



**Asia-Pacific
Economic Cooperation**

**2008 AFDC Workshop on Risk Management in
Commercial Bank:
Enhancing Risk Management and Governance in the
Region's Banking System to Implement Basel II and
to Meet Contemporary Risks and Challenges Arising
from the Global Banking System**

APEC Finance Ministers' Process

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Produced by
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Asia-Pacific Finance and Development Center (AFDC)

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Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

~ Training Program ~

8 – 12 December 2008

Shanghai, China

With video links to Sri Lanka and Mongolia

Background:

This training program is funded by the APEC Secretariat through the APEC Support Fund and by the Melbourne APEC Finance Centre (MAFC) and is being jointly implemented by the Asia-Pacific Finance and Development Center (AFDC) in Shanghai and MAFC.

Policy makers and regulators from APEC developing economies banking supervisory systems will be exposed to current thinking and practices regarding the implementation of Basel II from both a regulatory and an industry practitioners' perspective. The course will focus on key aspects of risk; credit, market, and operational risks and the techniques to measure and manage risk. Liquidity risk and the pressures arising from the global financial crisis, tightening global credit and liquidity conditions and measures to deal with them in the region's banking systems will be analysed. How banking regulators might approach banking risks arising under current liquidity conditions will be considered. The pressures for reforms to governance arrangements in banking supervisory agencies and in commercial banks to implement Basel II and to manage emerging financial pressures will be considered.

Structure:

The program will consist of a four day training program – from 8 to 11 December 2008 – followed by one day of site visits to financial institutions in Shanghai.

Economies involved:

The training program will involve senior regulatory policy makers and APEC banking regulators from China, Indonesia, Malaysia, the Philippines, Thailand, Vietnam, Mexico, Peru and Russia. Non-APEC representatives from Bangladesh, Cambodia, Sri Lanka and Mongolia will also participate.

COURSE PROGRAM

DAY ONE ~ Monday 8 December 2008		
	8:30 – 8:45	Registration and administration matters – Centres Staff
<i>Morning Coordinator: Dr Li Kouqing, AFDC</i>		
Session 1	8:45 – 9:00	Orientation: Introduction to the Training Program
	<i>Presenter</i>	Dr Li Kouqing, AFDC
Session 2: The Contemporary Banking Environment		
Session 2.1	9:00 – 9:50	Recent Developments in Banking Supervision and in the Implementation of Basel II – The objectives of Basel II, the underpinning philosophy of the regulatory approach and the main regulatory features involved and an outline of the major outstanding challenges in implementation.
	<i>Presenter</i>	Mr Luo Ping, CBRC
Session 2.2	9:50 – 10:30	Lessons from the sub-prime crisis and implications for bank supervisors and Basel II – Systemic stability and Central Bank liquidity management techniques, deposit insurances and “bail outs”, internal models and rating failures as well as governance issues
	<i>Presenters</i>	Prof Kevin Davis, Melbourne Centre for Financial Studies Mr Luo Ping, CBRC
	10:30 – 10:50	Morning tea / coffee break
Session 2.3	10:50 – 12:30	APEC Economy Issues – Course participants will make presentations on key issues facing bank regulators in their home economy
	<i>Coordinators</i>	Prof Kevin Davis, Melbourne Centre for Financial Studies Mr Paul McCarthy, PPMC Consulting
	12:30 – 13:30	Lunch
<i>Afternoon Coordinator: Prof Kevin Davis, Melbourne Centre for Financial Studies</i>		
Session 3: Issues in Contemporary Risk Management		
Session 3.1	13:30 – 15:00	Introduction to Value at Risk – An interactive session demonstrating concepts, strengths and weaknesses of VAR and its role in determining capital requirements under the Basel Framework
	<i>Presenter</i>	Dr Christine Brown, University of Melbourne
	15:00 – 15:20	Afternoon tea / coffee break
Session 3.2	15:20 – 16:00	Major Risk Types in Banking – Bank management structures for identifying risks and risk-based pricing
	<i>Presenter</i>	Prof Kevin Davis, Melbourne Centre for Financial Studies
Session 3.3	16:00 – 17:30	Group Case Studies – Participants will examine a number of high profile failures in bank risk management practices and report on reasons for governance and supervisory failures
	<i>Coordinators</i>	Prof Kevin Davis, Melbourne Centre for Financial Studies Dr Christine Brown, University of Melbourne Mr Paul McCarthy, PPMC Consulting
Reception	18:15	An opening night reception hosted by AFDC featuring dinner

DAY TWO ~ Tuesday 9 December 2008		
	8:45 – 9:00	Welcome and administration matters – Centre Staff
<i>Day Coordinator: Dr Christine Brown, University of Melbourne</i>		
Session 4: Capital Measurement and Adequacy		
Session 4.1	9:00 – 9:50	Capital Adequacy Standards and the Role of Bank Capital – Discusses the role of bank capital, measurement of capital, economic capital, regulatory capital requirements
	<i>Presenter</i>	Prof Kevin Davis , Melbourne Centre for Financial Studies
Session 4.2	9:50 – 10:30	Asset Liability and Management – Discusses interest rate risk in the banking book, Basel II approach, the tools for ALM and bank practices and the regulatory template
	<i>Presenter</i>	Dr Christine Brown , University of Melbourne
	10:30 – 10:50	Morning tea / coffee break
Session 4.3	10:50 – 11:40	Asset Liability Management Workshop – Participants will work through an example of assessing a hypothetical bank’s interest rate risk using a regulatory template from one of the region’s supervisory authorities
	<i>Coordinator</i>	Dr Christine Brown , University of Melbourne
Session 4.4	11:40 – 12:10	Bank Capital Management Practices – Discusses capital planning, bank capital instruments and the cost of capital
	<i>Presenter</i>	Prof Kevin Davis , Melbourne Centre for Financial Studies
	12:10 – 13:10	Lunch
Session 5: Managing Liquidity		
Session 5.1	13:10 – 13:50	Definition Issues and Managing in Times of Market Disruption – Difficulties in defining concepts and measuring liquidity, problems arising from market disruption and inability to realise assets in sub-prime crisis, the role of Central Banks in ensuring adequate aggregate liquidity (using non-government paper as collateral in reposessions/ securities loans etc)
	<i>Coordinator</i>	Prof Kevin Davis , Melbourne Centre for Financial Studies
Session 5.2	13:50 – 14:30	<p>Workshop Comprising Small Groups to Respond to the Following Question – “You are a regulator in an economy currently experiencing a significant degree of financial market turbulence and are concerned about the liquidity positions and liquidity management and planning by the banks your supervise. What are the five most important pieces of information (which could be particular numbers/statistics, descriptions of policies and procedures, commercial arrangements, simulations, etc.) you would demand from your banks to assess their liquidity exposure and their ability to manage this?”</p> <p>You should also note other pieces of information you would like. Appoint a group representative to report back to facilitated discussion where similarities and differences between the lists developed by each group will be discussed.</p>
Session 5.3	14:30 – 15:00	Facilitated Discussion on Liquidity Management Workshops
	<i>Coordinator</i>	Prof Kevin Davis , Melbourne Centre for Financial Studies

	15:00 – 15:20	Afternoon tea / coffee break
Session 5.4	15:20 – 16:15	Commercial Bankers' Perspectives on Handling Liquidity Pressures – Australian banking perspective
	<i>Presenter</i>	Mr Bruce Le Bransky, NAB
Session 5.5	16:15 – 17:00	Group Discussion between Presenters and Participants
	<i>Coordinator</i>	Mr Paul McCarthy, PWMC Consulting

DAY THREE ~ Wednesday 10 December 2008

	8:45 – 9:00	Welcome and administration matters – Centre Staff
<i>Morning Coordinator: Dr Peng Runzhong, AFDC</i>		
Session 6: Strategies for Handling Operational Risk		
Session 6.1	9:00 – 09:40	Regulators' Perspectives on Handling Operational Risk in the Region's Banking Systems
	<i>Presenter</i>	Mr Luo Ping, CBRC
Session 6.2	09:40 – 10:20	Group Discussion coordinated by Mr Luo Ping, CBRC
	10:20 – 10:40	Morning tea / coffee break
Session 6.3	10:40 – 11:10	Basel II Approach to Operational Risk – Discusses how separate capital charge for operational risk ought to be calculated and applied
	<i>Presenter</i>	Dr Zhao Xian Xin, Shanghai Pudong Development Bank, TBC
Session 6.4		Commercial Bankers' Perspectives on Managing Operational Risk – Discusses how to measure operational risk, the limits and constraints of models and techniques and how to manage operational risk in practice
	11:10 – 11:40	Australian banking perspective
	<i>Presenter</i>	Mr Bruce Lebransky, NAB
	11:40 – 12:10	Chinese banking perspective
	<i>Presenter</i>	Dr Zhao Xian Xin, Shanghai Pudong Development Bank
	12:10 – 13:30	Lunch
<i>Afternoon Coordinator: Mr Paul McCarthy, PWMC Consulting</i>		
Session 7: Strategies to Enhance Governance in Regional Banking Regulatory Agencies and Commercial Banks		
Session 7.1	13:30 – 14:00	Developments in Governance Reforms in China's Banking Systems – Discusses benefits and challenges and benchmarking
	<i>Presenter</i>	Mr Qian Yi, ICBC
Session 7.2	14:00 – 14:30	Australian Banking Responses – Challenges to Governance Structures Caused by International Financial System Turbulence
	<i>Presenter</i>	Mr Bruce Le Bransky, NAB
Session 7.3	14:30 – 15:00	Responses to Challenges – Exposed in Current Climate of Weaknesses in Internationally Operating Banks and Governance Arrangements
	<i>Presenter</i>	Mr Paul McCarthy, PWMC Consulting

	15:00 – 15:20	Afternoon tea/coffee break
Session 7.4	15:20 – 16:30	Group Discussion on Effectiveness of Governance Standards in Regional and International Banking
	<i>Coordinator</i>	Mr Paul McCarthy, PWMC Consulting

DAY FOUR ~ Thursday 11 December 2008

	8:45 – 9:00	Registration and administration matters – Centres Staff
<i>Morning Coordinator: Mr Ken Waller, MAFC</i>		
Session 8: Market discipline in Bank Risk Management Practices and Impact of Pillar 3 of Basel II		
Session 8.1	9:00 – 10:00	Pillar 3 Basel II – Discusses how this pillar impacts on risk management provides insights into its effectiveness or otherwise and banks’ perceptions of Pillar 3 and its Operation
	<i>Presenter</i>	Mr Bruce Le Bransky, NAB
Session 8.2	10:00 – 10:30	Group Discussions between Presenter and Participants
	<i>Coordinator</i>	Mr Ken Waller, Melbourne APEC Finance Centre
	10:30 – 10:50	Morning tea / coffee break
Session 9: Challenges in Managing National Foreign Exchange Reserves		
Session 9.1	10:50 – 11:30	China’s Approaches to Reserve Management
	<i>Presenter</i>	Mr Wei Benhua, People’s Bank of China
Session 9.2	11:30 – 12:30	Group Discussions between Presenter and Participants
	<i>Coordinator</i>	Mr Ken Waller, Melbourne APEC Finance Centre
	12:30 – 13:30	Lunch
<i>Afternoon Coordinator: Mr Bruce Le Bransky, NAB</i>		
Session 10: Review of Contemporary Challenges in Risk Management in the Region’s Banking Systems		
Session 10.1	13:30 – 14:30	Workshop Comprising Small Groups to Respond to the Following Question – “You are a regulator supervising domestic banks, some with operations in other jurisdictions, and internationally operating banks in your jurisdiction, and you are concerned at the spread of risk arising from market turbulence. Analyse what you think are the most effective governance structures in your agency to handle risk impacting on your responsibilities; what are the key measures you need to have place with the various groups of banks you supervise and what do you consider are the critical aspects of your agency’s relationships with foreign supervisors and with other groups”. Groups must appoint a group representative to report back to a facilitated discussion where responses by each group will be discussed
	<i>Coordinators</i>	Mr Ken Waller, Melbourne APEC Finance Centre Mr Paul McCarthy, PWMC Consulting Mr Bruce Le Bransky, NAB

Session 10.2	14:30 – 15:00	Facilitated Discussion on Contemporary Challenges in Risk Management in the Region's Banking System Workshops
	<i>Coordinator</i>	Mr Ken Waller , Melbourne APEC Finance Centre
	15:00 – 15:20	Afternoon tea / coffee break
Session 11	15:20 – 16:15	Panel Discussion on Review of Program and Key Outcomes
	<i>Coordinator</i>	Mr Ken Waller , Melbourne APEC Finance Centre
Session 12	16:15 – 16:45	Review of APEC's Capacity Building Programs, Further Initiatives and Concluding Remarks
	<i>Coordinator</i>	Dr Li Kouqing , AFDC

DAY FIVE ~ Friday 12 December 2008	
Site Visits Program	
9:20 – 10:10	Visit to Shanghai Stock Exchange Centre
10:30 – 11:30	Visit to Pudong Development Bank
11:30 – 13:00	Lunch at Lv Bo Lang Restaurant (Yu Garden)
13:30 – 14:30	Tour of the Yu Garden area
15:00 – 16:00	Cruise on Huangpu River



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Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Opening

Introduction to the Training Program

Dr Li Kouqing
AFDC, Shanghai

It gives me great pleasure to welcome you to China and to this program.

This program, which focuses on the region's banking system, comes at a very timely and opportune moment. The issues that affect banking regulators are currently at the forefront of global and national responses to the global financial crisis.

Handling this systemic crisis that has affected the financial markets requires great judgement based on good policy analysis.

This course will discuss many of the issues that have been revealed by the crisis, and will assist each of you in formulating good judgements. It will look at risk, liquidity, governance and other highly relevant matters in the implementation of Basel II.

The crisis has impacted all economies, large or small. Everyone is affected, and therefore everyone has something to contribute, and I encourage your very active participation in the course.

We are particularly grateful to the APEC Secretariat for providing the funding for this program, and the collaboration that we as the AFDC have established with the MAFC in Australia.

In July 2007, the Melbourne APEC Finance Centre and AFDC hosted a successful China-Australia Governance Program, which focused on Risk Management and Governance in Chinese banking, and brought together experts from both Australia and China. As a result of that collaboration, the two Centres signed an understanding to continue to work together in the future, enhancing capacity across the region.

In April this year we worked together to organise a roundtable in Shanghai that again brought together senior officials and political leaders from Shanghai and Melbourne. In October, a program funded by the Australian government again brought together a number of Chinese officials and Australian experts to discuss the key issues in global banking and the current situation. The Chinese officials then went on to do placements in Australia at various banks and financial institutions.

These collaborative examples show how well our two Centres can work together, and thus we have again embarked on a joint program to put together this course.

