30	3.23	74	83	5.62	2.81	80	80
-Total	6.60	2.95	85	85	5.30	3.53	73	83	5.93	3.26	80	80
-30-89 DAYS P/D	0.37	1.37	58	58	0.71	1.31	37	70	2.38	1.48	73	73
LNS Fin Comt RE-90+ Days P/D	0.00	0.03	98	99	0.00	0.49	96	99	0.00	0.02	98	98
-Nonaccrual	0.00	0.00	94	94	0.00	1.01	95	95	0.00	0.00	94	94
-Total	0.00	0.00	95	95	0.00	0.00	94	95	0.00	0.01	94	94
-30-89 DAYS P/D	0.00	0.37	96	96	0.00	0.60	95	96	0.00	0.00	94	94
Const & Land Dev-90+ Days P/D	0.00	0.01	90	85	0.00	0.01	90	87	0.00	0.07	91	91
-Nonaccrual	39.14	7.24	95	81	23.04	8.38	88	84	6.79	7.19	60	60
-Total	39.14	7.48	95	80	23.04	8.59	88	84	7.76	7.55	61	61
-30-89 DAYS P/D	0.00	0.53	52	56	10.99	0.67	97	97	12.98	1.34	97	97
1-4 Fam Cons & L Dev-90+ Days P/D	0.00	0.30	97	94	0.00	0.19	95	96	4.08	0.01	97	97
-Nonaccrual	72.98	3.62	97	82	22.78	4.23	88	88	4.83	5.84	68	68
-Total	72.98	3.86	97	81	22.78	4.46	88	88	17.17	6.22	74	74
-30-89 DAYS P/D	0.00	0.26	81	86	67.03	0.25	99	99	41.62	0.97	98	98
Other Const & Land Dev-90+ Days P/D	0.00	0.01	91	88	0.00	0.01	90	90	0.00	0.03	90	90
-Nonaccrual	30.23	7.46	90	82	23.09	9.21	87	83	7.40	6.75	65	65
-Total	30.23	7.68	89	81	23.09	9.42	87	82	7.40	7.15	64	64
-30-89 DAYS P/D	0.00	0.57	58	49	0.00	0.66	56	56	4.08	1.13	85	85
Single & Multi Mtg-90+ Days P/D	0.00	0.08	63	60	0.00	0.09	61	61	0.00	0.14	82	82
-Nonaccrual	4.08	1.86	82	84	4.48	1.93	83	83	2.30	2.18	65	65
-Total	4.08	2.01	81	83	4.48	2.09	83	83	2.30	2.39	61	61
-30-89 DAYS P/D	0.12	1.03	15	15	0.00	1.12	9	9	0.37	1.38	28	28
Non-Farm Res Mtg-90+ Days P/D	0.00	0.04	80	80	0.00	0.04	80	80	0.00	0.05	85	85
-Nonaccrual	2.35	2.24	59	59	3.65	2.23	72	72	0.92	2.42	42	42
-Total	2.35	2.38	58	58	3.65	2.44	71	71	0.92	2.62	39	39
-30-89 DAYS P/D	0.52	0.70	55	55	0.00	0.69	26	26	0.79	0.99	57	57
Own Occ Non-Farm Non-Res-90+ Days P/D	0.00	0.02	86	84	0.00	0.03	85	85	0.00	0.03	89	89
-Nonaccrual	1.26	2.01	50	23	1.35	2.00	50	50	0.00	2.20	40	40
-Total	1.26	2.13	48	21	1.25	2.10	47	47	0.00	2.36	38	38
-30-89 DAYS P/D	0.92	0.65	68	57	0.00	0.71	36	36	0.45	0.95	57	57
Other Non-Farm Non-Res-90+ Days P/D	0.00	0.02	89	89	0.00	0.01	90	90	0.00	0.01	92	92
-Nonaccrual	3.77	2.19	73	53	7.16	2.34	85	85	2.33	2.20	67	67
-Total	3.77	2.33	72	52	7.16	2.46	84	84	2.33	2.40	65	65
-30-89 DAYS P/D	0.00	0.53	50	50	0.00	0.48	54	54	1.31	0.72	76	76
Non-Current LN&LS (5,000)												
90 Days and Over Past Due	13	26	13	13	0.00	0.00	0	0	0.00	0.00	0	0
Total Nonaccrual LN&LS	12,040	7,594	11,097	11,097	11,097	9,222	10,248	10,248	10,248	10,248	10,248	10,248
Total Non-Current LN&LS	12,053	7,620	11,110	11,110	11,110	9,232	10,247	10,247	10,247	10,247	10,247	10,247
LN&LS 30-89 Days Past Due	746	2,310	2,408	2,408	2,408	1,786	4,639	4,639	4,639	4,639	4,639	4,639
Good LN&LS 90+ Days P/D	0	0	0	0	0	0	0	0	0	0	0	0
Good LN&LS on Nonaccrual	0	0	0	0	0	0	0	0	0	0	0	0
Good LN&LS 30-89 Days P/D	0	0	0	0	0	0	0	0	0	0	0	0
Restructured LN&LS 90+ Days P/D	0	0	0	0	0	0	0	0	0	0	0	0
Restructured LN&LS Nonaccrual	9,670	926	7,333	7,333	7,333	0	0	0	0	0	0	0
Restructured LN&LS 30-89 Days P/D	292	0	2,336	2,336	2,336	0	0	0	0	0	0	0
Current 1-4 Family Restruct LN&LS	576	0	456	456	456	2,232	204	204	204	204	204	204
Current Other Restructured LN&LS	3,721	10,172	3,774	3,774	3,774	7,764	2,595	2,595	2,595	2,595	2,595	2,595
Loans Secured 1-4 RF in Foreclosure	0	0	0	0	0	0	0	0	0	0	0	0
Other Real Estate Owned	4,163	2,545	1,877	1,877	1,877	1,424	556	556	556	556	556	556

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	3/31/2012			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
% of Non-Current LN&S by Loan Type												
Com'l & Indust LNS-90+ Days P/D	0.00	0.04	75	0.00	0.03	74	0.00	0.06	79	0.03	0.08	76
-Nonaccrual	1.31	1.49	61	1.78	1.58	64	0.67	1.77	50	0.00	1.46	32
-Total	1.31	1.61	58	1.68	1.63	63	0.67	1.97	46	0.03	1.71	26
-30-89 DAYS P/D	0.26	0.70	43	0.19	0.63	38	0.00	0.93	28	0.85	1.09	56
Loans to Individuals-90+ Days P/D												
-Nonaccrual	0.00	0.03	71	0.00	0.05	67	0.00	0.06	71	0.00	0.09	67
-Total	0.00	0.30	47	0.00	0.36	41	0.00	0.33	51	0.00	0.31	49
-30-89 DAYS P/D	0.00	0.32	33	0.00	0.44	31	0.00	0.50	42	0.00	0.48	38
Credit Card Plans-90+ Days P/D												
-Nonaccrual	1.10	0.27	97	1.16	0.37	82	1.01	0.24	86	2.27	0.21	94
-Total	0.08	0.00	93	0.00	0.00	94	0.00	0.06	96	0.00	0.39	96
-30-89 DAYS P/D	1.18	0.38	85	1.25	0.49	80	1.01	0.28	84	2.27	0.25	93
Lease Financing-90+ Days P/D												
-Nonaccrual	N/A	0.06	N/A	N/A	0.11	N/A	N/A	0.00	N/A	N/A	0.20	N/A
-Total	N/A	0.03	N/A	N/A	0.04	N/A	N/A	0.06	N/A	N/A	0.01	N/A
-30-89 DAYS P/D	N/A	0.02	N/A	N/A	0.04	N/A	N/A	0.11	N/A	N/A	0.05	N/A
Agricultural LNS-90+ Days P/D												
-Nonaccrual	0.00	0.00	94	N/A	0.02	N/A	N/A	0.02	N/A	N/A	0.00	N/A
-Total	0.00	0.07	97	N/A	0.06	N/A	N/A	0.15	N/A	N/A	0.13	N/A
-30-89 DAYS P/D	0.00	0.09	80	N/A	0.08	N/A	N/A	0.25	N/A	N/A	0.15	N/A
Other LN&S-90+ Days P/D												
-Nonaccrual	0.00	0.00	90	0.00	0.00	91	0.00	0.00	94	0.00	0.00	93
-Total	0.00	0.12	78	0.00	0.10	78	0.00	0.07	87	0.00	0.05	87
-30-89 DAYS P/D	0.00	0.15	73	0.00	0.14	73	0.00	0.10	83	0.00	0.09	82
Total LN&S-90+ Days Past Due	0.01	0.08	47	0.01	0.08	46	0.00	0.13	50	0.27	0.17	73
-Nonaccrual	5.59	2.50	85	5.17	2.64	82	4.35	3.09	71	4.58	2.68	78
-Total	5.59	2.67	84	5.18	2.78	82	4.35	3.30	70	4.85	2.97	77
-30-89 DAYS P/D	0.35	0.93	26	1.12	0.97	66	0.61	1.36	31	2.07	1.53	59
Other Pertinent Ratios:												
Non-Cur LN&S to LN&S Allowance	302.92	134.08	90	207.40	151.38	71	302.07	139.39	88	255.45	156.43	79
-Equity Capital	28.62	16.87	79	18.77	23.16	57	16.73	18.43	76	22.95	25.81	61
% Total P/D LN&S-Incl Nonaccrual	5.94	3.68	79	4.75	4.66	61	6.30	3.84	79	4.96	4.80	60
Non-Cur LNS+OREO to LNS+OREO	7.42	4.04	81	4.83	4.69	74	6.03	4.21	74	5.01	5.16	59
Non-Cur Restruct Debt/Gr LN&S	4.49	0.59	95	0.44	0.52	65	3.42	0.57	94	0.00	0.42	61
Current Non-Cur Restruct/GR LN&S	6.22	1.43	93	5.31	1.26	91	5.18	1.52	90	3.66	1.31	83
Current Restruct LN&S	2.00	0.93	79	4.89	0.81	94	1.98	1.04	75	4.73	0.97	92
Loans Sec 1-4 Fam RE in Forclosure as %	0.00	0.40	46	0.00	0.47	44	0.00	0.40	44	0.00	0.41	58
Total Loans Sec 1-4 Fam RE	0.00	0.24	90	0.00	0.09	92	0.00	0.31	90	0.00	2.92	95
Glyd LN&S 90+ P/D / LN&S 90+ P/D	0.00	0.99	76	0.00	0.72	76	0.00	0.90	76	0.00	0.56	82
Glyd Nonaccrual LN&S / Nonaccrual LN&S	0.00	0.46	84	0.00	0.38	83	0.00	0.33	85	0.00	0.06	92
Glyd LN&S 30-89 P/D / LN&S 30-89 P/D	0.00	0.46	84	0.00	0.38	83	0.00	0.33	85	0.00	0.06	92

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	3/31/2012			12/31/2011			12/31/2010			12/31/2009		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 4	PCT	BANK	PG 4	PCT
Long Assets Insts w/Options	5.54	17.89	9	5.91	17.45	11	6.26	17.75	9	6.78	17.93	11
Mortgage Loans & Pass Thrus	1.36	3.35	40	1.51	3.00	44	1.65	2.58	53	1.51	2.72	50
Loans & Securities Over 15 Years	1.58	4.97	27	1.61	4.81	28	1.50	3.68	36	1.44	3.34	38
Loans & Securities 5-15 Years												
Other Loans and Securities	60.80	61.15	48	62.24	62.02	49	64.93	61.58	61	71.75	63.25	78
Loans & Securities Over 15 Years	19.41	2.63	98	21.32	2.55	98	20.70	2.08	98	17.04	1.82	98
Loans & Securities 5-15 Years	18.13	11.16	82	15.24	10.80	74	12.37	9.63	68	14.49	9.21	79
Total Loans & Securities Over 15 Years	20.77	6.76	92	22.82	6.29	94	22.35	5.34	95	18.55	5.14	93
CMO'S Total	1.67	2.75	55	1.89	2.61	58	1.80	1.67	68	2.98	1.25	79
Avg Life Over 3 Years	0.00	1.15	42	0.00	0.91	44	0.00	0.71	57	0.00	0.38	65
Structured Notes	0.00	0.59	51	0.00	0.66	52	0.33	0.85	59	0.00	0.57	59
Mortgage Servicing (FV)	0.62	0.02	98	0.63	0.02	98	0.68	0.00	99	0.69	0.00	98
Total	0.62	0.65	67	0.63	0.71	66	1.02	0.88	69	0.69	0.60	70
Overall Risk Indicators												
Available for Sale	5.68	20.36	12	6.12	19.57	14	5.23	14.93	17	6.40	13.52	26
Held to Maturity	0.00	0.64	63	0.00	0.68	63	0.00	0.77	66	0.00	0.91	64
Off Balance Sheet	13.50	11.49	64	12.23	11.09	61	15.00	8.87	84	11.36	9.51	66
Unrealized Appreciation/Depreciation	0.00	0.02	72	0.00	0.02	72	0.00	0.00	80	0.00	0.01	76
Unrealized App/Dep % Tier One Cap	0.00	0.18	72	0.00	0.19	72	0.00	0.04	80	0.00	0.09	76
Contractual Mat/Reprice Data												
Loans/Securities Over 3 Year	46.03	39.51	65	44.72	37.91	66	42.50	34.39	70	45.78	35.74	75
Liabilities Over 3 Year	0.69	3.70	18	0.73	3.70	19	0.85	2.86	29	0.67	2.53	29
Net Over 3 Year Position	45.34	35.81	74	43.99	33.74	74	41.65	30.93	76	45.11	32.61	80
Loans/Securities Over 1 Year	55.44	59.13	36	56.96	58.43	43	58.45	55.81	58	60.52	55.81	63
Liabilities Over 1 Year	3.13	12.12	9	2.82	12.31	8	3.08	12.35	12	2.12	11.35	6
Net Over 1 Year Position	52.31	46.31	63	54.14	45.49	70	54.57	42.93	78	58.39	44.00	84
Non-Maturity Deposits	74.80	52.05	96	74.27	50.54	97	68.98	47.63	95	67.26	44.17	95
Non-Maturity Deps % Long Assets	162.51	146.17	67	166.06	148.54	67	162.29	157.04	61	146.91	139.16	63
Net Over 3 Year Position	-28.77	-12.21	18	-29.55	-12.28	17	-26.48	-13.05	24	-21.48	-8.35	23
As % Tier 1 Capital												
Structured Notes	6.00	6.39	51	6.61	7.44	52	7.52	9.35	58	8.00	6.41	59
Mortgage Servicing (FV)	4.90	0.21	96	5.37	4.89	97	5.13	0.05	98	5.29	0.04	98
Total	4.90	7.08	63	7.86	8.12	62	7.65	9.67	65	5.29	6.79	66