I would particularly like to thank the MAFC and also the experts from Australian banks and financial institutions who are here to participate in the discussions and offer their expertise. I would also like to thank the Chinese participants and experts, as well as the other international guests.

I hope that this program can demonstrate the success that can be achieved when two organisations work together to achieve a common goal. Welcome and enjoy the opportunity.



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Session 2.1/2

Financial Crisis and Regulatory Responses

Mr Luo Ping
CBRC



Financial crisis and regulatory responses

A perspective from the Chinese banking supervisor

Luo Ping

China Banking Regulatory Commission

APEC workshop

8 Dec. 2008, Shanghai

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A series of unbelievable failures

- We have been all shocked
 - The collapse of Bear Stearns
 - The massive federal rescue of Fannie Mae and Freddie Mac
 - Lehman Brothers filing for bankruptcy.
 - Merrill Lynch sold to Bank of America.
 - The Fed \$85bn takeover of AIG.
- With confidence replaced by an unprecedented level of fear, lending is frozen and worldwide markets are plunging. No decoupling.
- “Simply stated, the bright new financial system – for all its talented participants, for all its rich rewards – has failed the test of the market place.” Paul Volcker
- “Modern history’s greatest regulatory failure” Roger Altman, former deputy US Treasury secretary



Words from senior supervisors

- “**S**imply stated, the bright new financial system – for all its talented participants, for all its rich rewards – has failed the test of the market place.” Paul Volcker April 2008
- “**T**his will come to be seen as the greatest regulatory failure in modern history.” Roger Altman, former deputy US Treasury secretary September 2008
- “**I**t is poor execution of the basics that are at the root of today’s problems.” Nout Wellink, Basel Committee chairman 2008




Factors contributing to the financial crisis

Commonly recognized causes

- Exceptional boom in credit growth and leverage of financial institutions
- Growth of financial innovations outpacing institutions’ capacity to manage associated risks
- Poor underwriting standards
- Shortcomings in firms’ risk management practices
- Poor investor due diligence
- Poor performance of rating agencies for structured products
- Incentive distortion



Regulatory gaps/failures



**CBRC
assessment
April 2008**

- Inaction to stop lax credit underwriting standards
- Lack of regulation/oversight of complicated financial instruments such as securitizations
- Lack of regulation/oversight of shadow banking institutions such as mortgage brokers, SIVs, as well as investment banks, rating agencies
- Lack of regulation/oversight of cross-sector risk

Laissez faire capitalism/free market economy



**Deregulation
too far?**



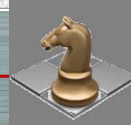
- **Best regulation is least regulation**
- **Government regulators were no better than markets at imposing discipline**
 - ♦ Policy to deal with real estate bubbles by cutting interest rates later rather than preventing bubbles from inflating
 - ♦ fear of new regulation of over-the-counter derivatives risked disrupting the capital markets 2002
- **Belief in self-correcting power of markets**

Underlying theoretical framework and rethinking



**Truth does
not
change?**

- “I do have an ideology. My judgment is that free, competitive markets are by far the unrivaled way to organize economies. We’ve tried regulation. None meaningfully worked.” Greenspan before the crisis
- “I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such as that they were best capable of protecting their own shareholders and their equity in the firms. ” Greenspan after the crisis Oct. 2008.



I’m a free market person



**Gorge
Bush
Nov. 2008**

- The crisis is not a failure of the free market-system
- If you seek economic growth, social justice and human dignity, the free market system is the way to go
- Government intervention is not a cure-all
- Whether the American leadership in the global economy will continue?
 - ◆ The world will see the resilience of America once again

The repeal of Glass-Steagall had fueled the crisis ?

A debate is going on

- Glass-Steagall has been a thorn in the side of American financial industry which like the proverbial lion has howled about the thorn in its paw.
- The more subtle hazards arise when a commercial bank goes beyond the business of acting as fiduciary or managing agent and enters the investment banking business either directly or by establishing an affiliate to hold and sell particular investments.

Glass-Steagall forces separation where conflicts and losses can be Mitigated. The case should be considered again



Impact of financial crisis on China

Direct impact: small

- **B**y Sept , total foreign exchange portfolio investments of major banking institutions \$160 billion. Exposures to seven major financial institutions overseas \$7 billion. Total un-realized losses\$1.5 billion

Potential indirect impact: significant

- **C**redit risk
 - ◆ Of \$160 portfolio investment , 11.3% government bonds , 14.9% agency or quasi government bonds , bonds by financial institutions 37.7% , corporate bonds 7.8% , securitized assets and others28.2%
- **M**arket risk
 - ◆ In terms of currency composition,75.2% in US dollars,10.5% in HK dollar , 7.5%in Euro

Case of a quite highly regulated banking industry



China's regulatory practices: back to basics

- Prudent mortgage lending standards
 - ◆ 30% down payment for first homes and 40% for others, verification of income
 - ◆ Stress tests
- Broader oversight of all banking institutions
 - ◆ Say no to shadow banks, raising fund by conduits impossible
- Conservative approach to innovative products
 - ◆ Supervisory approval needed in many cases
- Continued separation of commercial from investment banking

Stress on regulation in absence of strong market forces

Policy orientation of CBRC: Oct 2008

1

Stress on core deposit, risk management and provision of quality services

2

Provision of cross sector financial services is to proceed cautiously with strong emphasis on bank-wide risk management

3

Innovation is to proceed based on an effective cost and benefit analysis for innovative products, robust risk management system and enhanced disclosure

4

A fine balance between the pursuit of policy objectives and maximization of shareholders' profit

Looking ahead

- Change of financial landscape is inevitable
- More regulation is inevitable and more specifically a higher capital ratio is inevitable
- A continued fight against financial crisis is inevitable
- Learning from mistakes is inevitable

*We will for sure survive the current crisis hopefully
with a stronger financial system than before.*



Government position on financial crisis

Premier Wen Jiabao 28th Oct 2008

- **T**o improve the functioning of the international financial organizations so as to be more responsive in maintaining international and regional financial stability and strengthen financial regulation. Emerging markets should be involved more in the decision making and rule making process.
- **T**o reform the international financial regulatory/supervisory system so as to set forth appropriate and effective standards, early warning system and crisis prevention system, particularly the monitoring of major reserves currencies countries.
- **T**o speed up the formulation of a diversified international currency system so as to give more height to a number of currencies in support of the stability of the international monetary system.



Thanks!



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Session 2.2

Lessons from the Sub-Prime Crisis

Prof Kevin Davis
Melbourne Centre for Financial Studies

Origins of the crisis

The crisis can (at risk of oversimplification) be attributed to four major factors.

The first is the growth of financial products and practices which involved high leverage and were sustainable only under conditions of increasing asset prices and investor confidence. Sub prime mortgage lending in the US is the obvious example which triggered the crisis, but the problem was more pervasive due to the second factor of uncontrolled (and not well recognized) liquidity creation. Financial engineering has prompted the growth of liquidity creation techniques based around collateralized lending (such as repos, securities lending, margin lending), where active securities markets for the collateral meant that lenders did not themselves feel exposed to significant liquidity or counterparty risk. Although asset price inflation was high Central Banks, focused on consumer price inflation targets and real sector activity, did not respond by attempting to restrict liquidity and “pricking the bubble”.

A third factor was the growth of the, largely unregulated, “shadow banking” sector, involving investment banks, hedge funds, SIVs, conduits etc., and the construction of complex financial instruments and techniques which saw risk spread throughout the global financial sector and significant interdependencies created. Finally, there was an absence of public information about the level and distribution of risk in the financial system. Inability to assess the risk positions of potential counterparties meant that a crisis induced response for many institutions was simply to cease extending credit.

Indeed, one analyst (Gorton, 2008) links the onset of the sub prime crisis to the introduction of the ABX indices in 2006 which provided the first aggregate, market based, estimates of sub prime linked securities values.¹ While concerns about US house prices and sub prime mortgage defaults were also emerging, the indices enabled market participants to express, and trade on, views about the implications for CDOs, whose values were ultimately linked to US house prices via intricate relationships involving complex securitizations of sub prime mortgages.

¹ Gary Gorton, “The Subprime Panic” *NBER Working Paper* 14398, October 2008, <http://www.nber.org/papers/w14398>.

Features of the Crisis

The evolution of the crisis has identified a number of important features of financial system behaviour which need to be borne in mind in policy responses and in designing future regulation.

First, consumers of financial products such as mortgage borrowers or investors generally do not have financial sophistication and knowledge which is adequate to assess the risk and return (or cost) of financially complex products.

Second, incentive and governance structures within financial institutions have been inadequate to prevent sales of unsuitable financial products.

Third, outsourcing of due diligence and risk assessment, including reliance on statistical models of risk assessment which use only “hard” information rather than “soft” information (such as loan officer opinion and assessment), has increased risk.

Fourth, even large, reputable, financial institutions will seek to avoid constraints imposed by regulations, as evident in the creation of SIVs and conduits using 364 day liquidity facilities to avoid capital requirements.

Fifth, risk management systems of banks have proven inadequate, reflecting problems with measuring risk, control systems, reporting arrangements and governance.

Sixth, liquidity creation by non-prudentially regulated institutions, involving massive growth in collateralized lending techniques, was not well recognized or controlled by monetary authorities.

Seventh, systemically important financial institutions exist outside the ambit of prudentially regulated institutions, and include investment banks and insurance companies who are important counterparties in risk transfer and in provision of liquidity.

Eighth, limited deposit insurance arrangements are inadequate for maintaining depositor confidence and dealing with systemic crises.

Ninth, opaqueness of financial institutions and inadequate information about details of complex financial products can quickly cause interbank and asset markets to “freeze”, creating significant problems for both funding and asset liquidity.

Tenth, official liquidity support facilities need to be carefully structured so that market participants are not put off using them by the potential stigma of being perceived by the market as being weak, at risk, institutions.

Eleventh, risk based capital adequacy requirements appear to be insufficiently robust to financial innovation, prompting increased attention in the role of simple leverage ratios as a regulatory option.

Twelfth, globalization of finance has made the regulatory problem of dealing with multinational financial institutions extremely complex. Supervisory cooperation needs to be reinforced by improved alignment of national insolvency and resolution arrangements.

Thirteenth, the dramatic growth of the less-regulated non-bank sector (“shadow” banking sector) has meant that the macro-economic problems arising from a “flight to quality” to the banking sector and disruptions to proper functioning of the non-bank financial sector are particularly severe.

Regulatory Responses

Crisis induced responses by Governments have focused primarily on offsetting the immediate effects of the crisis rather than addressing the underlying causal factors.

First, there have been actions to shore up public confidence in national banking sectors, involving broad extensions of deposit insurance, guarantees, and government equity injections into, or full or partial nationalizations, of banks.

Second, there have been actions to unfreeze and/or restore liquidity to asset markets and financial institutions, via widening of acceptable collateral in Central Bank repurchase agreements, and Government purchases of particular types of assets (including mortgage backed securities). Central Banks have also increased aggregate liquidity through their open market operations to cater for the fear induced increase in demand for liquidity and to lower official interest rates to offset adverse effects on the real economy arising from higher credit spreads on private sector lending.

A third response has been the “bail out” of systemically important non-bank financial institutions such as investment banks in the US. The interdependencies within the financial system have been reflected in their roles as prime brokers for hedge funds, significant counterparties in derivatives transactions, and providers of credit through collateralized lending techniques. Ultimately, the disruption to asset markets from disorderly failure was deemed (with the aid of hindsight from the Lehman example) to be unacceptable.

A fourth response has been the introduction of new, temporary, regulations on financial markets and institutions. Particularly notable here has been the introduction of bans on short selling of (some or all) equities on national stock exchanges, driven by concerns about destabilizing speculation.

These responses (and the crisis itself) have had significant short term, and potentially lasting, impacts on the competitive position of various financial institutions. Non-bank investment vehicles (finance companies, managed funds etc) have suffered outflows, partly due to nervous investors being attracted to Government guaranteed deposits, but also reflecting the desire to avoid further losses on risky investments in such a bear market environment. Hedge funds (and others) using trading strategies based on taking short positions have found their business models undermined by bans on short selling.

Future Regulatory Responses

Looking ahead, a number of changes in the financial sector and in policy approaches can be anticipated.

It is likely that Central Banks will be tasked with focusing also on asset price inflation as a policy goal, rather than the previous, failed, approach of attempting to ensure a “soft landing” from the bursting of speculative bubbles. Also, to have greater effects on financial markets, new instruments of policy will be needed. “Macro-prudential” policy can be anticipated, in which capital requirements of prudentially regulated institutions are varied depending on economic and financial conditions. This may also include changes to allowable provisioning for losses, involving building up of loss reserves in good times and consequent smoothing of reported profits. Combined with concerns about the impact of mark to market (or model) accounting requirements on financial institutions in this period of market disruption, recently agreed international accounting standards will be subject to scrutiny.

Deposit insurance arrangements and the scope of prudential regulation will be subject to review.

A “safety haven” for unsophisticated investors is required, but recent events have reinforced the perception of “too big/too important to fail”, extending perceived protection to a vastly expanded range of financial products and institutions. Paradoxically, investment banking activities are being increasingly linked with traditional banking, worsening this problem. While holding company structures can notionally separate different types of activities, the potential for allowing failure of one part of the structure (such as the investment banking arm) while maintaining confidence in the rest (including commercial banking) seems limited.

There may be a case for increasing the capital requirements of systemically important financial institutions which rely on capital markets funding, compared to simpler deposit financed institutions. However, this risks reducing efficiency, prompting the search for mechanisms which involve automatic increases in bank capital in times of stress. (Several commentators have suggested such things as banks issuing “catastrophe-type” bonds which pay a higher yield but which convert automatically into bank equity if certain trigger points are met).

The recently introduced Basel II capital accord will also need further review. Although some of the regulatory failings exposed by the sub prime crisis can be

traced to inadequacies in the original Basel accord (such as allowing banks to provide 364 day liquidity facilities to their SIVs and conduits without capital requirement implications), there are many new banking practices not well covered by the accord. Indeed, the foundations of the new accord have been severely shaken. Bank internal risk models have not performed well – raising questions about the merits of relying on them for determination of capital requirements as done in the advanced approach of Basel II. Similarly, the credibility of ratings agencies has suffered, also raising questions about the fundamental role of ratings in determining capital requirements under the standardized approach of Basel II.

Whether the “shadow banking sector” is likely to be subject to regulation is an unknown. But it is almost certain that it will be subject to greater reporting requirements to ensure that in future policy makers and market participants will have better information on which to base decisions. Balancing the requirements between protecting commercially valuable private information and generating socially valuable aggregate information is challenging.

Greater information is also available when financial claims are traded in organized exchanges rather than over-the counter markets involving bilateral trades where only the participants are aware of prices and quantities. Incentives or legislation to increase the use of organized exchanges can be anticipated.

At the same time, organized exchanges appear to be subject to excessive short term trading and potentially destabilizing speculation, reflecting the dramatically reduced trading costs due to modern technology. While it is desirable for valuable private information about economic fundamentals to be incorporated into asset prices by the actions of traders, modern asset markets have, arguably, become much like casinos. Much trading appears to be based on perceptions of likely short term changes in market psychology or mood or on profit opportunities arising from liquidity needs forcing other participants to unwind current positions (such as short selling based on perceptions that price points leading to margin calls will be reached).

Reflecting these concerns, there may be renewed interest in some variant of the “Tobin Tax”, a proposal by Nobel prize-winning economist James Tobin originally

suggested for application to foreign exchange markets. The proposal (often described as “throwing sand in the wheels”) envisages some small tax rate on asset transactions which penalizes, and thus inhibits, short term trading, but has little effect on long term position taking.

Increased attention is also likely to be given to the inherent agency problems in the financial sector. The sub prime crisis reflects, at least in part, the lack of accountability and wrong incentives for mortgage originators and securitisers who were not exposed to the risk associated with mortgages and structured products created and on-sold.² Many investors were sold products with unsuitable risk characteristics by financial product sellers and financial advisers with remuneration structures linked to sales volume, which generated conflicts of interest.

Focusing solely on the sellers of financial products, however, only addresses part of the problem. There is a fundamental disjuncture between the sophistication of financial products created and the competence of both investors and borrowers to fully understand the risk and return (or cost) characteristics. And the lack of financial sophistication applies at both retail and wholesale level! Finding mechanisms for inducing (or preventing) the financially unsophisticated from allowing greed to outweigh common sense is indeed challenging. Compulsion, prohibitions, specification of default options, taxes and subsidies, are tactics which warrant attention (and some of which have been used in dealing with retirement financing).

Going forward, the financial system is bound to be a more subdued place for at least a few years. The excesses of financial engineering will not return for a while, although relatively simple financial innovations, such as basic securitization techniques, should eventually recover. But even here, there is the potential for improvements on the basic model such as use of the “covered bond” approach common in Europe, where the securities issued remain a liability of the bank originating the mortgages. And quickly winding down the role of governments in purchasing mortgage backed securities (at

² While it has transpired that many financial institutions retained some exposures to the financial products they created, complexity of those institutions and resulting agency, governance and communications problems suggest that it is not clear that senior decision makers were aware of the full extent of that risk bearing.

prices that cannot be assessed as appropriate for the risk involved, given the current absence of a private market) is an important agenda item.

But probably the major dilemma lies in the likelihood of increased concentration and inter-linkages in the financial sector. Major banking groups dominate not just banking, but also funds management, financial advising and planning, and securities businesses. Most of the other participants in the financial sector are dependent upon them for at least some services crucial to their business. Payments services, prime brokerage, and stand by liquidity facilities are some examples.

In these circumstances, as has so recently been demonstrated, Governments are simply not able to adopt a *caveat emptor* posture and allow such institutions to fail. And permitting a relatively small number of such institutions to dominate the entire financial sector brings with it the problems of concentration of power, inadequate competition, and excessive profits.

There is no hard evidence that a concentrated banking sector is more conducive to financial stability. And there is no good evidence as to whether a concentrated banking sector leads to adequate or inadequate competition in financial services. Finding the appropriate regulatory structure and framework for the financial sector which generates financial stability, adequate competition, and promotes value adding financial innovation is the challenge that lies ahead.

Kevin Davis

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Lessons from the sub-prime crisis

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Outline

- Origins of the Crisis
- Features of the Crisis
- Regulatory Responses
- Future Regulatory Responses

Origins of the Crisis

- Financial engineering and financial products
- Liquidity creation and leverage
- “Shadow banking” & risk sharing and spreading
- Inadequate public information

Features of the Crisis

- Consumer sophistication
- Incentive structures
- Outsourcing due diligence
- Regulatory avoidance
- Inadequate risk management systems
- Liquidity creation

Features of the Crisis

- “Shadow banking sector” importance
- Deposit insurance inadequacy
- “Freezing” of funding and asset liquidity
- Liquidity support facility arrangements
- Inadequacy of risk based capital
- Globalization issues
- “Flight to quality” issues

Regulatory Responses

- Protection of national banking systems
- Liquidity Creation/restoration
- Bail Outs
- Temporary regulations

Future Regulatory Issues

- Central Bank targets
- Macro-prudential policy
- Mark-to-market accounting
- Deposit Insurance
- “Too big/important to fail”
- Automatic recapitalization stabilizers

Future Regulatory Issues

- Basel II
- Domain of Prudential Regulation
- Reporting and Information Requirements
- Promoting organized exchanges
- Transactions taxes and volatility

Future Regulatory Issues

- Governance and agency problems
- Financial consumer protection
- Securitization structures
- Financial sector concentration



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 2.3

Indonesia

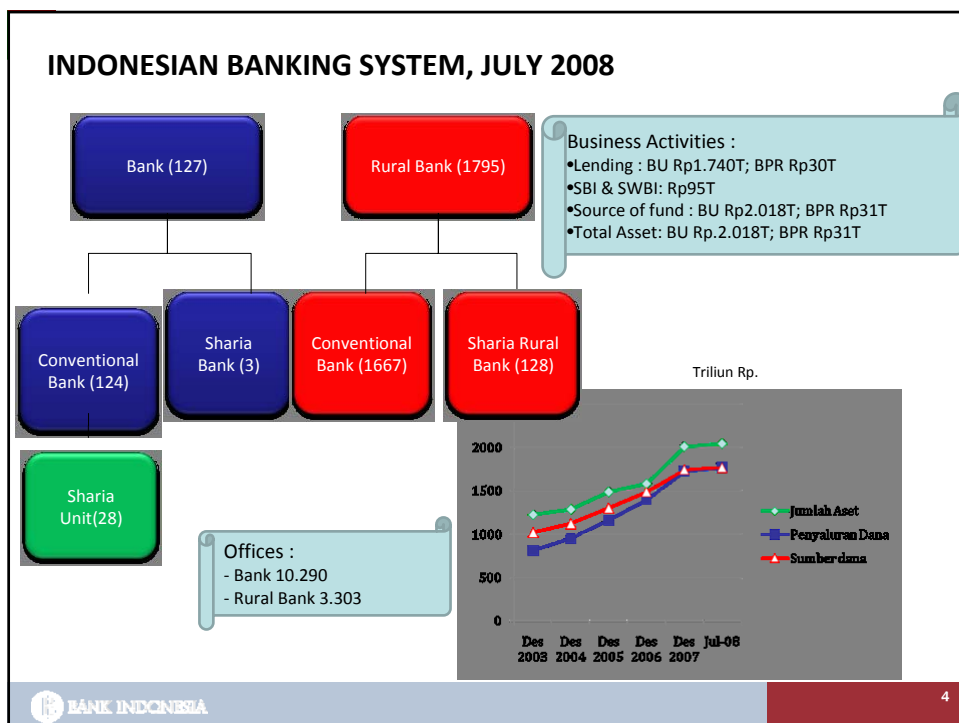
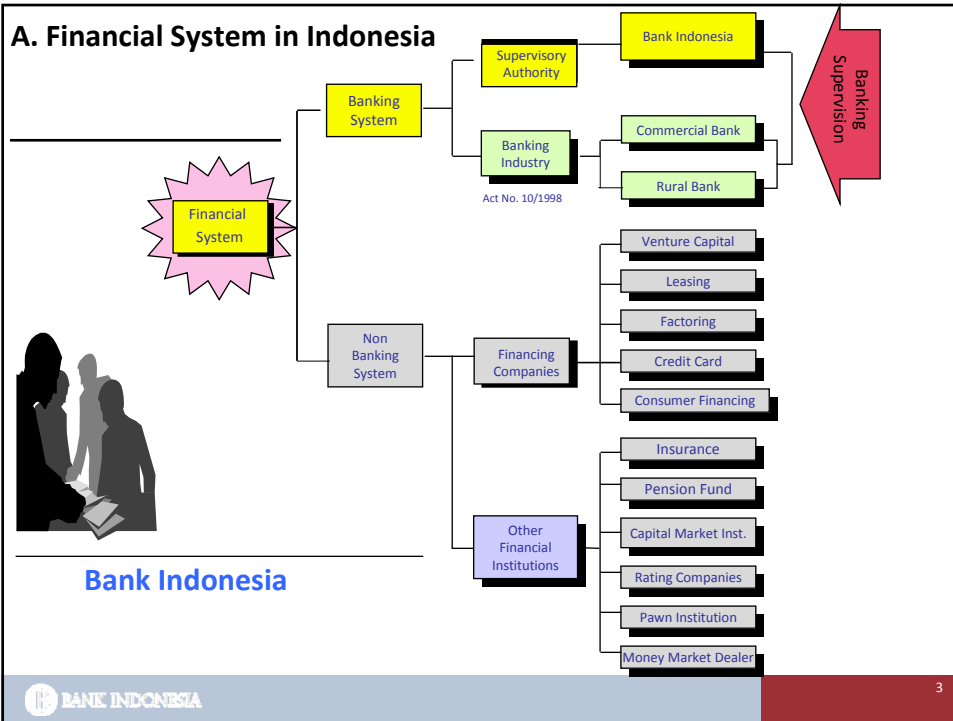
IMPACT OF CURRENT GLOBAL CRISIS TO INDONESIA'S ECONOMIC

APEC MEETING :
Enhancing Risk Management and
Governance in the Region's Banking
System to Implement Basel II and to
Meet Contemporary Risks and Challenges
Arising from the Global Banking System

DIDIK MADIYONO
MIRZA YUNIAR
Bank Indonesia
8 - 11 December 2008

AGENDA

- **Current Indonesia's Banking Policies**
 - A. Indonesian Financial System
 - B. Risk Based Supervision
 - C. Good Corporate Governance
 - D. Basel II
- The global financial crisis
- Implication of global crisis
 - Economic Condition
 - Banking Industry Condition
- Policies Respond
- Closing



C. RISK BASED SUPERVISION

The Differences Between Compliance & RBS

Compliance

- Picture drawn on the past
- Based on accounting record
- Point-in-time and surprise entry
- Same scope
- Legal entity approach
- Checklist of management questionnaire

RBS

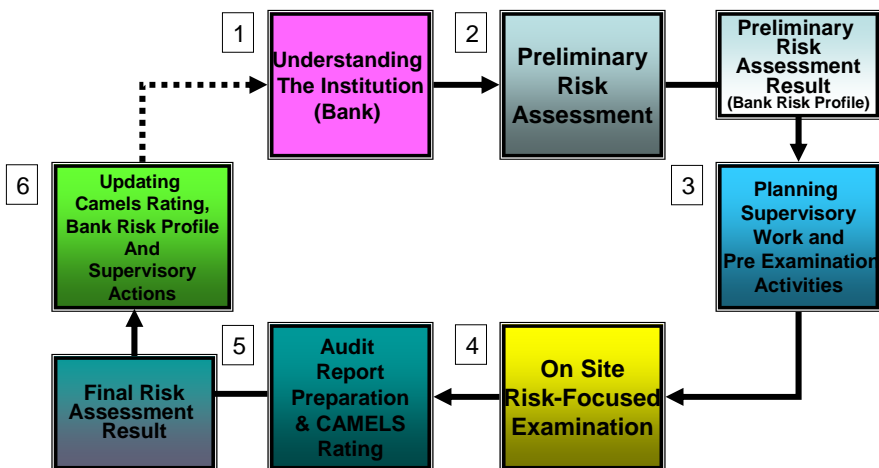
- Historical figures, Forward looking & judgement
- International Standard (BCP)
- Continuous supervision and meeting with board
- Prioritized scope
- Business line/activity (focus on areas with the greatest risk)
- Risk management process and internal control

5

5

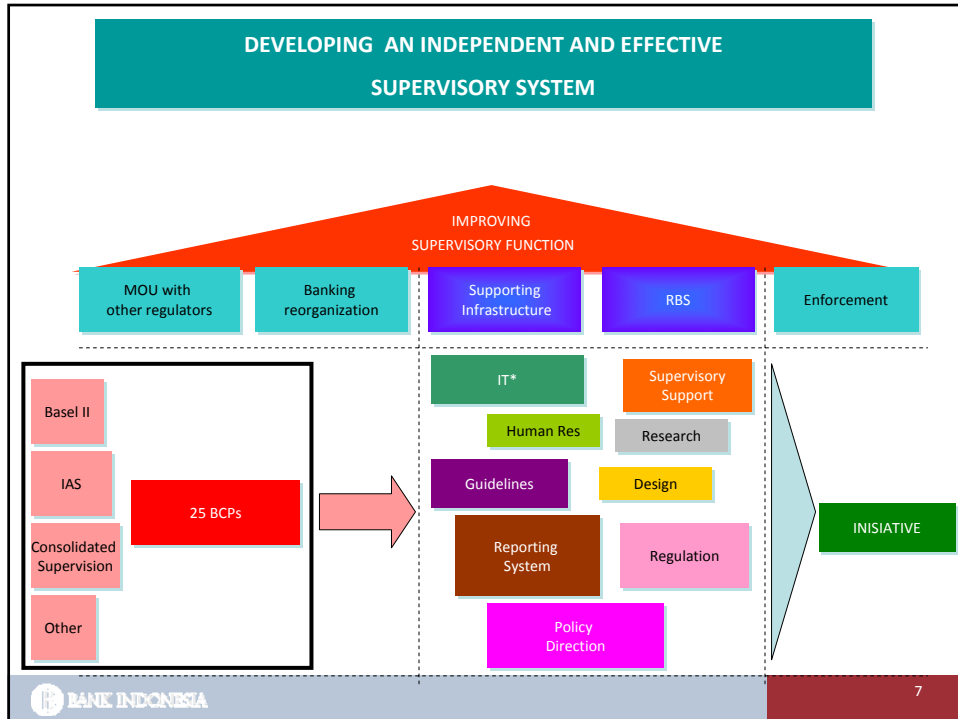
C. RISK BASED SUPERVISION

Integrated Process of RBS



6

6



Risk Management

The Scope of Risk Management:

- Active Supervision by the Board of Commissioners and Board of Directors
- Adequacy of policy, procedure and establishment of limits
- Adequacy of processes of identification, measurement, monitoring and control of risks; and the Risk Management Information System , and
- Comprehensive Internal Control System

Risk Management

Requirements for implementing Risk Management :

- A large scale bank with highly complex business operation shall be required to apply Risk Management for all types of risks (credit, market, liquidity, operational, legal, reputational, strategic, compliance risk)
- A less than large scale bank with highly complex business operations shall be required to apply Risk Management for at least the 4 (four) types of risks.