Non-Maturity Deposits

Long Assets (Long Term)





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	3/31/2012			3/31/2011			12/31/2011			12/31/2010			12/31/2009		
	BANK	PCT	PG 3	BANK	PCT	PG 3	BANK	PCT	PG 3	BANK	PCT	PG 4	BANK	PCT	PG 4
Capital Ratios															
Percent of Bank Equity:															
Net Loans & Leases (x) <i>5.1%</i>	5.00	27	6.20	5.04	19	6.80	5.05	26	6.36	5.17	19	7.07	5.84	19	7.37
Subord Notes & Debentures	0.00	95	0.54	0.00	95	0.59	0.00	95	0.68	0.00	98	0.22	0.00	98	0.10
Long Term Debt	0.00	95	0.54	0.00	95	0.59	0.00	95	0.68	0.00	98	0.22	0.00	98	0.10
Com RE & Related Ventures	328.17	66	275.46	328.36	57	317.51	325.94	64	285.07	333.01	55	330.20	367.82	55	340.83
Percent of Average Bank Equity:															
Net Income	7.59	42	8.93	6.59	60	6.54	6.25	40	6.41	10.65	81	0.25	9.58	81	-0.66
Dividends	2.87	67	2.18	3.96	75	2.00	3.21	58	2.88	3.97	77	1.77	3.67	77	2.13
Retained Earnings	4.72	40	5.79	4.63	51	3.50	3.03	39	2.87	6.68	82	-2.07	5.91	82	-3.32
Other Capital Ratios:															
Dividends to Net Operating Income	37.78	69	21.62	46.08	72	23.54	51.47	67	33.83	37.28	57	31.13	38.34	57	41.71
Bank Eq Cap + Min Int to Assets	12.91	88	10.19	13.22	91	9.68	13.06	89	10.15	13.42	91	9.63	13.23	91	9.56
Growth Rates:															
Total Equity Capital	3.75	25	9.04	6.49	68	7.61	3.36	24	8.75	6.92	24	1.04	6.31	24	2.93
Equity Growth Less Asst Growth	-2.55	23	3.47	-1.85	39	-0.37	-2.83	21	3.96	1.57	57	-0.90	1.94	57	-2.90
Intang Assets % Bank Equity	2.46	94	0.17	2.46	94	0.16	2.45	94	0.17	2.45	94	0.04	2.63	94	0.03
Mortgage Servicing Rights	0.00	61	2.14	0.00	63	2.12	0.00	61	2.18	0.00	79	0.80	0.00	79	0.93
Goodwill	0.00	96	0.04	0.00	97	0.03	0.00	96	0.04	0.00	96	0.03	0.00	96	0.05
Purch Credit Card Relations	0.00	64	0.30	0.00	64	0.36	0.00	64	0.32	0.00	82	0.10	0.00	82	0.13
All Other Intangibles	2.46	64	3.19	2.46	64	3.34	2.45	63	3.24	2.45	79	1.35	2.62	79	1.47
Total Intangibles															
✓Risk-Based Capital															
Tier One RBC to Risk-Wgt Assets	16.57	76	14.26	16.64	82	13.36	16.47	78	13.93	16.47	82	13.40	15.08	82	12.67
Total RBC to Risk-Weight Assets	17.56	92	15.52	17.89	82	14.63	17.72	78	15.18	17.72	82	14.60	16.32	82	13.83
Tier One Leverage Capital	12.67	92	9.54	12.98	94	9.17	12.35	91	9.41	12.35	94	9.16	12.78	94	9.09
Other Capital Ratios:															
Def Tax Asset to T1 Cap	7.08	92	1.62	6.87	88	2.18	7.17	92	1.62	6.95	92	1.51	4.24	92	1.54
End of Period Capital (\$000)															
Perpetual Preferred	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Common Stock	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322	4,322
+ Surplus	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144	16,144
+ Undivided Profits	21,117	19,850	21,117	19,850	20,622	19,850	20,622	19,850	20,622	19,850	19,850	19,850	19,850	19,850	19,850
+ Accum Other Comp Income	538	284	538	284	479	284	479	284	479	284	479	284	479	284	479
+ Other Equity Capital Comp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Bank Equity Capital	42,121	40,600	42,121	40,600	41,567	40,600	41,567	40,600	41,567	40,600	40,215	40,215	37,611	40,215	37,611
Minority Interest Cons Subs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Bank Capital & Min Int	42,121	40,600	42,121	40,600	41,567	40,600	41,567	40,600	41,567	40,600	40,215	40,215	37,611	40,215	37,611
Subordinated Notes & Debentures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Changes in Bank Equity (\$000)															
Balance at Beginning of Period	41,567	41,567	41,567	41,567	40,214	40,214	40,214	40,214	40,214	40,214	37,610	37,610	35,378	35,378	35,378
+ Net Income	794	868	794	868	0	0	0	0	0	0	4,131	4,131	2,521	2,521	2,521
+ Sales or Purchase of Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Merger & Absorptions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Restate due to Acctg Error&Chg	0	0	0	0	0	0	0	0	0	0	87	87	0	0	0
+ Trans with Parent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- Dividends	300	400	300	400	0	0	0	0	0	0	0	0	0	0	0
+ Other Comprehensive Income	59	-82	59	-82	1,315	1,315	1,315	1,315	1,315	1,315	1,540	1,540	1,350	1,350	1,350
Balance at End of Period	42,121	40,600	42,121	40,600	41,567	40,600	41,567	40,600	41,567	40,600	40,214	40,214	37,610	37,610	37,610
Intangible Assets															
Mortgage Servicing Rights	1,038	1,038	1,038	1,038	999	999	1,038	987	987	1,018	987	987	986	986	986
+ Purch Credit Card Relations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Other Intangibles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Intangibles	1,038	1,038	1,038	1,038	999	999	1,018	987	987	1,018	987	987	986	986	986

1-11A

	3/31/2012	3/31/2011	12/31/2011	12/31/2010	12/31/2009
<b>Risk Based Capital (\$000)</b>					
Tier One Capital					
Total Equity Capital Adjusted	41,583	40,316	41,088	39,848	37,170
- Ineligible Def Tax Assets	0	0	0	0	0
- Ineligible Intangibles	104	100	102	99	99
- Cumul Change F.V. Financial Liab	0	0	0	0	0
Net Tier One	41,479	40,216	40,986	39,749	37,071
Tier Two Capital					
+ Qualif Debt and Redeem Pfd	0	0	0	0	0
+ Cumulative Preferred Stock	0	0	0	0	0
+ Allowable LN&LS Loss Allow	2,735	3,028	3,116	3,015	3,048
+ Undr Gain Mktbl Eqy Sec (45%)	0	0	0	0	0
+ Other Tier 2 Capital Comp	0	0	0	0	0
Net Eligible Tier Two	2,735	3,028	3,116	3,015	3,048
Total RBC Before Deductions	44,214	43,244	44,102	42,764	40,119
Tier One & Tier Two	0	0	0	0	0
Tier Three & Fin Sub Adj	0	0	0	0	0
- Deductions for Total RBC	0	0	0	0	0
Total Risk-Based-Capital	44,214	43,244	44,102	42,764	40,119
Risk-Weighted Assets					
Off-Balance Sheet					
Category Two - 20%	13,379	12,374	12,407	10,480	7,263
Category Three - 50%	23,083	17,400	21,100	17,465	18,248
Category Four - 100%	203,769	202,179	204,431	204,072	212,991
Total Off-Balance Sheet	240,231	231,953	237,938	232,017	238,502
Memor. Category One - 0%	32,536	11,309	12,294	11,119	951
Off-Balance Sheet					
Category Two - 20%	0	0	0	0	0
Category Three - 50%	0	0	0	0	0
Category Four - 100%	11,444	10,472	11,550	9,147	7,472
Total Off-Balance Sheet	11,444	10,472	11,550	9,147	7,472
Memor. Category One - 0%	0	0	0	0	0
Adjustments to Risk-Wgt Assets					
Risk-Weighted Asset Before Ded	251,675	242,425	249,488	241,164	245,974
- Excess Allowable LN&LS Loss Al	1,288	689	606	643	185
- Allocated Transfer Risk Reserve	0	0	0	0	0
+ Mkt Risk Asset & Fin Sub Adj	0	0	0	0	0
Total Risk-Weighted Assets	250,388	241,737	248,882	240,521	245,789

→

expect risk in the future.