9

Prudential Regulations

- Capital Adequacy Ratio (CAR)
- Asset Quality
- Provision of Asset Quality
- Legal Lending Limit (L3)
- Net Open Position
- Liquidity

10

D. GOOD CORPORATE GOVERNANCE

- Bank Indonesia issued Regulation No. 8/4/PBI/2006 about Good Corporate Governance (GCG) for Banks amended by Regulation No. 8/14/PBI/2006.
- The regulation requires banks to implement GCG principles (TARIF- Transparency, Accountability, Responsibility, Independency, Fairness), which is reflected in :
 - Board Commissioners and Directors roles and responsibilities;
 - Committee's establishment and its functions to uphold GCG; serta
 - Others :
 - Functions of compliance, internal auditor, external auditor;
 - Risk Management;
 - Loan disbursement to related party and large exposure;
 - Bank Strategic plan; and
 - Transparency of bank condition and financial statement.
- Bank must carry on *self assessment* and provide BI with GCG Implementation Report.

Finished Deliverables

- Conducted a *pilot project self assessment*, by circulating Guidelines of Bank Self Assessment to all banks to determine bank's preparedness in implementing GCG and receive feedback for improvement.
- ***The self assessment*** is intended for initial preparation in order to accelerate the process of identification and analysis of bank's weaknesses and to propose follow up actions and timeline for corrective action before the obligation of self assessment is enacted in end of 2007.

GCG Programs

- To encourage banking forum activities for sharing knowledge and experience in implementing GCG in banking system;
- To issue Circular Letter with regard to Implementation of GCG for Banks;
- To conduct education and training programs about GCG regulation;
- To review dan evaluate GCG implementation;
- To have close relation and cooperation with other institutions to develop and improve the implementation of GCG in banking system.

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E. Basel II : Policy Direction

- Basel II will be implemented starting from year 2010 due to the current global financial crisis.
- The implementation of Pillar 1-Basel will commence with the least sophisticated approach as follows :
 - *Standardized Approach* – credit risk;
 - *Basic Indicator Approach* – operational risk.
- In managing market risk exposure, banks can adopt standardized model. Banks are opt to apply internal model approach, subject to supervisor's approval.
- Any banks capable of meeting preconditions and prerequisites adequately will be allowed to move to more advanced approaches upon supervisors approval including implementation of Advanced Measurement Approach (AMA) in operational risk.
- It is expected that by year 2011 the Framework will be applied in full scope covering all pillars
- BI's preparatory agenda : . Year 2008 issued regulation on Capital Adequacy Requirement based on Basel II, IAS 39. Year 2009 : Bi will issue regulation on credit risk and operational risk based on Basel II; supervisory manual to do SREP ; *exit policy* regulation

Banks are obliged to implement standardized approach by year 2010 at the latest

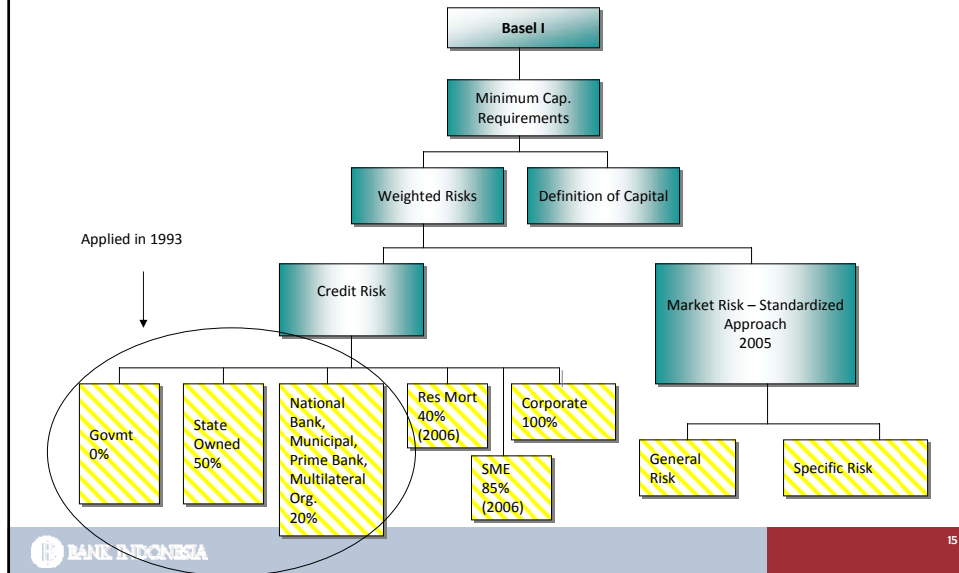
2009

Banks could migrate to a more advanced approach by year 2011 subject to BI's approval

2011

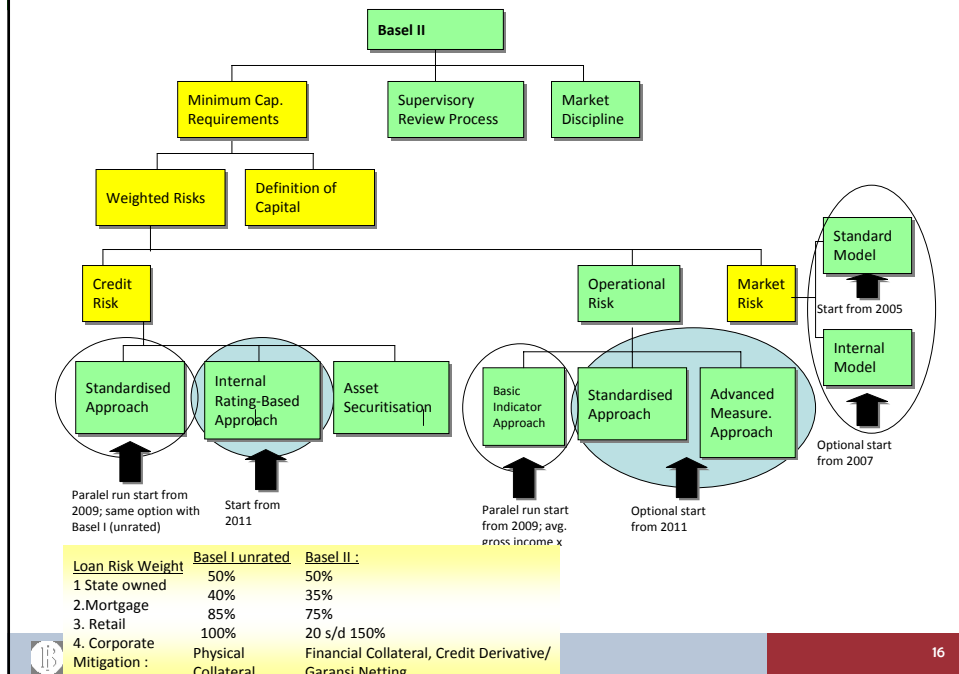
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PILLAR 1 : FRAMEWORK BASEL I



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PILLAR 1 : Basel II – 2010 Implementation



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Basel II Challenges

- **Information Technology :**
- **Pillar 2 Implementation :**
 - The beauty of pillar 2 : flexibility in implementation depend on bank's size and complexity.
 - Challenge for Bank Indonesia :
 - How supervisors exercise judgement
 - How to improve supervisory framework according to 25 BCPs, IAS, Consolidated Supervision and other *international best practices* .
 - Improvement of supervisory system to monitor bank's monthly report.
 - GCG and Risk Management in supervisory process.

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Challenges for Banks

Pillar 1

Credit Risk

- ✓ Mapping of collateral :
 - ✓ For each facility
- ✓ Exposure category :
 - ✓ Risk weight mapping
 - ✓ Calculation of provision
- ✓ External Credit Assessment Institutions (ECAI)
 - ✓ Mapping ECAI to risk weight

Operational Risk

- ✓ Mapping financial statement to capital charge calculation

Market Risk

- ✓ Subject to Basel I,
- ✓ If banks opt to internal model, then banks should have adequate understanding including senior management, treasury, internal control and risk management unit.

IT related issues

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Challenges for Banks

Pillar 2

- ✓ How banks conduct ICAAP in considering the operation's scope and complexity of all banks ?
- ✓ How to cover risks not yet calculated in Pillar 1 ?

To Strengthen
Risk
Management

Pillar 3

- ✓ Provide better quality of information and transparency without breaching *proprietary* and *confidential* matter.

To Improve
Market
Discipline

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AGENDA

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- Policies Respond
- Closing

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IMPLICATION OF GLOBAL CRISIS

- *Liquidity squeeze* caused by the diminishing confidence and difficulties to obtain loans lead to capital flight to world financial center in USA and other industrial countries.
- World recession influencing the export growth of developing countries which the developed countries become their export target.
- Minimum impact to Indonesia's economic and financial condition due to limited holding of structured products and notes issued by international financial institutions.
- Weakness in Indonesian financial system as source of Banking Crisis in 1997/1998 has been reduced :
 - Higher CAR of banking industry (16%) above minimum threshold 8%
 - Better asset quality (NPL<4%)
 - No breaching in legal lending limit
 - Prudential regulation encourage banks to improve governance, transparency and risk management quality
 - Established financial safety net

IMPLICATION OF GLOBAL CRISIS

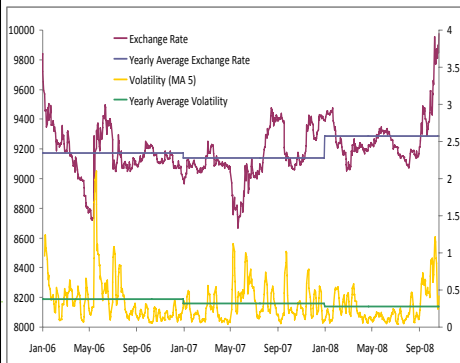
- Economic grows in slower pace since QIII-2008.
- Current account tend to be deficit along with the declining export and inclining import.
- Foreign exchange reserve in QIII-2008 reaches USD57.1 billion of 4.2 months of import and payment of government foreign debt but as of December 2008 is decreasing to USD50.2 billion.

IMPLICATION OF GLOBAL CRISIS

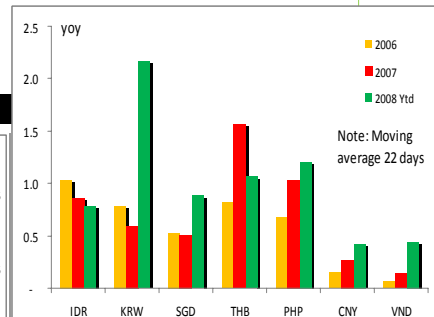
Exchange Rate

Rp is depreciating but still quite stable....

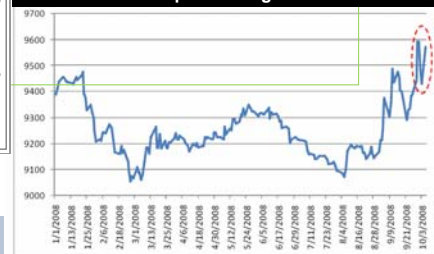
Level & Volatility Rupiah



Comparison of Volatility in Region



Rupiah During 2008



IMPLICATION OF GLOBAL CRISIS

Exchange Rate

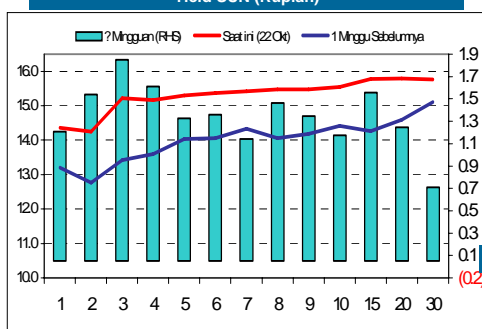
Currencies in Asian Region facing depreciation due to high demand of USD. As of 27-Oct, IDR has weakened 17% against USD year to date.

Exchange Rate	Early 2008	Change (%)				
		End of Aug 08	End Of Sept 08	30-Oct-08	30 Oct 08 to 30 Sep 08	30 Oct 08 to 1 Sep 08
JPY	111.65	2.7	6.2	13.0	6.4	9.2
KRW	937.6	-13.8	-22.3	-26.1	-4.9	-12.0
SGD	1.4396	1.7	0.7	-1.6	-2.3	-2.6
THB	29.9	-12.7	-11.8	-14.2	-2.7	-1.5
IDR	9390	2.6	0.05*	-12.2	-10.4	-14.3
PHP	41.23	-10.1	-12.4	-15.3	-3.4	-5.0
EUR	1.4679	0.3	-2.4	-11.7	-9.0	-11.2
NZD	0.7745	-9.9	-14.6	-29.6	-13.1	-16.6
CNY	7.2934	6.7	7.0	6.8	0.3	0.0
VND	16000	-3.2	-3.6	-5.0	-1.4	-1.7
MYR	3.3105	-2.5	-3.8	-6.3	-2.6	-3.4

* IDR end position is on Sep 26th 2008

IMPLICATION OF GLOBAL CRISIS

Yield SUN (Rupiah)



SUN (T-Bill) market is narrowing lead to increase in yield and plunge of SUN price and become 70%

Capital Market



Capital Market Index



- The plummeted stock index around 10,38% (higher than other world stock exchange 4-5%) and unhealthy market practice lead to suspend of capital market 8-10 October 2008.
- Government has prepared fund to buyback state-owned companies stocks.

Capital Market

Capital Market Index in other countries also plummet down...

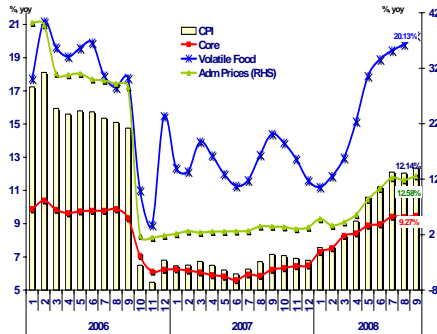
Equity Index	Early 2008	Change (%)				
		End of Aug 08	End Of Sept 08	22-Oct-08	22 Oct 08 to 29 Sep 08	22 Oct 08 to 1 Sep 08
AS	13044	-11.5	-16.8	-35.8	-17.8	-26.2
Eropa	3635	-19.8	-27.5	-39.6	-14.0	-23.3
Jepang	15308	-14.6	-26.4	-43.3	-26.1	-32.4
Malaysia	1436	-23.3	-29.0	-37.4	-11.3	-17.8
China	5273	-54.5	-56.5	-64.0	-17.3	-18.5
Filipina	3617	-25.7	-29.0	-42.2	-19.7	-22.1
Singapura	3444	-20.5	-31.5	-47.5	-22.9	-32.9
HongKong	27561	-22.9	-34.6	-48.7	-20.2	-31.8
Indonesia	2732	-20.7	-32.9*	-49.8	-24.7	-36.3
Korea	1853	-20.5	-21.9	-40.2	-22.1	-19.8
Thailand	843	-18.8	-29.2	-45.8	-22.6	-31.1
Taiwan	8323	-15.3	-31.3	-42.8	-18.0	-28.6
Vietnam	921	-41.5	-50.4	-59.6	-21.7	-30.5

* JCI's end position is on Sep 29th 2008

Inflation rate is predicted to become moderate

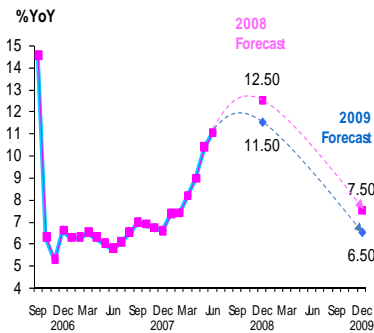
The effect of oil price increase in May 2008 has diminished in August. On the other hand, the decrease in global commodity price is predicted to be able to lessen the inflation pressure.

Inflation Component



Source: Bank Indonesia

Inflation IHK



Inflation Outlook

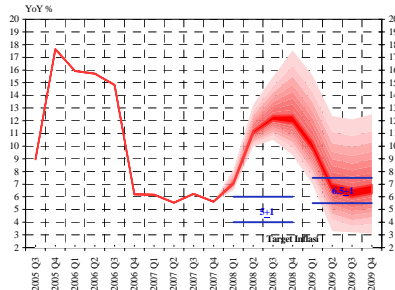
- Inflation pressure is alleviated from 11,5-12,5% (2008) to 6,5-7,5% (2009).
- The decrease is contributed mostly by low imported inflation.

Projection of Inflation 2008-2009

		YoY			
		CPI	Core	VF	Adm
2008	Q1	7.1	7.0	13.9	3.1
	Q2	11.0	8.8	18.7	10.3
	Q3	12.1	9.3	20.1	12.6
	Q4	11.9	9.9	16.2	13.6
2009	Q1	10.0	8.6	13.3	11.2
	Q2	6.7	5.7	8.3	7.7
	Q3	6.4	5.3	8.5	7.6
	Q4	6.8	5.3	8.6	9.1

Note : Since June 2008, BI estimates the aggregation of the CPI.

Fan Chart Inflation



KEY ECONOMIC INDICATOR

	2005	2006	2007	2008E*	2009E*
National Accounts					
Real GDP (% yoy)	5.7	5.5	6.3	6.2	5.8
Domestic demand ex. Inventory (% yoy)	5.8	3.7	6.0	7.4	6.8
Real Consumption: Private (% yoy)	4.0	3.2	5.0	5.5	5.5
Real Gross Fixed Capital Formation (% yoy)	10.8	2.9	9.2	12.7	9.5
GDP (USD Bils.) — nominal	287	364	433	486	567
GDP per capita (USD) — nominal	1,308	1,641	1,925	2,132	2,460
Open Unemployment Rate (%)	10.3	10.3	9.8	8.0	7.1
External Sector					
Exports, fob (% yoy, US\$)	22.9	19.0	14.0	10.0	3.0
Imports, fob (% yoy, US\$)	37.2	6.3	15.4	25.0	6.0
Trade balance (US\$ Bils.)	17.5	29.7	32.8	23.2	20.7
Current account (% of GDP)	0.1	3.0	2.4	0.4	0.1
External debt (% of GDP)	48	37	30	26	23
International Reserves-IRFCL (US\$ Bils)	34.0	42.6	56.9	60.0	64.0
Import cover (months)	4.3	4.5	6.2	4.6	4.6
Currency/US\$ (period average)	9,711	9,167	9,139	9,325	9,325
Other					
1M SBI (BI policy) Rate (% period average)	9.0	11.9	8.6	8.7	9.3
Consumer prices (% period average)	10.5	13.1	6.4	9.8	9.5
Fiscal balance (% of GDP; FY)	-0.5	-1.0	-1.3	-1.3	-1.3
S&P's Rating - FCY	B+	BB-	BB-	BB-	BB

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Banking Performance August 2008*






*Review data Juli'08 -Ags'08

National banking industry has showed resilient to current turmoil :

- High CAR level (Agustus 2008 16,0%).
- Third Party Fund grows in slower pace and even with negative growth during Ags'08. Working capital loan is increasing which make LDR augmented from 79,0% (Juli'08) to 81,6% (Ags'08). The increment of loan decrease NPL ratio.
- Monthly Net Interest Income in Ags'08 start to diminish. Bank's interest rate becomes thinner but ROA is relatively stabil.

Total Asset	↑	Increase by Rp9,5 T (0,5%), to Rp2.066,6 T (Des'07: Rp1.986,5 T). Increase yoy Rp246,2 T (13,5%), ytd increase Rp80,2 T (4,0%).
Credit	↑	Increase by Rp35,7 T (2,9%) from Rp1.210,9 T to Rp1.246,6 T. Increase yoy Rp309,8 T (33,1%), ytd increase Rp200,9 T (19,2%).
Third Party Fund	↓	Decrease by Rp4,8 T (0,3%) from Rp1.532,9 T to Rp1.528,1 T, which comes from demanda deposit (decrease by Rp18,1 T) and saving deposit (decrease by Rp2,8 T), while time deposit increase Rp16,1 T. Increase in yoy Rp135,5 T (9,7%), ytd up Rp17,4 T (1,2%).
NPL	↑	Nominal NPL increase Rp0,2 T. NPL Gross and Net improving, decrease from 4,04% and 1,57% to 3,95% and 1,42%, due to increase in loan and formation of loan provision.
Earning & Profitability	↓	NII Ags'08 (Rp9,40) decreases from NII Juli'08 (Rp9,63 T). ROA is still at level 2,7%.
Capital	↓	CAR decrease from 16,2% to 16,01%, due to augmented loan.

Banking Risk Profile

Risk	Level	Trend
Liquidity Risk 	High rasio <i>liquid asset to non core deposit</i> 84,89%, decrease from Juli'08 (91,98%). The decrease has taken effect since January 2008.	Increasing. Along with the decrease in <i>secondary reserves</i> , whilst financial market and capital market is still under tight condition
Market Risk 	Moderat – the matured bank's position which generally holding short position in short term under increasing interest rate environment will give bigger pressure on SUN's price.	Increasing. Market risk is tend to increase especially due to the volatility of Rp and SUN (Treasury Bill) price.
Credit Risk 	Moderat - NPL nominal increasing a little (Rp0,2 T Ags'08) whilst NPL ratio sedikit turun, yaitu dari 4,04% (Juli'08) menjadi 3,95% (Ags'08).	Potentially increasing according to increase in interest rate and strengthened USD to Rp while demand of consumer goods decreasing then the NLP tend to increase in the future.
Profitability 	Decreasing – Monthly NII declines a little from Rp9,63 T to Rp9,40 T, but ROA is relatively stable at 2,7%.	Potentially decreasing along with trend of narrowing interest rate <i>pread</i> suku bunga and inclining NPL amount.
Modal 	Decreasing - CAR decreases (into 16,01%). There is a concern that banking capital can not commensurate its risk.	Potentially under extensive pressure along with the increase of loan growth, decrease in profit and volatility in financial and capital market local and international.

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10 Government Policies to Prevent Adverse Impact of Global Crisis (28 October 2008)

1. To supervise of foreign exchange transaction of state owned companies in one clearing house
2. To accelerate completion of foreign capital funded project
3. For State-Owned companies not to transfer fund between banks
4. To buy back T-Bill by government
5. To maximize the usage of borrowed foreign exchange from Japan, Korea and China
6. To guarantee the risk in export credit payment
7. To decrease export tax of crude palm oil into from 10% into 0%
8. Flexibility of assumption in National Income and Budget year 2009
9. To prevent illegal import
10. To scrutinize more on circulated goods

This policies is taken in order to maintain balance payment and uphold stability of financial sector as well as national income and budget credibility. ..

BANKING POLICIES TO ANTICIPATE GLOBAL CRISIS IMPACT

1. **BI has increased BI rate** by 25 bps since May 2008 up to 9,5% on 4 September 2008 to prevent *capital flight* . This is followed by increase in domestic interest rate. But as of 3 Dec 2008, the BI rate decrease 25 bps to 9.25%.
2. Issuance of Regulation Subtituting Law No. 2 year 2008 dated 13 October 2008 about amendment of Law No.23 year 1999 about **Bank Indonesia** which covers :
 - a. BI can provide loan or financing based on Sharia up to 90 days to bank to help short term financial liquidity difficulties;
 - b. Such loan or Sharia based financing must be guaranteed by accepting bank with high quality collateral which value at least equal to amount of loan or financing;
 - c. In certain financial difficulties condition which has systemic impact and potentially incur crisis harm the soundness of financial system, BI can provide emergency facility which funded by government;
 - d. Collateral form is expanded which allow loan asset as collateral of such Short Term Funding Facility (FPJP).
3. Issuance of Regulation Subtituting Law No. 3 year 2008 dated 13 October 2008 regarding amendment in UU No. 24 year 2004 about **Deposit Insurance Agency** :
 1. Increase limit of insured deposit 20-fold form Rp100 million to Rp2 billion (\$20.000) and the maximum guarantee rate raised by 75bps to 10.0% .
 2. Insured deposit must fulfil requirements :
 1. Banking fund drawing in big amount
 2. Mounting up inflation in several years
 3. Number of depositors which are under deposit guarantee program are under 90% of total depositors
 4. Occurrence of crisis threat which threaten soundness of banking system, stability of financial system and decrease of public confidence.
4. Issuance of Regulation Subtituting Law No 4 year 2008 dated 15 October 2008 about Financial System Safety Net which initiate the establishment of Financial System Stability Committee to prevent and tackle crisis.

BANKING POLICIES TO ANTICIPATE GLOBAL CRISIS IMPACT

5. BI stipulated policies to ensure adequacy of foreign exchange and Rupiah liquidity, on 14 October 2008 to provide flexibility for banks to manage its liquidity :
 - a. **Lengthen tenor FX Swap** from 7 days to 1 month (effective from 15 October 2008). This is expected to meet temporary demand of USD in order to give additional adjustment time for banks and market participants before rearrange its portfolio composition.
 - b. **Provide foreign exchange stock for domestic companies through banking system in** (take effect as of 15 October 2008), in order to increase certainty and availability of foreign exchange stock for domestic companies.
 - c. **Decrease foreign exchange reserve requirement for coventional banks and sharia based banks** from 3,0% to 1,0% (take effect as of 13 October 2008) to inject USD liquidity for banks.
 - d. **Revoke article 4 of Regulation No. 7/1/PBI/2005 to eliminate threshold of daily balance of short term foreign loan** by eliminating dengan meniadakan batasan posisi saldo harian Pinjaman Luar Negeri jangka pendek (starting from date 13 Oktober 2008). This policy is intended to alleviate buying pressure of USD because of the transfer of Rp account to foreign exchange account by foreign depositors.
 - e. **Simplification of Rp reserve requirement calculation** (take effect as of 24 Oktober 2008) from previous regulation that linked reserve requirement to LDR into statutory reserve expected to be at least 7,5% of Third Party Fund in order to increase liquidity in banking system. In transition period this policy can be applied :
 - 5% in the form of statutory reserve in Bank Indonesia.
 - 2,5% in the form of secondary reserve in SBI and/or T-Bill and/or demand deposit in Bank Indonesia. This can be fulfilled by banks 1 year after 24 October 2008 at the latest.

BANKING POLICIES TO ANTICIPATE GLOBAL CRISIS IMPACT

6. Issuance of **regulation No. 10/28/PBI/2008 regarding Purchase of Foreign Currency against IDR through Banks** in order to monitor USD transaction and limit the speculative motive of transaction which can affect Rp stability. For transaction above USD100,000 customers must provide supporting documents evidencing underlying transactions, copy of ID, Tax identification number.

POLICY DIRECTION TO IMPROVE BANKING SYSTEM RESILIENCE

- To improve loan disbursement
- To accelerate banking consolidation
- To strengthen Risk Management System
- To accelerate improvement of Risk Based Supervision
- To intensify surveillance on systemic risk.

AGENDA

- Current Indonesia's Banking Policies
 - A. Indonesian Financial System
 - B. Risk Based Supervision
 - C. Good Corporate Governance
 - D. Basel II
- The global financial crisis
- Implication of global crisis
 - Economic Condition
 - Banking Industry Condition
- Policies Respond
- Closing

CONCLUSION

- The ongoing current global financial crisis will influence national, regional and international economic and financial performance condition in the future.
- Regulators will take necessary policies and actions in order to strengthen financial institution condition and improve resilience and stability of financial system
- Coordination and cooperation between local and cross border regulators and authorities is very important to anticipate and mitigate adverse impact of the crisis.





Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 2.3

Malaysia



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Risk Management & Governance Practices in Malaysian Banks & Key issues faced by regulators

8 December 2008



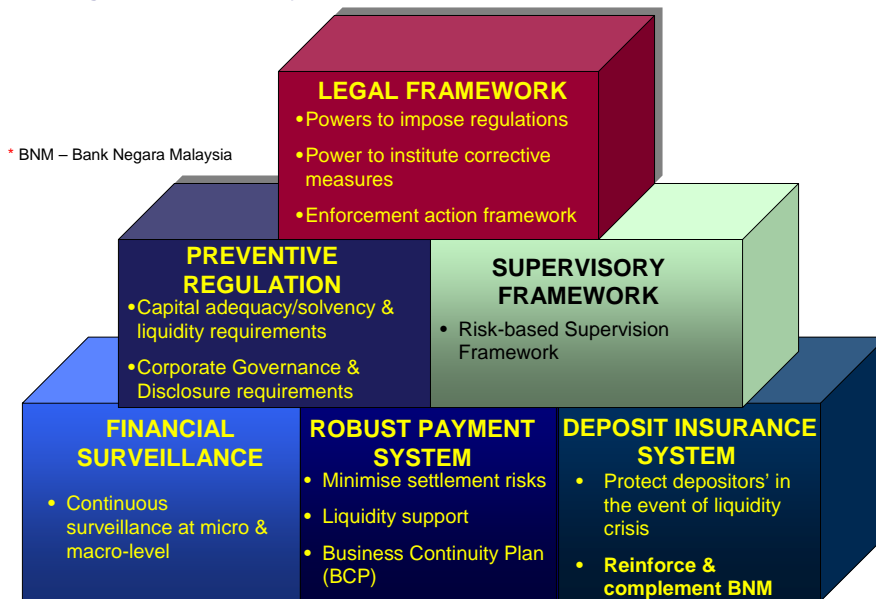
BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Scope

- System & frameworks of financial institution regulation in Malaysia
- Current Risk Management Practices in banking institution.
- Current Governance Practices in banking instituion.
- Regulatory challenges in risk management & governance practices in the current global financial crisis environment

System & framework of financial institution

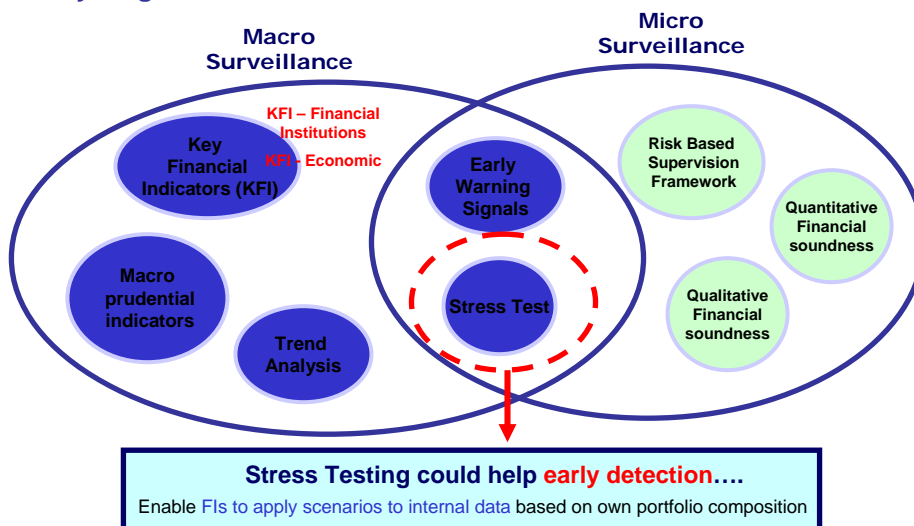
Robust legal, regulatory & supervisory framework are instrumental towards ensuring financial stability...prevention is better than cure



3

System & framework of financial institution

With robust mechanisms in place, failures could be detected at early stages...