1-12

	3/31/2012			12/31/2011			9/30/2011			6/30/2011			3/31/2011		
	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 3	PCT	BANK	PG 3	PCT
<b>Earnings and Profitability</b>															
Percent of Average Assets:															
Interest Income (TE)	4.10	4.30	34	4.12	4.41	29	4.04	4.52	20	4.21	4.54	26	4.71	4.53	62
- Interest Expense	0.24	0.74	4	0.22	0.80	4	0.34	0.88	5	0.40	0.94	6	0.42	0.99	6
Net Interest Income (TE)	3.86	3.56	71	3.85	3.61	67	3.70	3.64	52	3.81	3.60	64	4.29	3.53	90
+ Noninterest Income	1.71	1.75	91	1.47	1.52	88	1.52	1.72	90	1.28	1.68	87	1.67	2.63	90
- Noninterest Expense	3.90	2.89	89	4.82	2.99	84	3.82	2.93	87	3.64	2.94	82	3.96	2.93	90
- Provision: Loan & Lease Losses	0.37	0.28	68	0.12	0.50	24	0.45	0.48	60	0.55	0.47	66	0.45	0.42	62
Pretax Operating Income (TE)	1.31	1.18	54	0.37	0.85	41	0.95	0.99	41	0.90	0.91	43	1.55	0.91	75
+ Realized Gains/Losses Sec	0.00	0.05	61	0.00	0.03	58	0.00	0.06	52	0.00	0.04	56	0.00	0.00	58
Pretax Net Operating Income (TE)	1.31	1.26	50	0.37	0.89	35	0.95	1.08	37	0.90	0.97	40	1.55	0.93	75
Net Operating Income	0.97	0.92	55	0.54	0.63	36	0.77	0.78	44	0.72	0.69	47	1.12	0.70	74
Adjusted Net Operating Income	1.34	1.26	71	0.64	0.58	42	0.88	0.76	48	0.51	0.68	34	1.20	0.70	72
Net Inc Attrib Min Ints	0.00	0.00	98	0.00	0.00	98	0.00	0.00	98	0.00	0.00	98	0.00	0.00	98
Net Income Adjusted Sub S	0.97	0.83	60	0.54	0.57	36	0.77	0.70	47	0.72	0.62	49	1.12	0.60	80
Net Income	0.97	0.92	55	0.54	0.63	36	0.77	0.78	44	0.72	0.69	47	1.12	0.67	74
<b>Margin Analysis:</b>															
Int Inc (TE) to Avg Earn Assets	4.80	4.64	60	4.82	4.76	54	4.70	4.87	38	4.90	4.89	50	5.51	4.87	86
Int Expense to Avg Earn Assets	0.28	0.79	4	0.32	0.86	5	0.39	0.95	6	0.46	1.01	8	0.50	1.06	7
Net Int Inc-TE to Avg Earn Assets	4.52	3.83	88	4.50	3.89	83	4.31	3.92	73	4.44	3.88	81	5.01	3.80	95
<b>Loan &amp; Lease Analysis:</b>															
Net Loss to Average Total LN&LS	0.00	0.40	16	0.02	0.90	13	0.53	0.77	55	1.20	0.76	74	0.54	0.62	61
Earnings Coverage of Net Loss (X)	-1302.00	4.38	0	23.69	6.75	87	3.86	9.51	52	1.76	8.11	40	5.04	5.08	60
LN&LS Allowance to Net Losses (X)	-984.75	4.03	0	70.73	4.38	96	3.19	5.84	54	1.39	5.58	31	3.17	3.86	51
<b>Capitalization</b>															
Cash Dividends to Net Income	37.78	19.71	71	68.23	30.70	77	30.82	18.14	66	69.37	22.65	84	46.08	19.48	76
Retain Earnings to Avg Total Equity	4.69	5.71	40	1.37	1.27	37	4.37	4.29	41	1.78	3.09	31	4.61	3.48	51
<b>Yield on or Cost of:</b>															
Total Loan & Leases (TE)	5.83	5.71	61	6.09	5.82	69	6.12	5.87	69	6.20	5.84	75	6.44	5.80	87
Loans in Domestic Offices	5.77	5.69	59	5.97	5.80	63	5.99	5.85	61	6.08	5.82	68	6.32	5.78	85
Real Estate	5.82	5.64	66	6.22	5.75	79	6.21	5.79	75	6.27	5.75	83	6.62	5.71	93
Secured by 1-4 Fam Resl Prop	7.09	5.62	91	7.80	5.73	93	7.21	5.77	90	10.82	5.76	99	6.77	5.71	88
All Other Loans Sec Real Estate	5.64	5.66	50	5.97	5.82	64	6.77	5.82	89	5.57	5.77	36	6.60	5.72	91
Commercial & Industrial	5.63	5.79	47	5.83	5.92	53	6.33	5.99	68	6.68	5.94	78	5.89	5.88	63
Individual	5.22	7.33	13	5.18	7.58	12	5.76	7.58	18	5.49	7.51	16	5.89	7.37	20
Credit Card	7.51	9.88	33	7.50	9.39	34	6.76	9.08	29	6.84	9.07	27	8.02	9.30	39
Agricultural	1.92	5.17	10	N/A	5.22	N/A	N/A	5.22	N/A	N/A	5.39	N/A	N/A	5.23	N/A
Loans in Foreign Offices	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A
Total Investment Securities (TE)	3.43	2.93	71	3.63	3.01	73	4.37	3.23	87	4.55	3.33	89	4.50	3.31	88
Total Investment Securities (Book)	2.68	2.59	57	2.87	2.69	60	3.69	2.91	85	3.93	3.01	86	3.83	2.97	85
US Treas & Agency (Excl MBS)	2.96	1.90	85	2.96	2.00	82	3.18	2.13	84	3.50	2.19	87	3.67	2.15	90
Mortgage Backed Securities	1.42	2.62	6	1.78	2.77	13	3.68	3.15	73	4.11	3.37	79	3.73	3.31	66
All Other Securities	3.60	3.46	55	3.70	3.61	52	3.87	3.68	58	4.05	3.73	64	4.00	3.76	61
Interest-Bearing Bank Balances	0.42	0.29	79	0.34	0.32	68	0.30	0.32	65	0.32	0.34	64	0.49	0.33	77
Federal Funds Sold & Resales	N/A	0.15	N/A	N/A	0.18	N/A	N/A	0.17	N/A	N/A	0.19	N/A	N/A	0.18	N/A
Total Interest-Bearing Deposits	0.30	0.84	4	0.35	0.92	4	0.43	1.01	5	0.50	1.08	6	0.54	1.14	6
Transaction accounts	0.20	0.33	38	0.20	0.30	34	0.30	0.49	48	0.27	0.42	42	0.32	0.44	47
Other Savings Deposits	0.23	0.39	28	0.26	0.43	29	0.33	0.49	33	0.40	0.53	36	0.40	0.56	33
Time Deps Over \$100M	1.16	1.26	22	1.16	1.16	22	1.16	1.55	29	1.33	1.62	30	1.37	1.68	27
All Other Time Deposits	0.69	1.39	6	0.79	1.51	7	0.88	1.60	7	1.01	1.68	8	1.16	1.74	11
Foreign Office Deposits	N/A	0.28	N/A	N/A	0.19	N/A	N/A	0.23	N/A	N/A	0.22	N/A	N/A	0.24	N/A
Federal Funds Purchased & Repos	N/A	0.55	N/A	N/A	0.60	N/A	N/A	0.65	N/A	N/A	0.65	N/A	N/A	0.64	N/A
Other Borrowed Money	N/A	2.92	N/A	N/A	2.72	N/A	N/A	2.75	N/A	N/A	2.82	N/A	N/A	2.83	N/A
Subord Notes & Debentures	N/A	4.81	N/A	N/A	5.08	N/A	N/A	4.72	N/A	N/A	4.66	N/A	N/A	5.17	N/A
All Interest-Bearing Funds	0.30	0.94	3	0.35	1.02	3	0.43	1.11	4	0.50	1.17	6	0.54	1.23	5

# Asset Quality and Credit Risk Management

July 2012

Asia Pacific Economic Cooperation Forum  
– Financial Regulators Training Initiative

## Credit Risk in Banks

Credit Risk is the inherent risk to earnings or capital arising when a borrower or counterparty fail to meet the terms of a contract or do not fully perform as agreed by provision of contracts.



Credit risk is the greatest risk factor for most banks!

*Decision*

*B/S → Loans*

## Asset Quality

- Reflects level of risk in bank's assets
- Considers risk management of assets and off-balance sheet items
- Strongly influenced by level, distribution, severity, and trend of classifications and the adequacy of reserves
- Other factors: concentrations, administrative processes, violations of laws and regulations

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## Objectives

- Assess credit risk (existing and potential)
  - Loans
  - Investments and other assets
  - Contingent liabilities
- Evaluate the allowance for loan losses
- Assess credit risk management issues
- Prepare a short asset quality summary

[new BCP 18][new BCP 17]

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commitment of a loan

## Credit Risk in Banks

### • What are common kinds of credit risk?

- Default risk
- Counterparty risk
- Country risk

- Transfer risk

- Sovereign risk

投資  
CD, 利率  
but not a country risk!

Lehman  
Brother



→ esp. Greece, Spain, Italy, Iran, 菲律賓

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## Credit Risk in Banks

### • Where does credit risk arise?

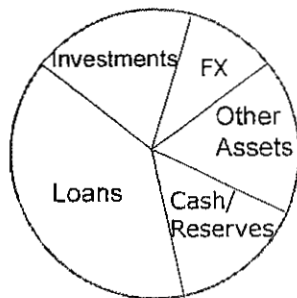
- Wholesale or commercial loans and advances
- Retail credit (e.g., credit cards, installment loans)
- Commitments and guarantees
- Due from correspondent bank balances
- Investments (bond or equity)
- Settlement of a transaction
- Trading products (e.g., FX and derivatives)

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## Credit Risk: Where? Asset Mix



- Common-sized balance sheet (% of total assets)
- Consider risks in each broad category
- Consider risks in each specific group: loans and investments by type

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## Which is more risky? Why?

### • Loan Portfolio 1

- ✓ - Commercial 20%
- Government 15%
- ✓ - Agriculture 15%
- Home loans 20%
- Individuals 30%
  - Credit cards 15%
  - Installment 15%

*diversified  
guaranteed*

### • Loan Portfolio 2

- ✓ - Commercial 15%
- Government 10%
- Agriculture 10%
- Home loans 20%
- ✓ - Individuals 45%
  - Credit cards 25%
  - Installment 20%

*unsucessed loans.  
→ default possibility is more*

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## Additional credit risk

- Off-balance sheet items
  - Commitments
  - Contingencies
  - Guarantees



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## Managing Credit Risk

- **How do banks manage their credit risk?**
  - Strategy and goals for credit risk
  - Setting exposure limits
  - Internal rating systems (ICRRS) *Not every bank has its own ICRRS.*
  - Terms and pricing
  - Regular monitoring of obligors and exposures
  - Collateralization and guarantees
  - Risk transfer (e.g., participation, securitization)
  - Sound internal controls for whole process

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## Managing Credit Risk

- **What is an Internal Credit Risk Rating System (ICRRS)?**
  - An assessment of a borrower's creditworthiness
  - A number or letter assigned to represent ability and willingness of borrower to meet its financial obligations
  - An indicator of borrower's default risk
  - Ratings are a type of relative ranking of risk
- **Does every bank need an ICRRS?**

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## Managing Credit Risk

- **How internal ratings used? (1/2)**
  - Approval authorities and limits:
    - Who can approve a loan to a borrower rated 'X'?
  - Setting facility pricing and terms
    - What return do we expect for assuming exposure to a borrower rated 'X'?
  - Portfolio management and reporting
    - What is our overall exposure to borrowers rated 'X'?
    - Is there any concentration of exposure to or among borrowers rated 'X' within our risk appetite?

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## Managing Credit Risk

- **How are internal ratings used? (2/2)**
  - Relationship management / credit admin.
    - Does a borrower rated 'X' require more attention?
  - Capital adequacy, provisioning, and profitability
    - Are reserves adequate to cover expected losses on borrowers like those rated 'X'?
    - Is capital enough to cover unexpected losses on borrowers like those rated 'X'?
  - Validation of the system
    - How timely and accurate is the rating for 'X'?
    - Does the rating system need to be recalibrated?

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## Managing Credit Risk

- **What are key attributes of a rating system?**
  - **Transparent:** assumptions, methodologies, policies and procedures are well documented and understood
  - **Consistent:** system is fully implemented, used consistently across business lines, and covers all material credit exposures
  - **Replicable:** system results in the same rating assigned when different individuals review the same credit

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## Credit Risk: How much? Adverse Classifications

Typical classification rules might include:  
Assets and Contingent Liabilities

Past due	Category	"Weight"	Reserve
current	1-Pass	0%	0%*
0-29	2-Spec.Mention	0%	5%
30-89	3-Substandard	20%	20%
varies	4-Doubtful	50%	50%
90+	5-Loss	100%	100%

Weighted  
Classified Assets

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## Credit Risk: How much? Classification Ratios

- **Sample Classification Ratios:**

- Total classified (3+4+5) assets

- Core Equity Tier 1 Capital + Reserves

- Weighted classified (20%(3)+ 50%(4) +5) assets

- Core Equity Tier 1 Capital + Reserves

- Total classified assets ← Beware of this ratio

- Total Assets

It's not as useful as it looks

- **Severity and Trend of Classifications**

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## Credit Risk: Trends? Past Due, Nonperforming (3,4,5) and Restructured

- Total delinquencies by type (which loans have more risk? Remember slide 8?)
- Nonperforming loans/gross loans
- Market trends of collateral (e.g. loans secured by real estate in a "down market")
- Restructured loans/gross loans

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## Credit Risk: Other Factors

- **Concentrations of Credit** [new BCP 19]
  - Level and Trend based on internal reports
  - Compliance with large exposure limits (example)
    - Single borrower – 15% typical limit (more if real estate secured)
    - Group of related borrowers – 50% of capital
    - Industry limits – bank's own, regulations, laws
  - Investment limits (non government)
    - Single company, project, or bank  $\leq$  10% capital;
    - Total of all investments  $\leq$  xx% capital
- **Insider Transactions** [new BCP 20]
  - Arm's length: specific approval requirements for directors, senior officers, and principal shareholders; limits on loans;

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*showing conflict interest*

## Mitigating Credit Risk

- **How can credit risk be mitigated?**
  - Mitigants basically fall into three types
    - Collateral: cash, gold, pledge of securities, receivables, inventory, real estate, etc.
    - Guarantees: personal guarantees, standby letters of credit, etc.
    - Risk transfer: insurance, securitization, credit derivatives
  - Be aware of differing treatment for capital adequacy calculations

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## Mitigating Credit Risk

- **What are limitations of these tools?**
  - Mitigants should not substitute for obligor performance
  - Their use often increases other risks (market, liquidity, operational, etc)
  - Practical difficulties of use (e.g., support of legal system, limitations of bank infrastructure)
  - Measuring credit risk can be imprecise, which reduces the effectiveness of mitigants

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## Allowance for Loan & Lease Losses<sup>ALLL</sup> (credit reserves)

- A reserve set aside to absorb potential loan losses
- Is the "ALLL" sufficient? [new BCP 18]
- General reserves (as an example)
  - 0.50% of outstanding loans in groups 1 to 4
  - Note that only 1.25% of risk-weighted assets counts toward regulatory capital
- Specific reserves (as an example)
  - e.g. 5% / 20% / 50% / 100%

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## Analyzing the ALLL Factors to Consider (1/2)

- Level, trend, and severity of delinquencies
- Underwriting standards
- Adequacy of lending policies
- "Loan review" function and timely identification of problem loans

Internal loan review  
external

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## Analyzing the ALLL Factors to Consider (2/2)

- Historical level and severity of loan losses and recoveries
- Prevailing economic conditions
- Process for determining and documenting adequacy of the ALLL [new BCP 18]

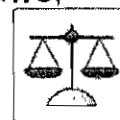
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## Risk Management

- **What is it, and what does it do?**
- ✓ – A process to identify, measure, evaluate, monitor, report, and control (or mitigate) risk on a *continuous* basis
  - Does not minimize risk, but seeks to optimize the inherent risk-reward tradeoff
  - Should go beyond just complying with laws, regulations, and mandates



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## Risk Management

- **What are other key elements of the credit risk management process? (1/7)**

- Credit origination

- Purpose of credit and source(s) of repayment
- Assessment of industry and economic factors
- Proposed terms, conditions and covenants
- Adequacy and enforceability of collateral / guarantees
- Approval by appropriate authority

[new BCP 17]

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## Risk Management

- **Discussion: credit risk management process**

- You are a credit officer at a local bank

- You have been asked to identify the primary repayment source for the following types of credit exposure:

- Commercial real estate
- Mortgage loan to purchase a home
- Commercial letter of credit to finance export of goods
- Due from correspondent bank balance



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## Risk Management

- **Credit risk management process (2/7)**

- Limit setting **[new BCP 19]**

- For single and groups of connected obligors
- Size based on credit strength of obligor, need for credit, economic conditions and risk tolerance
- By industry, economic or geographic sector to control concentration risk
- Inclusive of country risk and transfer risk **[new BCP 21]**
- Reviewed regularly but at least annually or upon facility renewal

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## Risk Management

- **Credit risk management process (3/7)**

- Rule setting for related party transactions

- Arm's length / monitor / mitigate **[new BCP 20]**

- Credit administration

- Documentation
- Disbursement
- Exposure monitoring
- Processing payments
- Collateral monitoring
- Maintenance of credit files

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## Risk Management

- **Credit risk management process (4/7)**
  - Measuring credit risk
    - Bank should establish a risk rating system for all types of credit activities
    - Should consider both business risk and financial risk factors
    - Ratings philosophies: point-in-time vs through-the-cycle
    - Independent review: validation of ratings, rating system design and practice

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## Risk Management

- **Credit risk management process (5/7)**
  - Credit risk monitoring and control
    - Credit policy should define standards
    - Financial position and business conditions
    - Conduct of accounts
    - Adherence to loan covenants
    - Collateral valuation
    - **Rules for handling delinquent accounts, including maintaining sufficient reserves**

[new BCP 18]

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## Risk Management

- **Credit risk management process (6/7)**
  - Independent review of risk profile
    - Reported to Board and properly documented
    - Performed at least annually -- more frequently for problem credits and new relationships
    - May be done on portfolio basis for certain kinds of exposures (e.g., retail)



To be effective, review staff must be knowledgeable, have adequate resources to do their job, and enjoy the support and confidence of management and the Board of Directors.

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## Risk Management

- **Credit risk management process (7/7)**
  - Problem credits
    - Bank should have a remedial process defined by policy as to how these are managed
    - The process should include:
      - Negotiation and follow-up
      - Remedial / exit strategies
      - Review of collateral and security documentation
      - Regular exposure reviews and status updates

**[new BCP 18]**

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## Risk Management

- **Discussion: managing credit risk (1/2)**

- You are a bank that wishes to start offering credit cards
- You discover there are basically three patterns of behavior clients for this product have:

portfolio

(  
 >90%  
 20%  
 10%)

- Those who payoff their balance every month
- Extended borrowers who eventually repay
- High-risk and distressed borrowers who often fail to repay

not much profit

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## Risk Management

- **Discussion: managing credit risk (2/2)**

- How would this client mix affect loss expectations?
- What limits would be appropriate for this product?
- How might risk be measured and managed?
- How might this affect terms and pricing offered to clients?
- Could other mitigants be used? Why?
- What are some other kinds of risk besides credit that might affect this type of lending activity?

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[new BCP 17]

## **Credit Risk Management**

- Lending policies and procedures (BO, P3L)
- Credit underwriting standards (P3L)
- Credit monitoring & administration (P3L)
- Loan review function (IC/IA)
- Management Information Systems (MIS)
- Process for managing problem assets (P3L)

[new BCP 18]

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## **Other Asset Quality Factors**

- Influence of Market Risks
- Continuity of management
- Historical lending experience
  - E.g. Net losses by type
  - E.g. Past due by type
- Growth rates (all loans, loans by type)
- Economic conditions

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## Summarizing Asset Quality and credit risk management (1/2)

- Conclusion with support
- Level, severity, and trend of:
  - Classified Assets
  - Past-due and nonaccrual loans
  - Net loan losses
- Adequacy of the ALLL

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## Summarizing Asset Quality and credit risk management (2/2)

- Loan policy, administration, and loan review
- Investment portfolio and policies
- Risk in off-balance sheet items

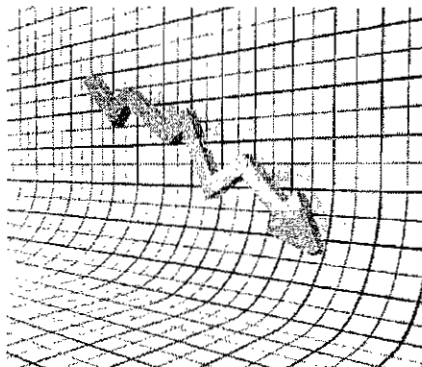
✓ Sound risk management should: identify, measure, evaluate, monitor, report, and control (or mitigate) credit risk.

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## Effect on Earnings



- Additional provisions required to increase the ALLL?
- Nonaccrual assets reduce interest income

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## Effect on Capital

- High and/or unexpected losses erode capital levels
- High losses increase the potential for regulatory action against the bank



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## Effect on Liquidity



- Unpaid loans and investments provide no liquidity inflow
- Large loan (or other) losses can lead to reputation risk and make liquidity challenges worse

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# Internal Rating Systems: Do Banks Need Them?

APEC-FRTI Bank Analysis & Supervision School (BASS)

Manila, Philippines

9-13 July 2012



## Presenter: J. Martin Guilfoyle

- U.S. Treasury Department, Comptroller of the Currency (1980 – 3)
- Federal Reserve Bank of San Francisco (1986 – 93; 2005 – 7)
- Bank of America, NA (1993 – 2001)
- Bearing Point, Inc (2001 – 5)
- Independent Consultant (2007 – 9)
- IMF Banking Supervision Advisor – Bangko Sentral ng Pilipinas (2009 – )

## Disclaimer

*The views expressed in this presentation are solely those of the presenter, and do not necessarily reflect the views of the International Monetary Fund, the Bangko Sentral ng Pilipinas, or of any other organization.*

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## Outline

- The basics of credit risk
- Why have internal rating systems?
- Rating system design
- Supervisory expectations

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## Credit Risk

“Credit risk is the inherent risk to earnings or capital that arises when a borrower or counterparty fails to meet the terms of the contract, or does not fully perform as agreed under the contract.”



*Credit risk is the greatest risk most banks face!*

## Credit Risk

- What are some common types of credit risk?
  - Default risk
  - Counterparty risk
  - Country risk
    - Transfer risk
    - Sovereign risk



## Credit Risk

- Where does credit risk arise?
  - Wholesale or commercial loans and advances
  - Retail credit (e.g., credit cards, installment loans)
  - Commitments and guarantees
  - Due from correspondent bank balances
  - Investments (debt or equity)
  - Settlement of a transaction
  - Trading products (e.g., foreign exchange, derivatives)

## Credit Risk

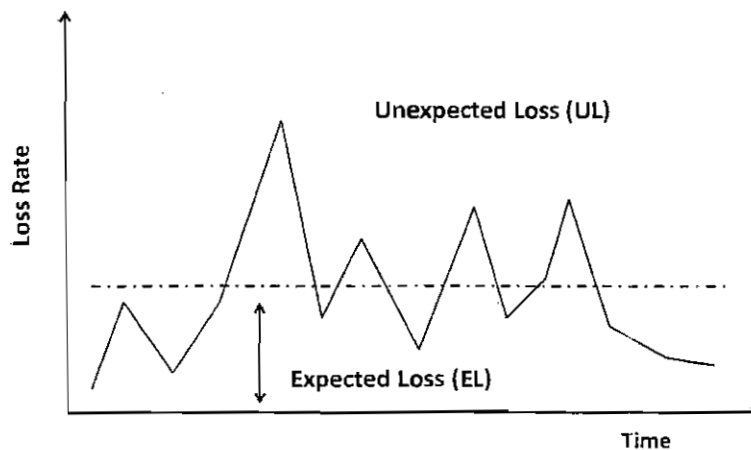
- Theoretical construct of credit risk
  - A statistically derived, quantitative approach to measuring credit risk known as "credit VaR"
  - Provides a forward-looking measure or *estimate* of credit risk (default probability)
  - Useful for understanding logic implicit in risk rating systems and scoring models
  - Basis for Internal Ratings-Based (IRB) approach in Basel II; too complex for most others to formally implement

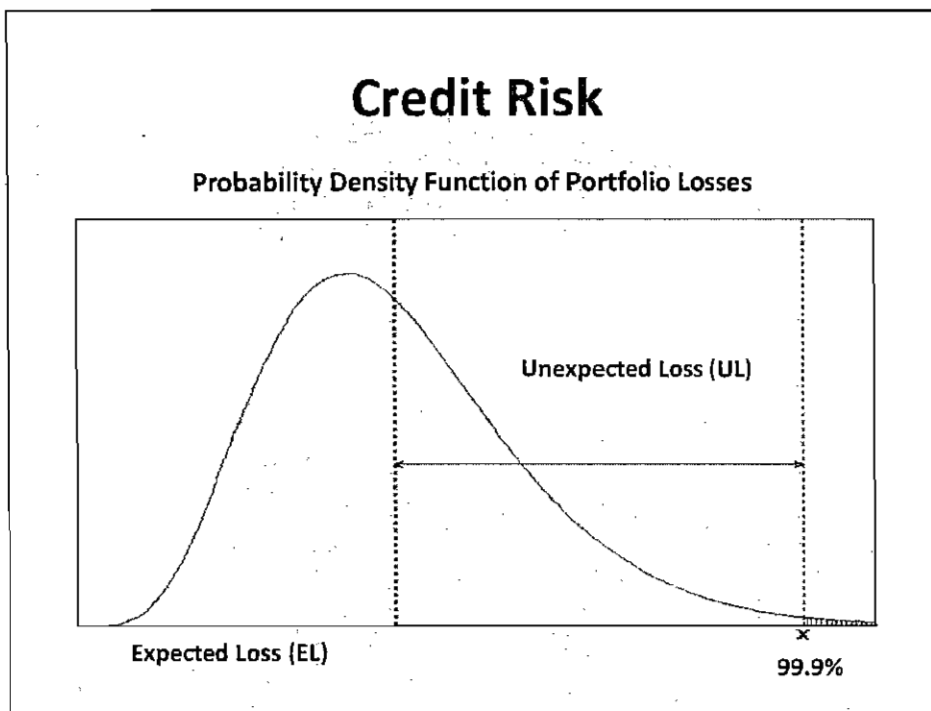
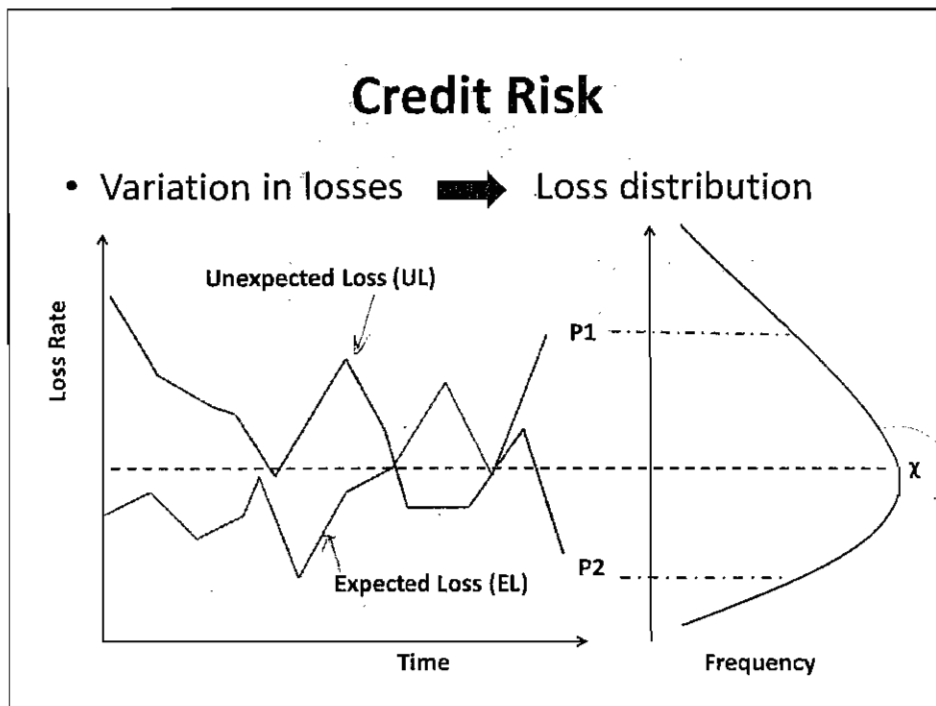
## Credit Risk

- Expected losses (EL)
  - Known with reasonable certainty
  - Generally covered by reserves / provisions
  - Example: expected default rate on a certain borrower or portfolio *according to the past long time*
- Unexpected losses (UL)
  - Associated with unforeseen events
  - Capital is normally a buffer to absorb such losses

## Credit Risk

Portfolio Losses Over Time





*Solvency ratio*

## Credit Risk

- Example: expected loss (EL)
  - A bank extends loans to purchase new autos
  - Standard interest rate for a 3 year loan is 12%
  - On average, 8% of borrowers default in Yr. 1, 6% default in Yr. 2, and 2% default in Yr. 3 (“frequency”)
  - Average loss (“severity”) of 1/6, 3/6, and 5/6 is associated with each of these defaults
  - What is the EL of this portfolio?