* FIs – Financial Institutions

4

Risk Management Practices

Credit Risk

Risk Identification	<ul style="list-style-type: none"> Identify all types of risk that the bank exposed to when they grant loans to customers Identify risk that may arise from introduction of new products Produce credit policy that defines risk tolerance, responsibilities & accountabilities Communication of credit policies Sound credit granting process Conduct credit analysis Performing stress testing & scenario building
Risk Measurement	<ul style="list-style-type: none"> Credit risk rating system (for all portfolio) to quantify all credit risk Use credit risk rating system as a tool for portfolio management & decision making
Risk Control	<ul style="list-style-type: none"> Imposition of risk tolerance limit Quality & independence of internal credit review Management of problem credit Internal control, segregation of duties, dual control Credit administration Accuracy, completeness & integrity of MIS & reports Compliance with regulatory & accounting guidelines
Risk Monitoring	<ul style="list-style-type: none"> Updated MIS Credit risk rating system & reporting that accurately stratifies credit quality Adequacy of portfolio management

5

Risk Management Practices

Market Risk

Risk Identification	<ul style="list-style-type: none"> Identify, assess and review market risk within existing and new products New product approval program ensures that all risks in new products are identified, measured and managed Communication of credit policies Sound credit granting process Thorough credit analysis Performing stress testing & scenario building
Risk Measurement	<ul style="list-style-type: none"> Employ various risk measurement tools to identify market risk - Value at Risk, Earning at Risk, Duration Analysis, Simulation & Sensitivity Analysis
Risk Control	<ul style="list-style-type: none"> Formulate framework, policies and procedures to govern market risk activities Establish various market risk limits and triggers to cap/manage market risk exposure within acceptable risk levels Conduct daily/periodic monitoring to ensure adherence to approved limits and policies
Risk Monitoring	<ul style="list-style-type: none"> Prepare scheduled reporting to senior management and ALCO/RMC/ Board to facilitate informed decision-making Prepare exception reporting on risk limits/policy breaches to ALCO/RMC/Board in accordance to established policies & procedures

6

Risk Management Practices

Operational Risk

Risk Identification	<ul style="list-style-type: none"> Risk Control Self Assessment is an ORM tool to Identify operational risks inherent to the respective department in the bank.
Risk Measurement	<ul style="list-style-type: none"> Incident Management Data Collection is an ORM tool used to log in operational risk incident occurred in the Bank
Risk Control/ Monitoring	<ul style="list-style-type: none"> Key Risk Indicators report to Risk Management Committee and Board of Directors

7

Current Governance Practices

Board	<ul style="list-style-type: none"> Approving strategic issues Ensure approved credit standard & all other practices consistent with BI's capital strength, management expertise & risk appetite. Also in line with BI's mission & overall business strategies Board receive reports on overall credit exposure of the BIs <p>Board Committee</p> <ul style="list-style-type: none"> Credit Review Committee Audit Committee Risk Management Committee Remuneration & Establishment Committee Nomination Committee
Senior Management	<ul style="list-style-type: none"> Enforcing strategies approved by Board Develop policies & procedures Ensure delineation of line of authority & responsible for managing credit risk Proper channel of communication to ensure credit policies & procedures are clearly communicated Ensure adequate operational procedures, internal controls, system Comprehensive risk reporting process/ management information system Sufficient resources & competent personnel Independent assessment by risk management <p>Senior Management Committee</p> <ul style="list-style-type: none"> ALCO – market & liquidity risk Loan Committee Executive Risk Committee – Credit & Operational risk

8

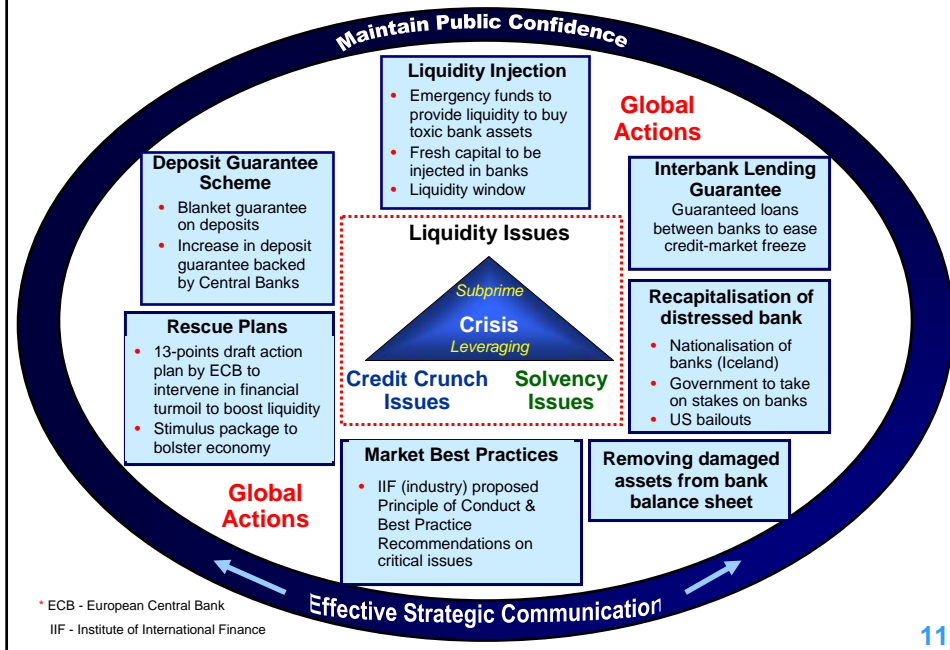
Current Governance Practices

Independent Risk Management Function	<ul style="list-style-type: none"> • Ensure day-to-day management risk performed by business line is effective <ul style="list-style-type: none"> ➢ Credit Risk ➢ Market Risk ➢ Operational Risk ▪ Ensure Risk measurement systems and methodologies in place to support robust risk assessments
Internal Audit	<ul style="list-style-type: none"> • Assisting management & business units to detect & mitigate potential risk at early stage • Provide an ongoing review of the internal control systems and risk management processes • Report internal audit findings and recommendation to senior management & Board
Compliance Function	<ul style="list-style-type: none"> • Assist senior management in setting or reviewing policies & procedures to ensure adherence to applicable regulation and regulatory requirements • Monitor compliance with policies & procedures • Report compliance matters senior management & board

Regulatory challenges in risk management & governance practices during the financial crisis

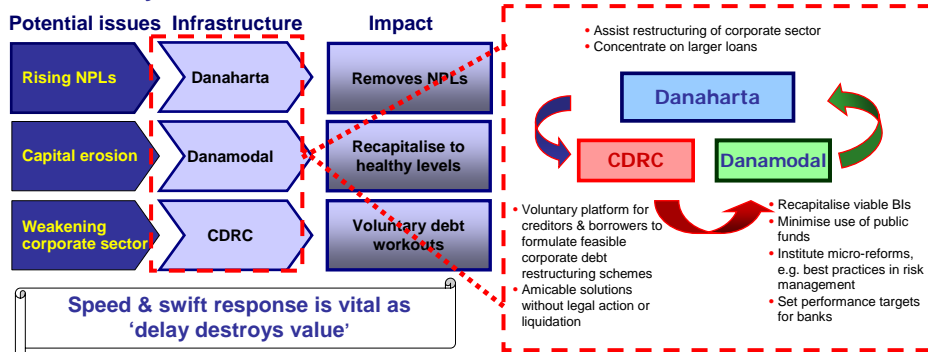
- Regulators need to be updated with the complex financial products
- To educate the Board and Senior Management on risk management culture
- To conduct stress testing, to determine vulnerabilities of financial institution during the financial crisis and if any capital injection required
- To come up with revised guidelines during the crisis
 - Loans – to allow the bank to reschedule the loans without prior approval from Central Bank
 - Securities portfolio – to allow banks to transfer the HFT portfolio to HTM
- Malaysian banks overseas expansion will result in exposure to country and regulatory risk (need to keep abreast with the operating & regulatory environment of the overseas operations)

In managing crisis, **liquidity, solvency and credit crunch issues** need to be dealt with in order to maintain confidence...

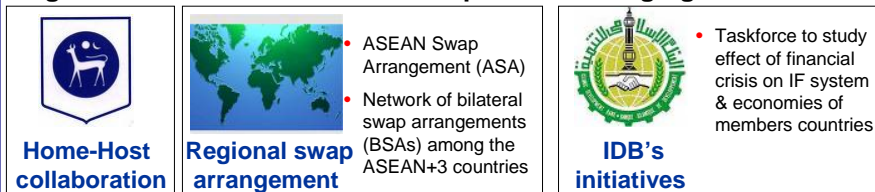


11

Pertinent infrastructure must be in place to weather unexpected storm in the financial system...



Regional & Global effort must be in place in managing crises...

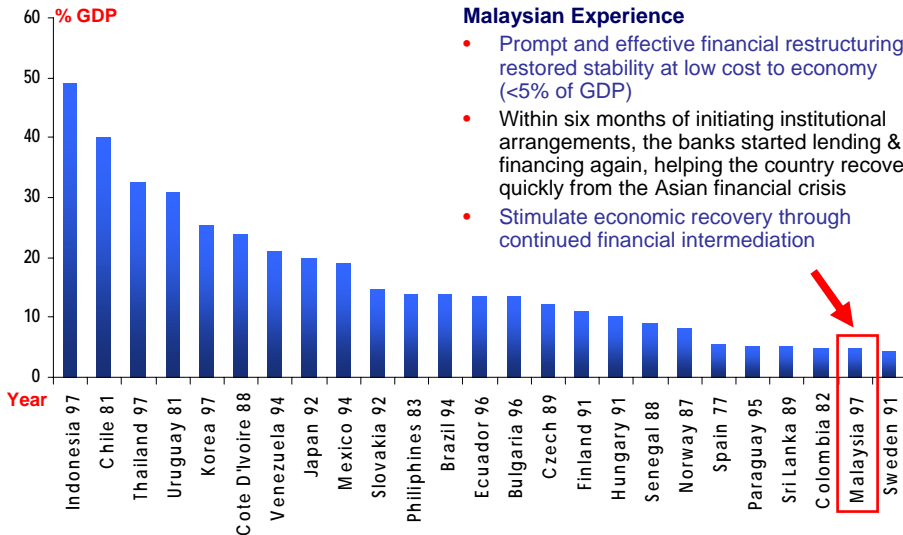


* CDRC – Corporate Debt Restructuring Committee; BIs – Banking Institutions; IF – Islamic Finance

12

Early detection and action is critical as bank failures are costly & have adverse implications on economy

Financial crisis – the cost (% GDP)



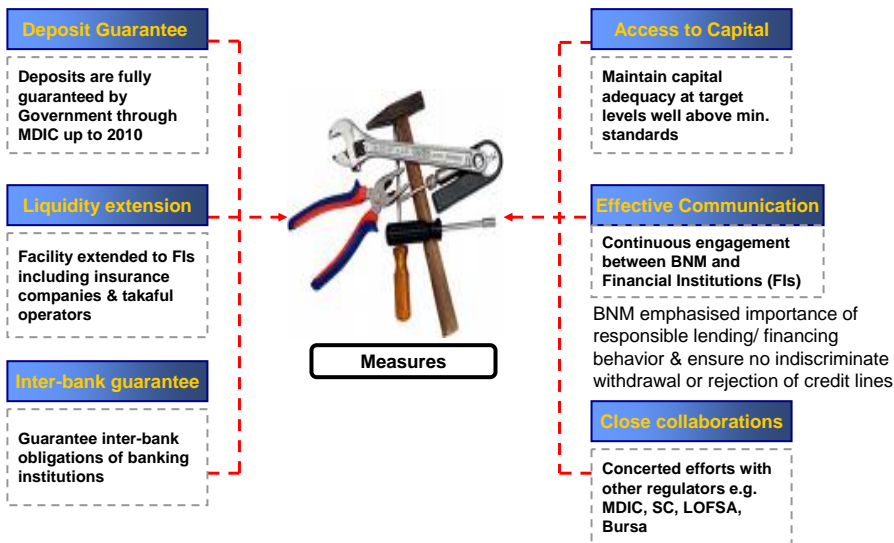
Malaysian Experience

- Prompt and effective financial restructuring restored stability at low cost to economy (<5% of GDP)
- Within six months of initiating institutional arrangements, the banks started lending & financing again, helping the country recover quickly from the Asian financial crisis
- Stimulate economic recovery through continued financial intermediation

Source: Krasno Financial Advisory, IMF & Bank Negara Malaysia

13

Malaysia: In position of strength...current measures to pre-empt crisis & to re-instill confidence...



* BNM: Bank Negara Malaysia; MDIC: Malaysian Deposits Insurance Corporation; SC: Securities Commission; LOFSA: Labuan Offshore Financial Services Authority; FIs – Financial Institutions

14

For more information on regulatory framework...



- <http://www.bnm.gov.my> - Bank Negara Malaysia
- <http://www.bnm.gov.my/fxadmin> - Malaysia's Foreign Exchange Administration system and rules
- <https://www.fast.gov.my> - Fully Automated System For Issuing/Tendering
- <http://rmbond.bnm.gov.my> - Ringgit Bond Market
- <http://iimm.bnm.gov.my> - Islamic Money Market
- <http://www.sc.com.my> - Securities Commission Malaysia
- <http://www.bursamalaysia.com> - Bursa Malaysia
- <http://bondinfo.bnm.gov.my> - Bond Infohub

THANK YOU

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Law/ Guidelines

- Central & Banking Institution Act
- Banking & Financial Institution Act
- Islamic Banking Act
- Various circulars & guidelines
 - Corporate Governance
 - Risk Management (Credit, Market, Operational)

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Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

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Session 2.3

Mexico



Mexican Financial System

Fabrizio López-Gallo Dey

2008 Workshop on Risk Management in Commercial Banks
December 2008, Shanghai

The views presented here are my own, and do not represent official positions of Banco de México



Contents

1. General Review
2. Risk Management Practices in Banking
3. Governance Practice in Banking
4. Regulatory Challenges



General Review

The Regulation and Supervision of the Mexican Financial System is in charge of the following entities:

- Ministry of Finance (SHCP)
- Central Bank (Banco de Mexico)
- Banking Commission (CNBV)
- Financial System Users Ombudsman (Condusef)

Source: Bank of Mexico



General Review

Banco de Mexico regulates the following:

- Banks' Assets and Liabilities,
- Securities, FX and Derivatives,
- Financial Trusts,
- Liquidity both in pesos and in FX,
- Lender of Last Resort,
- Payment Systems and
- Credit Bureaus.



General Review

Coordinated with other authorities Banco de México designs prudential regulation for banks:

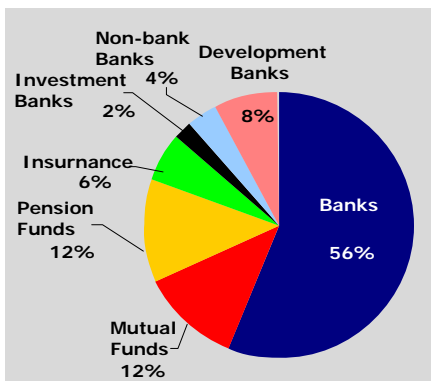
- Capital adequacy rules for banks and security traders,
- Risk concentration limits for common risk, single name and related parties,
- Loan loss reserves and provisions,
- Early warnings and prompt corrective actions.

5



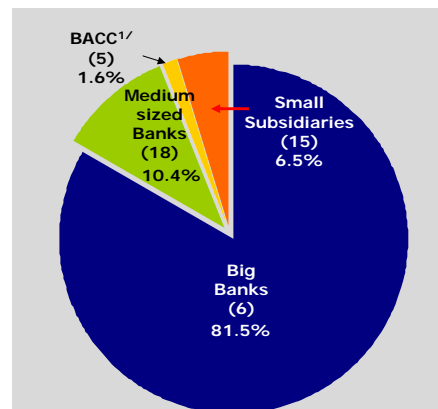
General Review

Mexican Financial System
Percent of total assets



Total Assets 1q: 7.106 Trillion pesos

Banking System Structure
Percent of total assets



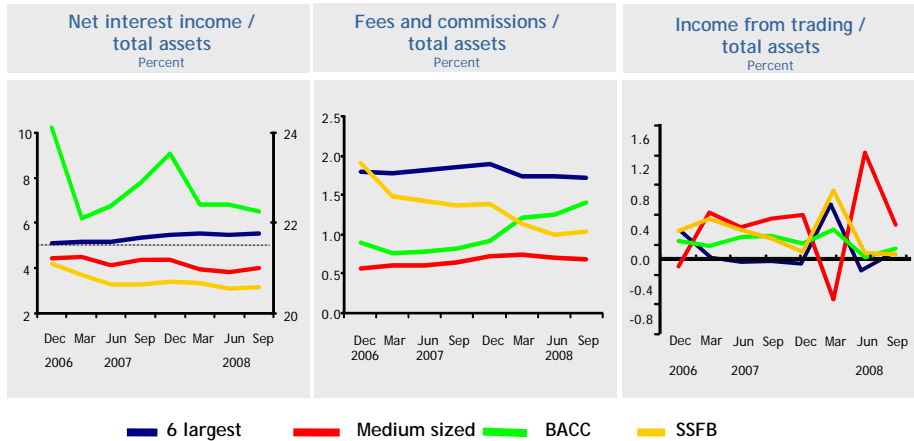
1/ BACC: Banks associated with Commercial Chains

Source: Bank of Mexico



General Review

In the 6 largest banks, net interest income has been stable as a percentage of assets (September 08).

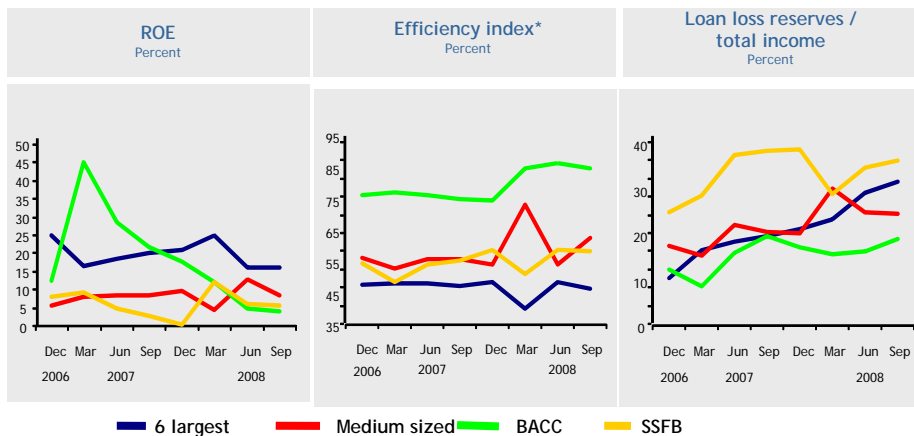


Source: Bank of Mexico and CNBV



General Review

ROE in the 6 largest banks decreased as a result of a rise in loan loss reserves and *trading losses*. ROE in BACC falls as net interest income decreases and the efficiency index rises (worsens) as a result of their expansion programs.



Source: Bank of Mexico and CNBV



Risk Management practices in banking

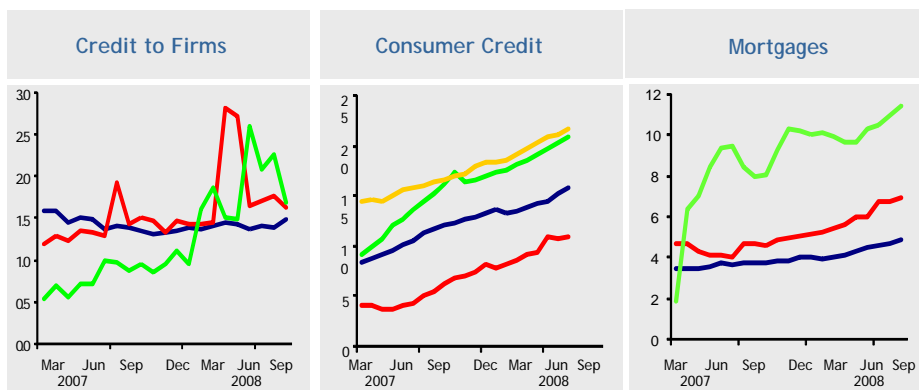
Banks should have an independent risk unit that:

- Measure all the risk both for the entity as well as for its financial subsidiaries in a consolidated basis,
- Develop and adopt risk models,
- Verify risk limits,
- Compute capital charges,
- Etc...



Risk Management practices in banking

Adjusted Delinquency Rates
Percent



Adjusted Delinquency Rates include past due loans and credit portfolio write offs.

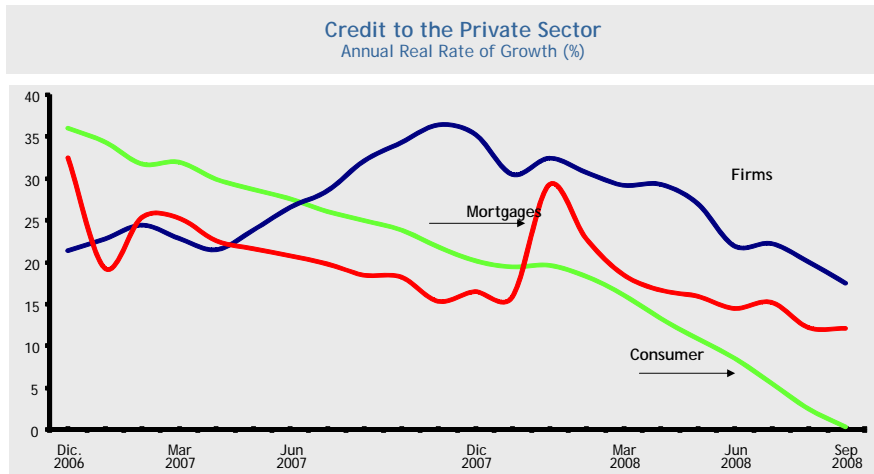
■ Six Largest ■ Medium Sized ■ BACC ■ SSFB

Source: Bank of Mexico and CNBV



Risk Management practices in banking

The growth rate of consumer credit continues to decrease.

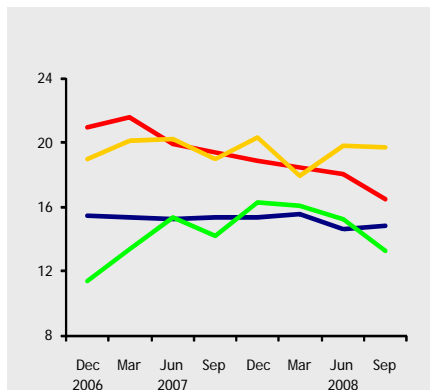


Source: Bank of Mexico

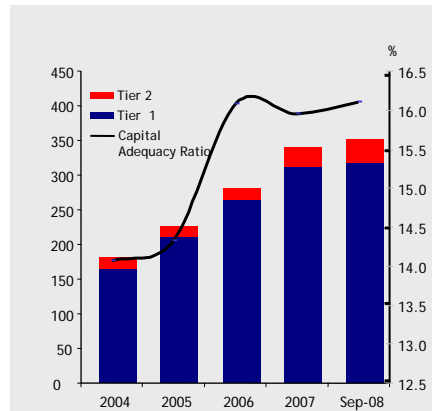


Risk Management practices in banking

Capital Adequacy Ratio
Percent



Capital Adequacy Evolution
Billion Pesos



■ Six Largest ■ Medium Sized ■ BACC ■ SSFB

Source: Bank of Mexico and CNBV



Governance Practices in Banking

- Independence between risk and business areas,
- Related parties,
- Minority shareholders.

Source: Bank of Mexico



Regulatory challenges

- Adjusting the rules for the LLR.
- Foreign parent banks.
- Regulating banks related to commerce.
- Rating Agencies.
- Liquidity risk.
- Basel III?

Source: Bank of Mexico



Thank you



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Peru



**Ministry of Economy and
Finance of Peru**

Basel II: Implementation in Peru

**Andrés Zacarías
Sofía Calderón**

General Directorate of Economic and Social Affairs

December, 2008

1

Contents

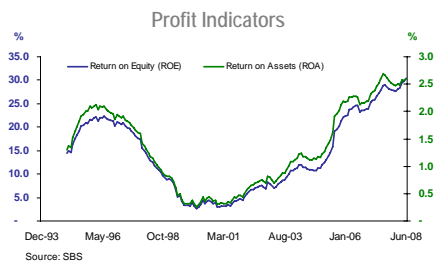
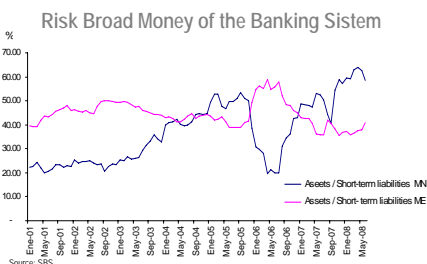
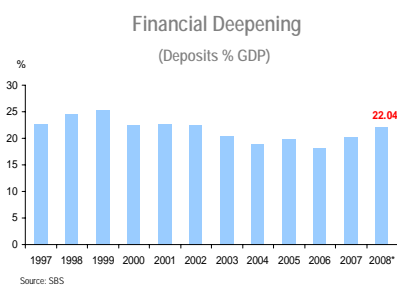
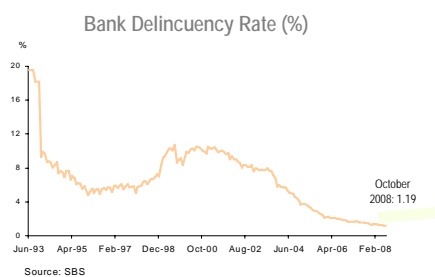
- I. Situation of Peruvian Financial System
- II. Pillars
- III. Basel II: Implementation in Peru

2

I. Situation of Peruvian Financial System

3

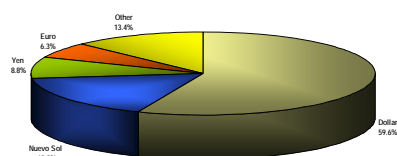
3. Financial sector consolidates more and more...