## Credit Risk

	Expected % of Borrowers Defaulting	Expected Average Outstanding Loss	Loss as % of Loan
	(A)	(B)	(C) = (A) x (B)
Year 1	8	1/6	8/6
Year 2	6	3/6	18/6
Year 3	2	5/6	10/6
Total			36/6 = 6%

## Credit Risk

- A note on expected loss (EL):

$$\text{EL} = \text{Probability of Default} \times \text{Loss Given Default}$$

or

$$\text{PD} \times \text{LGD} = \text{EL}$$

Because both PD and LGD can vary in response to economic conditions....



...this causes EL to fluctuate within a range (distribution) over time.

## Credit Risk

- Food for thought
  - Traditional *de facto* supervisory rating system
    - Special Mention, Substandard, Doubtful and Loss
    - Pass: all other exposures
  - May be problematic in certain cases
    - Implicitly assumes all 'Pass' credits share the same PD
    - Mandatory reserve percentages (specific or general) may not accurately reflect bank's own portfolio
    - Tends to be backward-looking and does not consider expected default behavior



## Why Have Rating Systems?

- What is an internal credit risk rating system?
  - Number or letter grade represents an assessment of creditworthiness / default risk
    - By individual obligors for wholesale credit
    - Either by obligor or pool level for retail exposures
  - Differentiation of risk allows management to optimize returns
  - Effectively embodies EL/UL concept since ratings should be a proxy for expected performance

## Why Have Rating Systems?

- Uses of internal ratings (1/3)
  - Facility pricing and terms
    - What return do we expect for taking on exposure to a borrower rated 'X'?
  - Approval authorities and limits
    - Who can approve a loan to a borrower rated 'X'?
    - How much can be approved to a borrower rated 'X'?
  - Relationship management / credit administration
    - Does a borrower rated 'X' require more attention?

## Why Have Rating Systems?

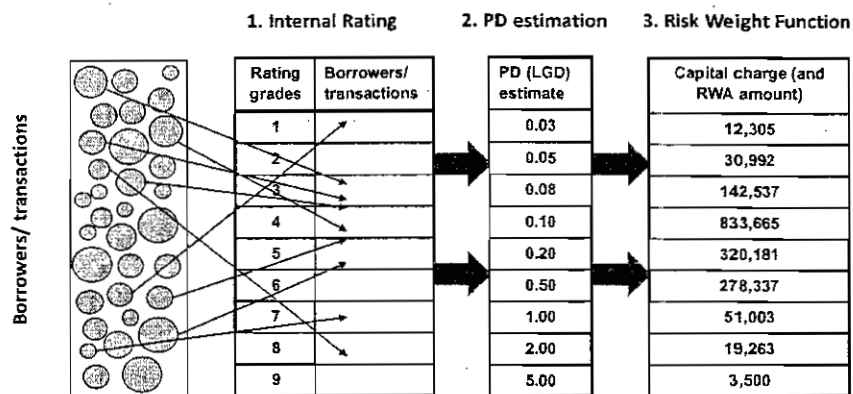
- Uses of internal ratings (2/3)
  - Capital adequacy, reserving and profitability
    - Are reserves adequate to cover expected losses on borrowers like those rated 'X'?
    - Is capital adequate to cover unexpected losses on borrowers like those rated 'X'?
  - Validation of the rating system
    - How timely and accurate is the rating for 'X'?
    - Does the methodology need to be changed (i.e., does the system need recalibration)?

## Why Have Rating Systems?

- Uses of internal ratings (3/3)
  - Portfolio management and reporting
    - What is our overall exposure to borrowers rated 'X'?
    - Is any concentration of exposure to borrowers rated 'X' within our risk appetite?
  - Migration analysis and stress testing
    - What further loan loss provisions would be needed if all borrowers rated 'X' migrate to 'Y'?

## Why Have Rating Systems?

- How ratings are used in the IRB approach



## Rating System Design

- High-level aspects of good ICRRS design
  - Integration with major phases of credit risk management (“use test”) (1/3)
    - Pricing
    - Provisioning
    - Credit management
    - Performance measurement (e.g., RAROC)
    - Portfolio management and reporting
    - Stress testing and scenario analysis

## Rating System Design

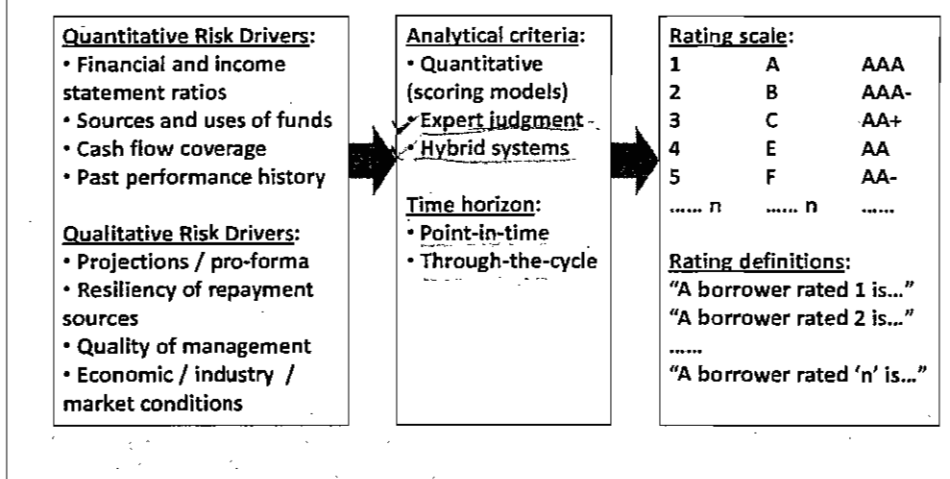
- High-level design aspects (2/3)
  - Sound governance
    - Board approval
    - Clear responsibility for design, maintenance, etc.
    - Independent validation of methodology and ratings
    - Adequate information for Board to monitor implementation by management
  - Includes all material credit exposures
    - Loans (including interbank exposures) and investments
    - Derivatives and structured products

## Rating System Design

- High-level design aspects (3/3)
  - Adequate number of ratings to meaningfully differentiate risk
  - Ratings must be accurate and timely
    - Dynamic to reflect changes in underlying risk drivers
    - Well supported and documented to credit file
    - Independent confirmation (credit review function)
    - Consequences if not
  - Ratings are consistent and replicable

## Rating System Design

- What is a rating “methodology”?



## Rating System Design

- <sup>relative</sup> Ordinal vs. cardinal ranking
  - Ordinal ranking is a relative risk measure:
    - Expresses relative risk without reference to magnitudes
    - Examples: ‘BBB’ is riskier than ‘A’; ‘5’ is riskier than ‘2’
  - Cardinal ranking is an absolute risk measure:
    - Comparison of borrowers based on actual riskiness
    - Never observed, only estimated
    - Example: a ‘6’ is twice as risky as a ‘3’; a PD of 4% is twice as risky as a PD of 2%

## Rating System Design

- One- vs. two-dimensions
  - One dimensional systems consider only credit (default) risk
    - Can be used to statistically estimate probability of default (PD)
  - Two dimensional (dual) systems also consider potential loss (severity) associated with facility type
    - Can be used to statistically estimate loss given default (LGD)
    - Most produce a summary rating that captures both

## Rating System Design

- One dimensional rating system

One-Dimensional		
Expected Loss (facility)	Rating	Expected Loss
	1	1%
	2	2%
	3	4%
	4	10%
	5	15%

## Rating System Design

- Two-dimensional rating system

Two-Dimensional							
			Loss Given Default (facility)				
			1	2	3	4	5
			10%	30%	50%	80%	100%
Probability of Default (obligor)	1	2%	1%				
	2	5%					4%
	3	10%				10%	
	4	20%	2%				
	5	50%	15%				

## Rating System Design

- Time horizon <sup>(1/3)</sup>
  - Through-the-cycle (TTS) perspective
    - Estimates borrower's condition at worst point in the economic or industry cycle
    - Longer assessment horizon generally means more stable ratings
    - Horizon should reflect borrower's entire credit cycle
    - Ratings change due to both borrower conditions and economic fluctuations

## Rating System Design

- Time horizon (2/3)
  - Point-in-time (PIT) perspective
    - Borrowers grouped by expected loss / default frequency over a precise time horizon (generally one year)
    - Given current economic and financial condition, how likely is default?
    - ✓ • Shorter assessment horizon usually results in less stable ratings
    - Ratings change due to both borrower conditions and economic fluctuations

## Rating System Design

- Time horizon (3/3)
  - Regardless of time perspective chosen, system should rate expected performance
  - Past history alone is not sufficient for this
  - Focus is on adequacy of primary repayment source to generate a sustainable source of cash
  - As repayment source weakens, structural elements may have greater bearing





## Rating System Design

- Different perspectives for assigning ratings
  - Expert judgment: design tends to be more qualitative
  - Model driven: design tends to be more quantitative
  - Hybrid systems: uses some combination (most common in practice)

## Rating System Design

- Expert judgment
  - Generally one of two types:
    - Judgmental systems with quantitative guidelines
    - Model-based ratings with judgmental overrides
  - Advantage: flexible, can incorporate different variables based on situation
  - Disadvantage: lacks transparency, subject to bias, heavily dependent on rater's analytical capability

## Rating System Design

- Model-driven systems
  - Rating assignment based on model output
  - Model considers statistically significant variables or risk drivers
  - Can include both quantitative and qualitative factors, but must be expressed quantitatively (i.e., numeric score)
  - Ratings are replicable once model is set

## Rating System Design

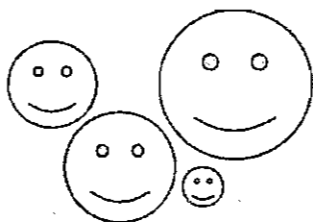
- What are credit scoring models?
  - Statistically derived type of rating system
  - Estimator of borrower's probability of default, expressed as a numeric score
  - Widely used in retail credit (e.g., credit cards, installment loans)
    - Exposures tend to be more "granular"
    - Generally not as useful for wholesale credit since risk drivers tend to be more borrower-specific

## Rating System Design

- What do we mean by “granularity”?



Portfolio 'A' has lots of small exposures; statistical measures can more readily be used to predict with some certainty the expected default rate of the pool. Portfolio A is more granular, and typifies many retail portfolios.



Portfolio 'B' has fewer individual exposures, but these tend to be much larger; default likelihood depends more on idiosyncratic (unique) factors to each. Portfolio B is less granular and typifies wholesale portfolios.

## Rating System Design

- Pitfalls of model design:
  - Historic data is always too scarce and “dirty” *forget?*
  - Markets, structures and underwriting standards change over time
  - Assumptions simplify reality
  - Complexity can obscure reality
  - Bias to achieve a lower capital number



*All models are wrong, but some are useful!*

## Supervisory Expectations

- No “one size fits all” rating system
  - Two key objectives of supervisory review
    - Are ratings timely and accurate?
    - Is system effective given bank's size, complexity, product mix, and organizational culture?
  - Proportionality can be challenging to apply
    - Requires considerable exercise of judgment
    - ✓ • Is mostly an art rather than a science

## Supervisory Expectations

- What kind of rating system is appropriate?



- Small, less complex bank; limited or no systemic risk
- Limited products (mainly simple loans and deposits)
- Low level of risk management sophistication
- Management “knows their borrowers”

?

- Large, complex financial holding company
- Elements of systemic risk
- Extensive product set spanning across many business lines
- Well developed credit risk MIS and reporting
- Sophisticated credit risk management practices

## Supervisory Expectations

- Factors to consider in proportionality
  - What gets rated?
    - rating systems work best for those types of loans where subjective analysis is most needed
  - Credit approval and review
    - consider how intertwined rating and underwriting are
    - consider what degree of separation is possible between line staff and credit approvers
  - Corporate culture
    - consider degree of formality and what is practical

## Supervisory Expectations

- Certain standards help ensure an effective rating process (1/4)
  - Board involvement
    - Approves credit policy, which should define all rating systems and contain guidelines for their use
    - Monitors quality of significant individual borrowers and/or exposures
    - Larger or more complex banks should have reports on portfolio quality and trends (e.g., migration)

## Supervisory Expectations

- Rating system standards (2/4) *stress testing*
  - Integration into credit decision-making
    - ICRRS should link to underwriting standards
    - Pricing and provisioning are most obvious uses
    - Simply put, there is no “magic bullet” for determining whether a bank’s ICRRS meets the “use test”
  - Dynamic ratings reflect all material information
    - Minimum annual review for all credits
    - More frequent review for some (e.g., large, problem, new, higher risk pass and complex structured credits)

## Supervisory Expectations

- Rating system standards (3/4)
  - MIS adequately supports and can identify
    - ✓ • “Double downgrades” *CAMELS*
    - Seasoning of ratings
    - Default / loss history by grade
    - ✓ • Rating changes by officer, branch, division
    - Ratings migration

*rating system*

## Supervisory Expectations

- Rating system standards (4/4)
  - Self-assessment
    - Separate credit review function in larger banks
    - Done by internal audit in others – check coverage and qualification (must have sound credit skills)
  - Back-testing
    - Minimum expectation for systems that quantify PD/LGD
    - Experience should confirm ratings definitions
    - Less sophisticated systems should demonstrate that worse ratings exhibit higher defaults / losses

## Supervisory Expectations

- What can go wrong? (1/3)
  - Rating system is poorly implemented or viewed as a “compliance object”
    - Inadequate definition in credit policy
    - Insufficient / conflicting understanding how to apply ratings (or by whom)
    - Poorly defined grades or insufficient number to meaningfully differentiate default risk
    - Little or no use in pricing or provisioning decisions
    - No link to compensation or relationship management

REVIEW

ISB is a very powerful tool!

## Supervisory Expectations

- What can go wrong? (2/3)
  - Unfounded optimism / unwillingness to recognize problems before they emerge
    - “We know our borrowers” isn’t good enough
    - Practices like “evergreening” can obscure realistic evaluation of creditworthiness
    - Credits should generally not be upgraded based solely on an improvement plan absent performance
    - Rating overrides need to be documented, approved and properly justified

## Supervisory Expectations

- What can go wrong? (3/3)
  - Poor process controls
    - Inadequate coverage of ratings and/or system design by self-assessment functions
    - Exceptions are excessive or inadequately justified
    - Unsuitable skills of self-assessment function (e.g., auditors may lack sufficient credit skills)
    - Inadequate back-testing
    - Ratings are not consistent or replicable
    - Inadequate validation of scoring models



## Supervisory Expectations

- Models: some questions to ask (1/2)
  - What are the main assumptions?
  - How do these affect the output (ratings)?
  - What raw data is used? How is it “scrubbed”?
  - How robust are the ratings produced?
    - Do other similar models produce different results?
    - Do final ratings differ from model output? Why?
  - Is the model used by management for provisioning or capital allocation?

## Supervisory Expectations

- Models: questions to ask (2/2)
  - How is the model validated (and by whom)?
 

Model validation is a *formal process* involving:

    - Review of developmental evidence (reasonableness of assumptions and overall design)
    - Benchmarking (comparison with like models)
    - Back-testing (comparison of model estimates to actual outcomes)
  - How does the model compare to what you’ve see elsewhere?

**Thank You!**



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Guintubdan Falls, Negros Occidental  
(Philippines)

# Earnings Analysis: Indicators and Techniques

*July 2012*

Asia Pacific Economic Cooperation Forum – Financial  
Regulators Training Initiative  
Bank Analysis and Supervision School  
Manila, Philippines

## Importance of Earnings to Bank Performance and Analysis

**Earnings (profitability) are a fundamental indicator of management's skill in running the bank.**

- Profitability adds to capital, which is the single most important indicator of a bank's financial strength.
- Profitability also makes shareholders more willing to invest additional capital in the bank, if required.
- Profitability enhances liquidity by increasing net cash flow and inspiring depositor confidence.



## Relation of Profitability to Other CAMELS Components

**Asset Quality** affects profitability: weaker loan quality requires higher loan-loss provisions (an expense)

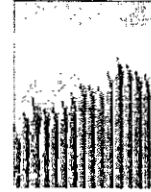
**Capital** affects profitability: higher capital may lower borrowing costs. *資本は利子*  
Increasing net interest margin; higher capital also increases earning power by increasing excess of interest-earning assets over interest-bearing liabilities

**Profitability** affects capital: higher profitability adds to capital directly, and makes shareholders more willing to invest more capital

**Liquidity** affects profitability: higher liquidity may lower borrowing costs

**Profitability** affects liquidity by increasing net cash flow

**Sensitivity to market risk** affects profitability by the classic tradeoff: higher, unstable profits (more risk) vs. lower, stable profits (less risk)



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## Foundations of Profitability Analysis

(1 of 2)

**Profitability indicators are flow indicators** – measured over a *period of time*, not at one point in time. The period of time must be specified in the analysis.

**Profitability indicators must be *standardized*** – because banks differ in size and time periods differ in length. Normally, profitability and its components are measured **as a percentage of average total assets (or capital) and annualized.**

**Example: Return on Equity (ROE).** Profit over a certain period, say 3 months, as a percentage of average total capital over the same period, multiplied by 4 to annualize



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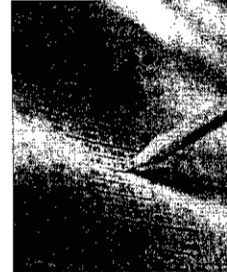
capital  
interest rate

# Foundations of Profitability Analysis

(2 of 2)

Profitability components can be analyzed for their

- **Level** (strong, weak, or average)
- **Trend** (getting better, getting worse, or staying about the same)
- **Stability** (same from period to period, or wildly fluctuating)
- **Comparison to similar banks** (peer group) - helps to develop a sense of what is a "normal" value or range for a profitability indicator in a given banking system, and identify outliers for further analysis



6% NPL → not good enough!  
but have to compare with other banks!  
(benchmark)

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## Return on Assets and Its Composition: Goal of Analysis

Return on Assets (ROA): profit divided by average total assets and annualized

Goal of all earnings analysis is to explain why ROA is high or low, where it is going, why and how much it fluctuates, and how it compares to similar banks.



To do this, we need to decompose ROA into its constituent components with a profitability model.

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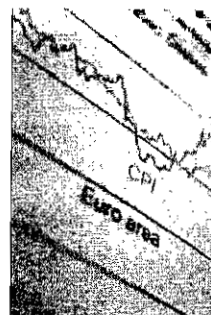
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## The Profitability Model: The Parts of ROA (1 of 3)

(All amounts expressed as a percentage of average total assets and annualized)

	Net Interest Income
+	Fees and Commissions
+	Net Trading Income (possibly)
--	Operating Expenses
<hr/>	
=	<b>Subtotal: Core Income</b>
--	Net provisions for loan losses
+	Net gain (loss) from mark-to-market adjustment on securities, derivatives, etc.
+	Other op income – other op expense (net) <i>(operating)</i>
<hr/>	
=	<b>Subtotal: Net Operating Income</b>



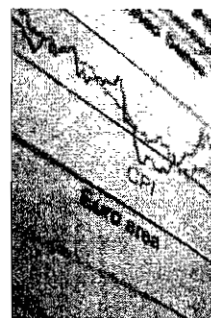
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## The Profitability Model: The Parts of ROA (2 of 3)

<hr/>	
=	<b>Subtotal: Net Operating Income</b>
+	Net gain (loss) on sales of securities, <u>fixed assets</u> , <u>repossessed assets</u> , <u>real estate held for investment</u> , etc.
+	Net gain (loss) from revaluation of assets, <u>liabilities</u> , and <u>off-balance sheet items due to foreign currency fluctuations</u>
<hr/>	
=	<b>Subtotal: Profit before taxes</b>
--	Corporate profits taxes
<hr/>	
<del>*</del>	<b>RETURN ON ASSETS</b>



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## The Profitability Model: The Parts of ROA (3 of 3)

### = RETURN ON ASSETS

The above profitability model conveniently summarizes incomes and expenses into 10 components (some of them net) and 4 subtotals – a useful simplification for analytical purposes

For each, analyze level, trend, compare to peer

(There are other ways to categorize incomes and expenses, and analysts sometimes disagree on definitions. Consult your own regulatory authority for guidance!)



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## The Profitability Model: Core Income (1 of 3)

**Core income:** the *regular, recurring* profitability from a bank's *basic* activities of taking deposits, making loans and investing in various securities; providing services for customers that earn fees and commissions; trading securities, derivatives, and foreign exchange (possibly); and incurring various operating expenses.

**Key words:** regular, recurring, basic

Whether ~~net trading income~~ should be included in core income or not depends on its stability!

Excludes provisions, net gains on asset sales

**Benchmark** varies, traditionally 2 percent of average assets

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## The Profitability Model: Core Income (2 of 3)

A variation on the Core Income concept is the Efficiency Ratio:

$$= \frac{\text{(Net Int Inc + Comm/Fee Inc + Net Trading Inc)}}{\text{Operating Expenses}}$$

*grow stable*

(Sometimes expressed as its reciprocal – the "inefficiency ratio")

★ Measures the amount of extra core income a bank gets for one dollar (peso, yuan, won, baht, etc.) extra of operating expenses

*How much money does it cost to earn next to or?*

The higher this ratio, the more efficient the bank

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## The Profitability Model: Core Income (3 of 3)

# ?

Why aren't provisions included in core income?

- A. Banks should be making *regular, recurrent* provisions. But few do. Provision expense tends to show sharp peaks – often after on-site examination – and troughs (near the end of the year when some banks “adjust” provision expense to meet earnings targets).



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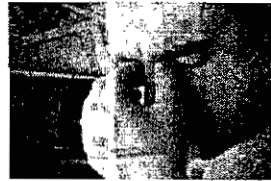


## The Profitability Model: Core Income (conclusion)

Core income must be sufficiently **HIGH** and sufficiently **STABLE** to handle normal and unusual provision expense.

If core income is weak or negative, there is very little chance the bank will survive.

There are not any reliable sources of income left for the bank!



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## The Profitability Model: Analysis of Net Interest Income (1 of 4)

We can analyze Net Interest Income, just like we looked at the individual parts of ROA...

$NII = \text{Interest Income} - \text{Interest Expense}$

And, in turn, II and IE can be separated into determinants, and *each one* can be analyzed for level, trend, and peer group comparison:

$II = \text{amount of interest-earning assets} \times \text{weighted average interest rate on IEA}$

$IE = \text{amount of interest-bearing liabilities} \times \text{weighted average interest rate on IBL}$

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## The Profitability Model: Analysis of Net Interest Income (2 of 4)

Special names and relationships exist among these components of net interest income:

Weighted average interest rate on IEA or IBL:

*total as asset* Yield *Yield on liability*  
 ✓ Yield on IEA (YA) – Yield on IBL (YL):  
 Spread

(IEA – IBL) / IEA:

Net Interest Position (Earning Power)



It can be shown that NII (as % of avg. assets) =  
 $f(\text{Spread, NIP, IEA/Avg. Assets})$

## The Profitability Model: Analysis of Net Interest Income (3 of 4)

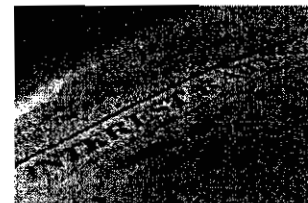
Take a closer look at the spread – 4 scenarios:

1. High YA, High YL → average spread
2. Low YA, Low YL → average spread
3. High YA, Low YL → high spread
4. Low YA, High YL → low spread

1 and 2 are not equivalent – why?

In general, we are concerned by a high  
YL – could mean bank is having trouble  
attracting funds

**Aggregate spread of banking sector often  
 used as index of competitiveness**



*means the bank is taking*

## The Profitability Model: Analysis of Net Interest Income (4 of 4)

Take an even deeper look at the spread...

Understand the factors that influence YA and YL:

*If YA, for example, is high relative to peer group, look at two determinants:*



1. Composition of IEA – is bank investing more heavily in assets that typically earn higher rates?
2. Yields on individual types of IEA – is bank charging or collecting higher interest rates on certain assets?

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## The Profitability Model: Analysis of Net Interest Income (conclusion)

Net Interest Income will be favorable *if*:

- Spread is high
- Net Interest Position is high
- Bank has high IEA relative to TA
- Or some combination of above



**Necessary to analyze *all* above components to understand why NII is weak or strong!**

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## The Profitability Model: Other Components of Core Income

### Fee and Commission Income:

- Includes fees for issuing guarantees, letters of credit, performing payroll services, plus service charges on deposits, late fees on credit cards, etc.
- Depends mostly on the level of competition and the overall level of economic activity

### Net Trading Income:

- Depends on volume of trading activity, volatility of prices of securities, derivatives, etc., and skill of traders



### Operating Expenses...

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## The Profitability Model: Operating Expenses (1 of 2)

Banks cannot control general level of interest rates, exchange rates, level of economic activity, state of competition...

### BUT:

**Banks have STRONG control over their operating expenses.**

Excessive operating expenses, relative to similar banks, reveal poor management.

Tell banks if operating expenses are high!



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## The Profitability Model: Operating Expenses (2 of 2)

Operating expenses (also called “general and administrative expenses”) consist of:

- Personnel expenses
- Rents
- Utilities (including telecommunications)
- Marketing expenses
- Professional service expenses (auditing, legal, security)
- Depreciation on fixed assets
- Stationery, postage, other office supplies
- Amortization of intangible assets



If operating expenses are high or rising, determine the cause – which component?

If personnel, calculate average salaries or number of employees/TA and compare to peer group

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## Summing Up: Threats to Profitability

Profitability model can be used to organize our understanding of the *threats* to profitability:

**NII is threatened by:**

- Nonperforming loans (decreases NIP)
- Unfavorable interest-rate movements (if bank is exposed to interest-rate risk) (decreases spread)

**Fee/Commission income is threatened by:**

- Increased competition
- Decline in level of economic activity

**Operating expense is threatened by:**

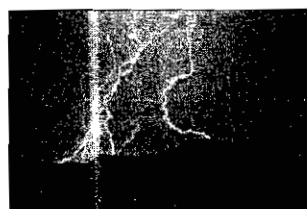
- Lack of proper control over expenses, poor budgeting

**Provision expense is threatened by:**

- Rise in nonperforming loans (increases necessary expense)

**Net gain/loss due to exchange rate fluctuations is threatened by:**

- Unfavorable exchange rate movements (if bank is exposed to FX risk)



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***Profitability is a window on  
management's success or failure!***



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# Capital Standards: Why Do They Matter?

APEC-FRTI Bank Analysis & Supervision School (BASS)

Manila, Philippines

July 2012



## Presenter: J. Martin Guilfoyle

- U.S. Treasury Department, Comptroller of the Currency (1980 – 3)
- Federal Reserve Bank of San Francisco (1986 – 93; 2005 – 7)
- Bank of America, NA (1993 – 2001)
- Bearing Point, Inc (2001 – 5)
- Independent Consultant (2007 – 9)
- IMF Banking Supervision Advisor – Bangko Sentral ng Pilipinas (2009 – )

## Disclaimer

*The views expressed in this presentation are solely those of the presenter, and do not necessarily reflect the views of the International Monetary Fund, the Bangko Sentral ng Pilipinas, or of any other organization.*

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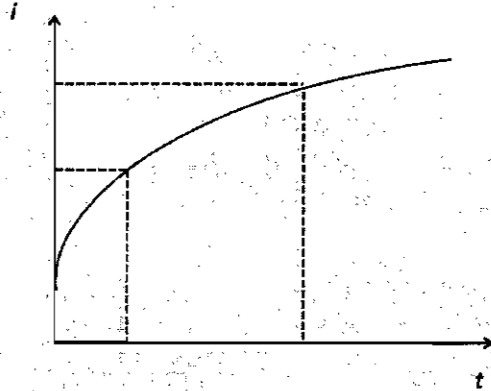
## Outline

- Why supervise banks?
- Historical perspective
- Evolution of capital standards
- Basel Capital Accord (reference)
  - Pillar1: measurement approaches
  - Pillar 2: supervisory review
- Implementation challenges

4



## Why Supervise Banks?

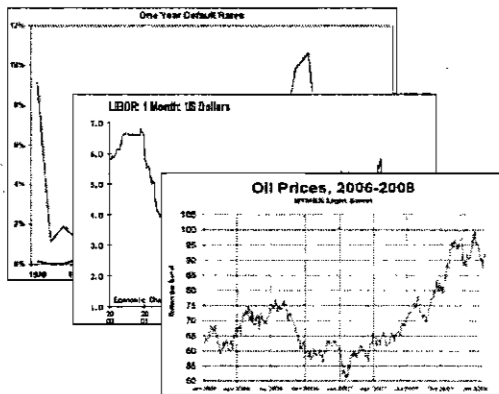


Most banks have an inherent money-making advantage in normal times when the yield curve is upward sloping — but times aren't always "normal".

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## Why Supervise Banks?

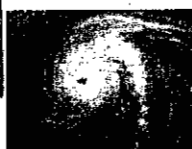
- Prices and markets are volatile



Volatility represents uncertainty, which gives rise to risk. As financial intermediaries, banks trade in commodities with volatile prices (e.g., money).

## Why Supervise Banks?

- Historic data and risk estimation



No matter how much data we have, there will always be catastrophic events that aren't in the data set, so won't ever be estimated by our models.



## Why Supervise Banks?

- Leverage and return

	Bank of Reckless	Bank of Prudence
Capital	\$10	\$90
Deposits	\$90	\$10
Total	\$100	\$100
Net Income	+10	+10
ROE	100%	11%

As supervisors we are keenly aware that banks are users of – and critically depend on – other peoples' money (mainly their depositors').

## Why Supervise Banks?

- Payments and settlements



Adverse developments in one market or jurisdiction can have unanticipated (and potentially disastrous) spillover effects on others.

## Why Supervise Banks?

- Hence our concern with capital
  - Shock absorber cushions against loss
  - Need for “skin in the game”
  - Maintain depositor confidence
  - Reduce likelihood of financial contagion
  - Lender of last resort and deposit insurance create moral hazard
  - Market forces aren’t always enough to ensure adequate capitalization

## Why Supervise Banks?

- But how much capital should banks hold?
  - Supervisors recognize banks must take risks to make money
  - But there is an inherent trade-off:
    - Risk-taking furthers economic development
    - Too much risk may lead to failure
  - As supervisors what we seek to determine is the level of capital that is *appropriate* for a given institution

## Historical Perspective

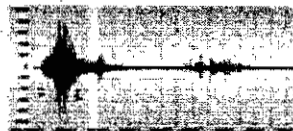
- Improvements in risk measurement practices
  - Application of modern portfolio theory (MPT)
  - Expanded use of quantification techniques
  - Emergence of VaR as a standard methodology
  - Introduction of new products for managing risk
  - Better and more consistent data collection
  - Competitive pressure => need to relate capital levels to risk / return
  - Development of RAROC and economic capital

## Historical Perspective

- Movement toward risk-based supervision
  - More disclosure / market discipline
  - Fair value accounting and transparency
  - PCA framework vs. forbearance in response to financial crises
  - Greater focus on corporate governance
  - Principles- vs. rules-based regulation → Basel
  - Internalization of risk management culture
  - Emphasis on capital planning and management

## Historical Perspective

- Shock therapy along the way
  - 1987: "Black Monday"
  - 1992: Sterling / ERM crisis
  - 1994: bond market crash / Mexican peso devaluation
  - 1997: Asia financial crisis
  - 1998: LTCM / Russian debt default
  - 2001: U.S. terrorist attacks / Argentine debt default
  - 2001-3: tech meltdown / U.S. corporate frauds
  - 2007-9: subprime and liquidity crises / credit contraction
  - 2010 - ?: Eurozone banking / sovereign debt crisis



## Evolution of Capital Standards

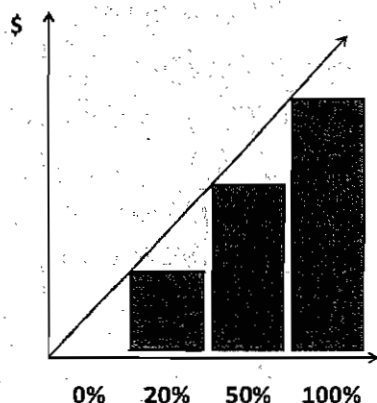
- Basel Committee on Banking Supervision (1/2)
  - Created by the G-10 in 1974; housed at the Bank for International Settlements ([www.bis.org](http://www.bis.org))
  - Representation from central banks and supervisory agencies globally
  - No formal legal existence or permanent staff
  - Serves as supervisory forum and issues standards, recommendations and guidelines
  - These do not have the force of international law; national adoption is discretionary

## Evolution of Capital Standards

- Basel Committee (2/2)
  - First major effort was the Concordat (1975); this closed gaps in supervision of globally active banks
  - Second major activity is promulgation of supervisory standards; this culminated in issuance of the Basel Core Principles (1997)
  - Third area of focus has been capital adequacy standards
  - Macro prudential supervision is a currently emerging area of great interest

## Evolution of Capital Standards

- Basel Capital Accord (Basel I: 1988)



Basel I only explicitly considers credit risk, using simple risk weights to derive minimum required capital. Though simplistic, it largely achieved the Committee's objective of globally harmonizing capital adequacy standards.

## Evolution of Capital Standards

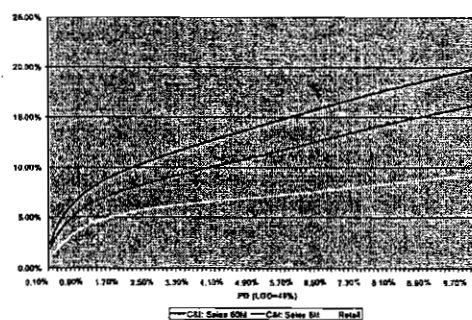
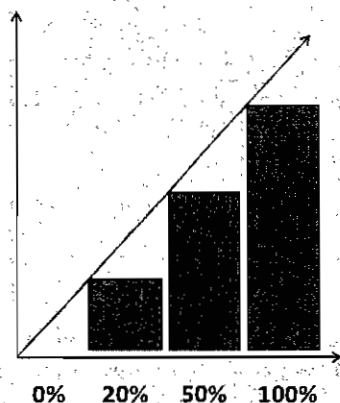
- Major modifications to Basel I
  - Inclusion of general loss provisions as capital (1991)
  - Recognition of bilateral netting agreements (1993)
  - ✓ – Market Risk Amendment (1996)
    - Inclusion of capital charge for market risk
    - Acknowledgement of growing profile of this risk at many banks
    - Allowed for inclusion of banks' own estimates (model results) as drivers of capital charge

## Evolution of Capital Standards

- The New Capital Accord (Basel II: 2005)
  - Inclusion of capital charge for operational risk
  - More risk-sensitive measurement of credit risk
  - Menu of choices for measuring credit, market and operational risk
  - Greatly expanded scope for use of banks' own model estimates for determining capital charges
  - Three Pillars of minimum capital, supervisory review and market discipline

## Evolution of Capital Standards

- The New Capital Accord (2/2)



More sensitive credit risk weights.



## Evolution of Capital Standards

- The New Capital Accord (3/3)
  - Recognition that other risks also impinge on capital adequacy
  - Some of these risks cannot be readily quantified (e.g., reputational, strategic, liquidity), but are nonetheless real
  - Seeks to internalize capital management and planning as a Board and senior management responsibility
  - Formal recognition of disclosure

## Evolution of Capital Standards

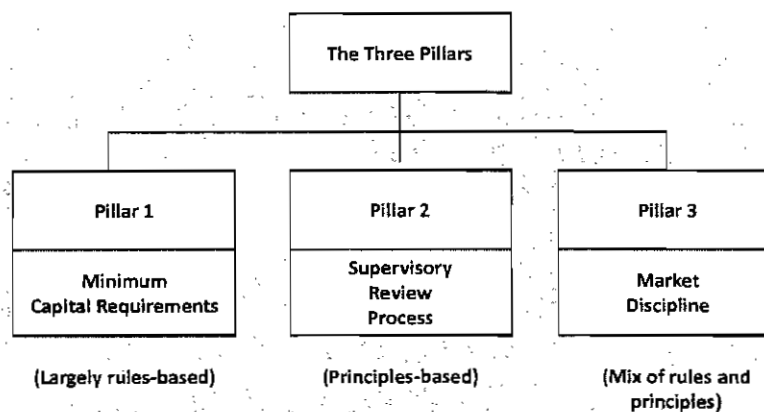
- Basel III (2010)
  - Aims to incorporate lessons learned from the recent financial crisis
  - Inclusion of regulatory standards for measuring and monitoring liquidity risk
  - Redefinition of certain types of eligible capital to enhance overall quality
  - Introduces methodology for countercyclical provisioning

## Evolution of Capital Standards

- Recap
  - Nature of risks banks face (and markets in which they operate) have changed markedly over time
  - Ongoing development of risk management as a separate discipline
  - Capital standards emerged from a desire to level the international playing field
  - Supervisors are now more focused on internalizing risk management and ensuring capital alignment / adequacy

*Banks demo their models to Supervisors.*

## Basel Accord Schematic



## Measurement Approaches

- Menu of Pillar 1 measurement approaches

Credit Risk	Market Risk	Operational Risk
Standardized approach	Standardized approach	Basic Indicator approach (BIA)
Foundation IRB (F-IRB)	Internal Models approach	Standardized approach
Advanced IRB (A-IRB)		Advanced Measurement approach (AMA)

## Measurement Approaches

- Standardized approach
  - Uses “standard” risk weights
    - Relies on external ratings where available
    - Broad national discretion allowed in application
  - More risk-sensitive in theory, but:
    - Obvious shortcomings with reliance on external ratings (timeliness, accuracy, lack of availability, misaligned incentives, etc)
    - Burden on supervisor to evaluate external rating agencies and methodologies

## Measurement Approaches

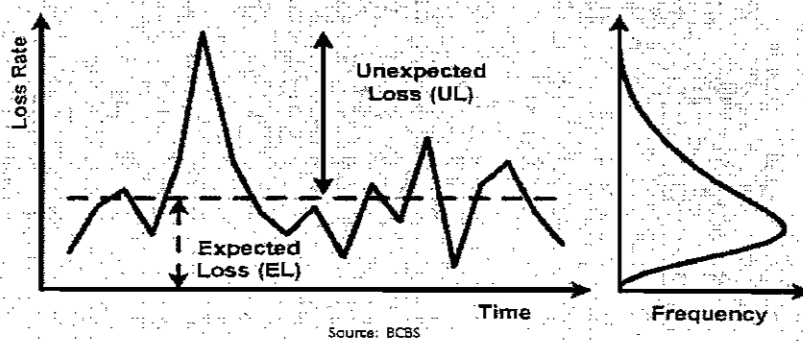
- Emerging markets implementation issues
  - Low (or even nonexistent) external ratings penetration
  - Ability of bank's internal systems and processes to:
    - Monitor ratings changes
    - Collect, aggregate and classify all credit exposures
  - "Off the shelf" solutions usually need customizing
  - Temptation to substitute external rating for proper due diligence

## Measurement Approaches

- Internal Ratings-Based approach (IRB)
  - Two variants: Foundation (F-IRB) and Advanced (A-IRB)
    - Relies heavily on banks' own estimates
    - Is in fact just a stylized version of a VaR model based on EL/UL concept
    - Subject to supervisory approval; very detailed requirements for both banks and supervisors
    - Adoption must be for an entire banking group

## Measurement Approaches

- Variation in losses → loss distribution



## Measurement Approaches

- Internal Ratings-Based (IRB) approach
  - Uses three parameters to determine risk weight and associated capital charge
    - Probability of default (PD)
    - Loss given default (LGD)
    - Exposure at default (EAD)
  - Source of inputs varies:
    - Supervisor provides LGD and EAD in F-IRB
    - Bank estimates all three parameters in A-IRB

## Measurement Approaches

- Why do IRB parameters matter?
  - These are the inputs used to estimate EL and UL, which in turn determine the capital charge



$$EL \text{ (in \$, €, ¥, £, ...)} = PD * LGD * EAD$$



$$EL \text{ (as \% of EAD)} = PD * LGD$$



$$UL = f(PD, LGD, EAD, M, R)$$

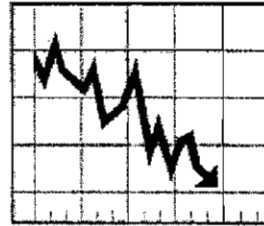
## Measurement Approaches

- Comparison of approaches

Probability of default (PD)	Approximated via external ratings	Banks' own estimates	Banks' own estimates
Loss given default (LGD)	Expanded list of CRM instruments	Fixed LGD (45/75%); expanded list of CRM	Banks' own estimates
Exposure at default (EAD)	Credit conversion factors for off-B/S	Credit conversion factors for off-B/S, fixed EAD	Banks' own estimates
Maturity	Not explicitly recognised	Generally 2.5 years	Generally between 1 – 5 years
Correlation	Not explicitly recognised	Preset	Preset

## Measurement Approaches

- Market risk
  - Two measurement methodologies
    - Standardized approach
    - Internal models approach
  - Five types of market risk addressed
    - Interest rate
    - Foreign exchange
    - Equity
    - Commodities
    - Options



## Measurement Approaches

- Market risk: Internal Models approach (IMA)
  - Supervisory approval
    - Subject to certain general criteria and other minimum standards
  - Qualitative standards
    - Designed to ensure risk management systems are conceptually sound and implemented with integrity
  - Quantitative standards
    - Designed to ensure that models are rigorous and appropriate

## Measurement Approaches

- Internal Models approach (IMA)
  - Stress testing
    - Must also be integrated into this approach
  - Model validation
    - Establishes minimum standards for independent internal model validation
  - External validation
    - Ensures external verification of internal validation, model formulae, back-testing, etc

## Measurement Approaches

- Internal Models approach (IMA)
  - Market risk in most emerging markets
    - Is typically modest relative to other kinds of risk (notably credit)
    - Markets are often underdeveloped, with relatively few instruments and limited tenors.
    - Emerging markets tend to be prone to sporadic liquidity “gaps” and poor price discovery



## Measurement Approaches

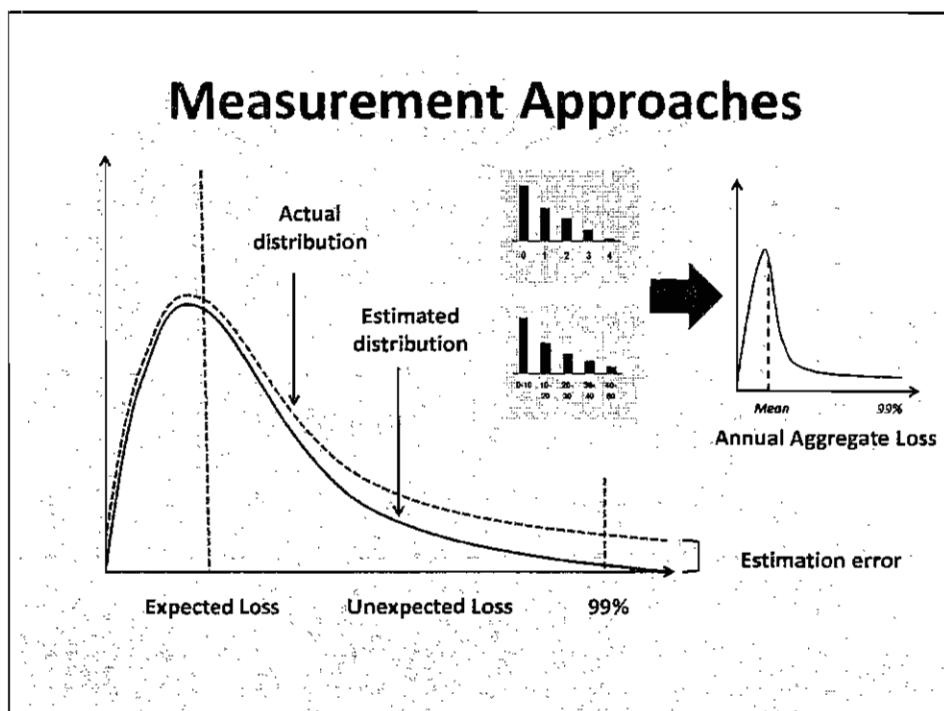
- Operational risk
  - Three approaches
    - Basic Indicator (BIA): 15% of gross income for past three years
    - Standardized: also used gross income, but based on eight business lines with different scaling (“beta”) factors ranging from 12 – 18%
    - Advanced Measurement (AMA): applies a VaR methodology to loss experience and other data

## Measurement Approaches

- Advanced Measurement Approach (AMA)
  - Focus is on both risk measurement and risk management
  - Key components
    - Internal data (seven loss event types)
    - External data
    - Scenario analysis
    - Business environment and internal controls

## Measurement Approaches

- AMA loss event types
  - Internal fraud
  - External fraud
  - Employment practices and workplace safety
  - Clients, products and business practices
  - Damage to physical assets
  - Business disruption and system failures
  - Execution, delivery and process management
- Many supervisors encourage banks to collect this information even if AMA is not currently offered

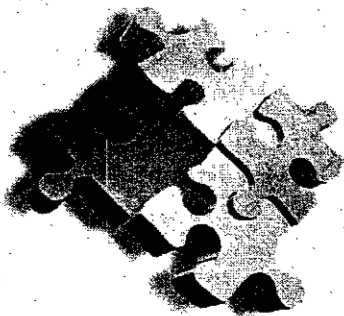


## Supervisory Review Process (Pillar 1)

- Pillar 1 does not cover all risks
  - Some aren't fully captured (e.g., concentrations)
  - Some aren't addressed at all (e.g., liquidity risk)
  - Factors external to the bank (e.g., business cycle effects)
- Bank is responsible for internal capital adequacy assessment process (ICAAP):
  - Material risks are appropriately identified, measured, monitored and controlled
  - Risk profile is aligned to bank's capital
  - Capital remains adequate – now, in future and under some level of stress

## Four Key Principles

### Pillar 2



- Banks have their own internal capital adequacy assessment process (ICAAP)
- Supervisory review of ICAAP; appropriate action if necessary
- Banks should operate above minimum capital levels; supervisor is able to legally require this
- Supervisory intervention at an early stage to prevent capital falling below minimum; rapid remedial action

## Review of ICAAP

- **Assessment of Capital Adequacy**
  - Supervisors should review process to determine that capital targets are comprehensive and relevant
  - Are capital levels are properly monitored and reviewed by senior management?
  - Is composition (quality) of capital is appropriate to overall risk profile?
  - Link to CAMELS/RAS or similar supervisory rating methodology

## Review of ICAAP

- **Adequacy of risk assessments:**
  - Assess degree to which internal targets cover all material risks faced by the bank
  - Burden of proof is on bank to demonstrate reasonable materiality standard
  - Assess adequacy of risk measures and how these are operationally used in setting limits, evaluating performance and controlling risks

## Review of ICAAP

- Scenario and stress testing
  - “Severe but plausible” standard
  - Framework must be flexible, dynamic and adaptive to changes in environment and business
  - Duration and magnitude should be considered in light of recent financial crisis
  - Tests should consider interrelationship of risks
  - Results should be communicated to Board and senior management

## Review of ICAAP

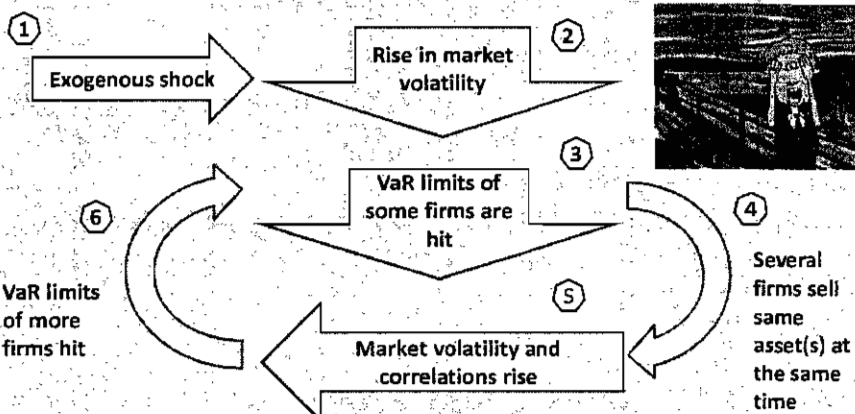
- Assessment of Control Environment
  - Ensures integrity of the ICAAP
  - Supervisors should consider quality of MIS, how risks are aggregated, and management’s record in responding to emerging or changing risks
  - Capital should be determined according to risk profile and adequacy of risk management process and internal controls

## Basel III and Liquidity

- More formal treatment of liquidity risk
  - Introduces minimum liquidity standards and monitoring tools
    - Liquidity coverage ratio (LCR)
    - Net stable funding ratio (NSFR)
    - Contractual maturity mismatch
    - Concentration of funding
    - Available unencumbered assets
    - LCR by significant currency
    - Market-related monitoring tools

## Basel III and Liquidity

- Why is liquidity also crucial for survival?



## Implementation Challenges

- Supervisory issues
  - Proportionality: hard to develop consistent approach that spans smaller / simpler firms up to large complex ones
  - Resources: expertise in reviewing banks' capital assessments need development / strengthening
  - Home-host coordination: cooperation between supervisors is more essential than ever
  - Other legal / regulatory impediments

cc: 13/1/12

Small & good banks

## Implementation Challenges

- Industry issues
  - Many bankers have difficulty moving beyond a compliance mindset
  - Early focus on Pillar 1 reinforced this mindset
  - Requires a paradigm shift in some banks; cosmetic improvements (e.g., in IT infrastructure) aren't enough
  - Concern over level playing field across multiple jurisdictions

## Implementation Challenges

- Technical issues
  - Treatment of diversification
  - Standards for what constitutes a “material risk”
  - Qualitative assessment of certain risks
  - Stress testing and scenario analysis
  - Definition of systemic importance (SIFIs)
- Dialogue with industry
  - Critical for successful implementation

## Thank You!



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