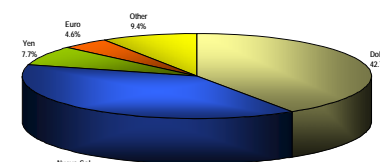
4

Prudent Debt Policy: a new profile of public debt

Public Debt Structure by Currencies



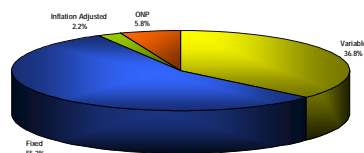
June 2006



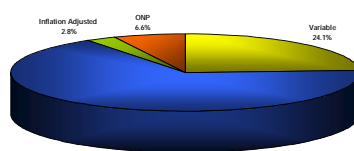
June 2008

Source: MEF

Public Debt Structure by Interest Rate



June 2006



June 2008

Source: MEF

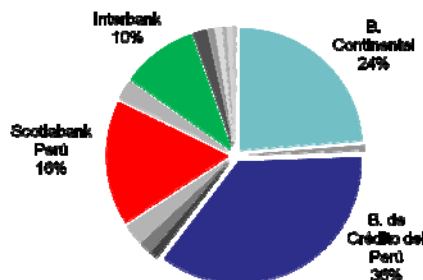
5

Peruvian Financial System Structure

Structure of Peruvian's Financial System
October 2008

	N°	Assets (%)
Bank industry	16	93.5
Financial Firms	3	0.6
Non Banking Microfinancial Institutions	36	5.9
Municipal Credit and Saving Funds	13	4.3
Rural Credit and Saving Funds	10	0.8
Edpyme	13	0.8
Total FS	55	100.0

ASSETS = US\$ 53,440 millions



6

Financial Regulation

Credit Exchange Risk (Res. 041-2005 and others)	January 2005	Sets minimum prudential standards respect to the grantings of foreign currency credits, as an additional component to define the ability to pay. Addionat provisions will be set in case of failure the requirements.
	May 2005	
Over indebtedness (Res. 1237-2006 and Res. 6941-2008)	September 2006	Commands that companies must establish in their trade policies, as well as granting, amendment and revision of revolving lines of credit, the criteria and explicit measures that incorporate explicit over indebtedness risk of debtors retailers. Additionally, sets minimum requirements for the administration of overindebtedness, otherwise additional provisions will be established under the non used portion of revolving credit lines for retail and Smes
	August 2008	

Financial Regulation

New Banks Law (DL. 1028) Legislative regulation that modifies the General Law of the Finantial System	June 2008	It allows the implementation of the new international standards of capital allocation (Basel II). Increases the minimum capital ratio of 9.1% to 10% (8% at International Standards). Establishes additional capital requirements accorging to risk profile.
Dynamics Provisions (pre publication) New Rules for the Evaluation and Classification of debtors.	October 2008	It sets new criteria for the classification of debtors It establishes greater provisions for the revolving credit lines not used of MES (Micro enterprise) and retail. Establishes a framework of cumulative provisions during the growing phase of economic cycles.
New Capital Requirements (pre publication) Regulations capital requirement for market risk Regulations capital requirement for operational risk For publishing Regulations requirement for credit risk capital Regulations for a capital risk securitization	October 2008	It allows the peruvian scheme of capital allocation to international standards. It demands additional requirements for operational and market risks. Makes more risk-sensitive the calculus of capital requirements for credit risk.

II. Pillars

9

Background

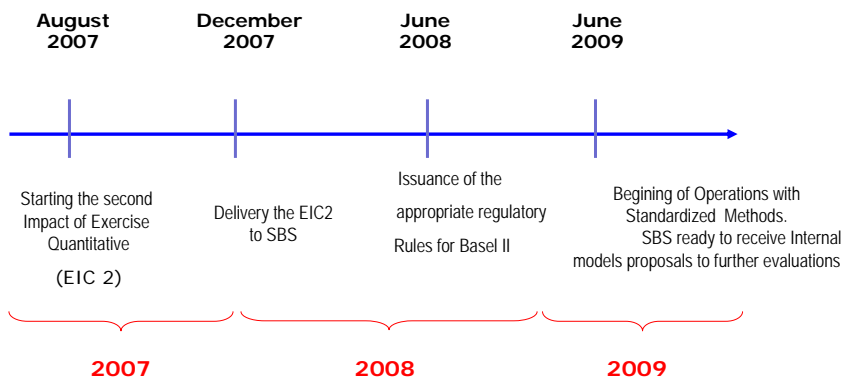
- According to the recommendations of the Basel Committee for Banking Supervision, the Superintendancy of Banks, Insurance Companies and Pension Fund Managers of Peru – SBS decided to adopt the International Convergence of Capital Measurement and Standards, or the New Capital Accord - Basel II (NAC) for the domestic financial system.
- This means, for calculation purposes of regulatory capital, the use of standardized methodologies, on a mandatory basis.

Pillars: Basel II

- **Pillar I**
 - Capital requirements
 - Credit Risk
 - Market Risk
 - Operational Risk
- **Pillar II**
 - Supervisory Review Process
- **Pillar III**
 - Market discipline

Implementation Timetable

FASE1: Impact Studies and Issuance of Standardization



In June 2009

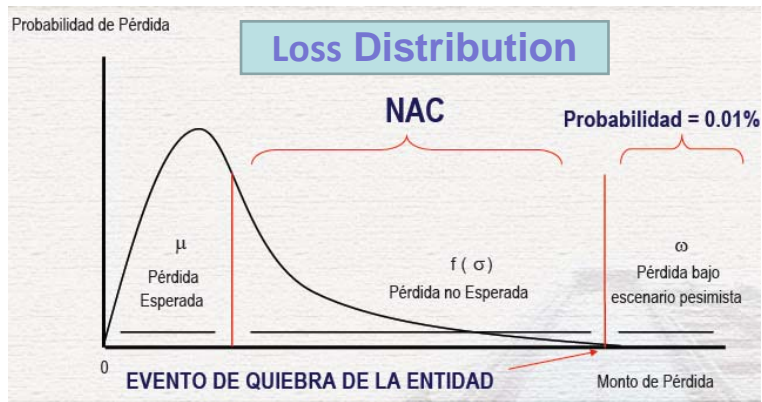
All Banks will embrace the Standardized Method. That means they will use the new rules of Basel II using the criteria of the SBS.

At the same time, Banks and other financial institutions will can (optionally) submit their proposals to advanced methods to estimate capital requirements.

Applicants to advanced models will enter a process of validation by the SBS, which, once completed, it can be used to estimate their required minimum capital.

IRB Models in Peru

- There are two schemes of IRB Models:
- Fundamental IRB: Only for entities that have only the information and requirements to estimate PD.
- Advanced IRB: For entities that match with the informations and requirements to estimate PD, LGD and EAD.
- *What is the incentive?....At the end, institutions that adopt IRB models will need less capital requirements for their operations since the estimations are more accuracy*



Banking Supervision

IN SITU SUPERVISION

- Maintain the Portfolio audit
- Reinforce internal audit systems
- Reinforce risk mitigants evaluation

EXTRA SITU SUPERVISION

- Validation and monitoring of internal Models
- Stresstesting and Backtesting of Internal Models

SUPPORT TO SUPERVISION

- Desing of benchmark models
- Calibration of parameters (PD, LGD, EAD)
- Update of benchmark models

It is important to reinforce IN –SITU procedures and to intensify and specialize EXTRA -SITU Procedures.

Market Discipline

All financial institutions must have always a disclosure policy that allows economic agents to evaluate different financial alternatives and to be informed how the institutions will manage their funds.

Transparency: It is the process by which relevant information must be clear, accessible and mainly, understandable.



**Ministry of Economy and
Finance**

Basel II Implementation in Peru

**Andrés Zacarías
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Philippines



Overview of the Philippine Banking System



1

8 December 2008

Philippine Financial System

BSP and PDIC

SEC and IC

Banking System

- Universal and Commercial Banking System
- Thrift Banking System
- Rural and Cooperative Banking System
- OBUs and branches of foreign banks

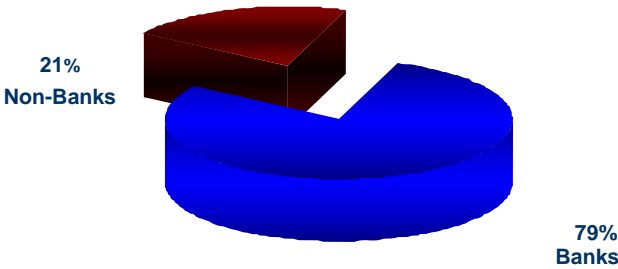
Non-Bank Financial Institutions (NBFIs)

- Non-banks without Quasi-Banking Function: Investment Houses, Financing Companies, Investment Companies, Securities Dealers/ Brokers, Lending Investors, Pawnshops, Venture Capital Corporations, Government Non-Bank FIs, Non-stock Savings and Loan Associations, Credit Card Companies
- Other FIs: Insurance Companies and Mutual Funds

Note: NBFIs with quasi-banking functions (e.g. Investment Houses and Financing Companies) are under BSP supervision

2

Strong Presence of Banks in the Philippine Financial System

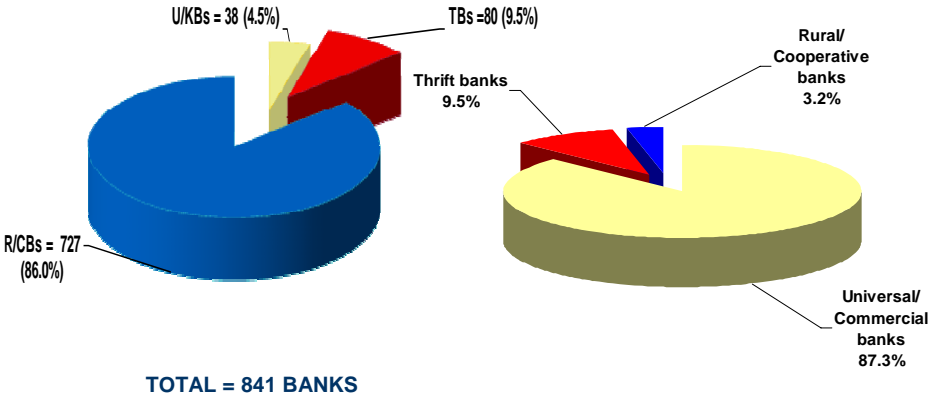


P8.0 Trillion Assets

Philippine Banking System

NUMBER OF OPERATING BANKS
As of End-June 2008

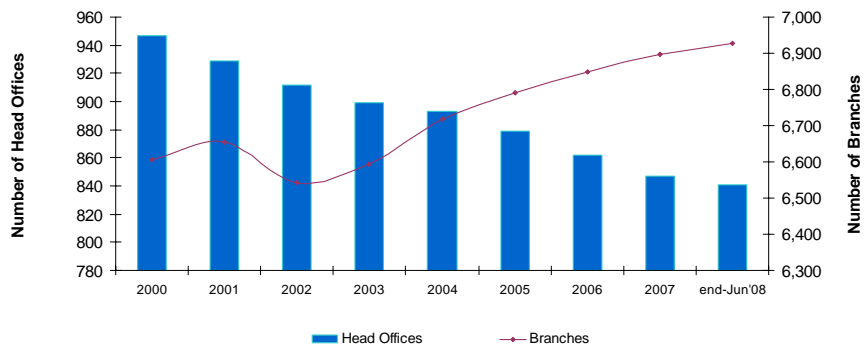
ASSET SHARE BY BANK
CATEGORY



Philippine Banking System

streamlined structure

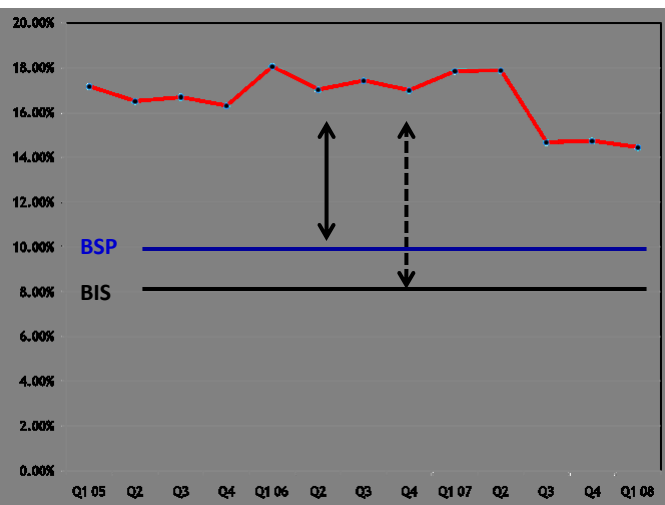
PHILIPPINE BANKING SYSTEM: TOTAL BANKING UNITS
As of End-Years Indicated and
as of end-June 2008



5

Philippine Banking System

strong capital position



Latest data for Capital Adequacy Ratio (CAR) of Universal and Commercial banks stands at 14.46%

This is much higher than the BSP prudential standard of 10% and the Basel standard of 8%

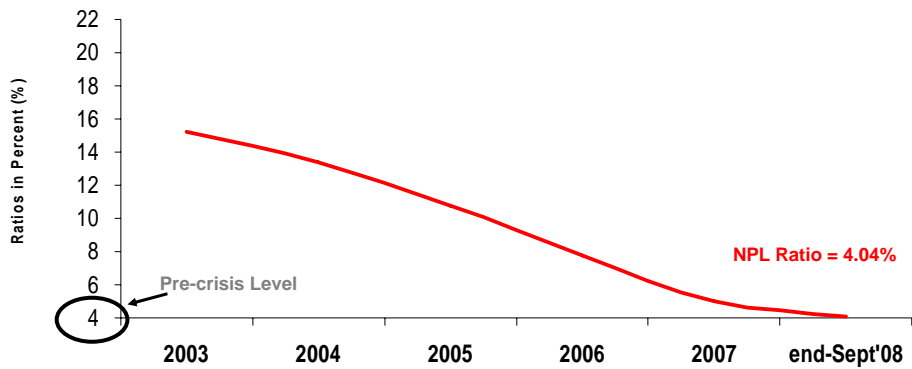
6

Philippine Banking System

improving asset quality

BANKING SYSTEM: LOAN AND ASSET QUALITY RATIOS

As of End-Years Indicated and end-Sept 2008



7

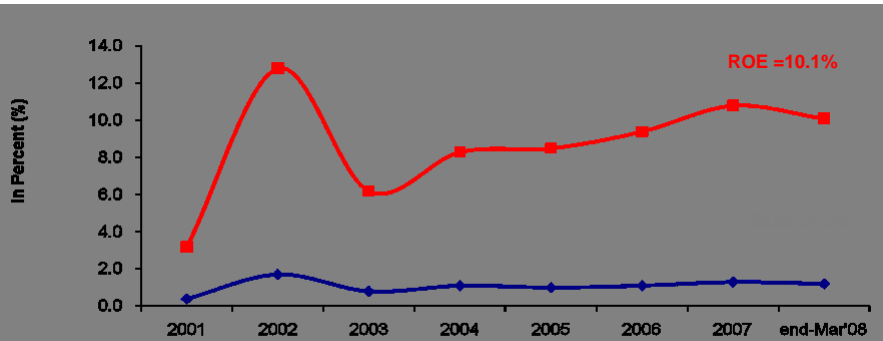
Philippine Banking System

sustained profitability

BANKING SYSTEM: RETURN ON ASSETS (ROA)/

RETURN ON EQUITY (ROE)

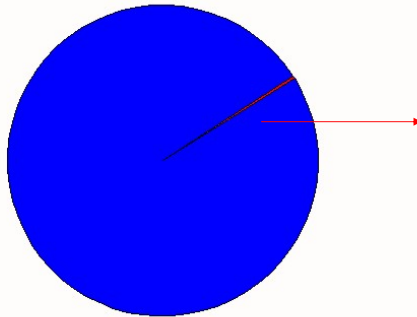
For One Year Period Ended 31 March 2008



8

The Extent of Banking Exposure

Total Assets



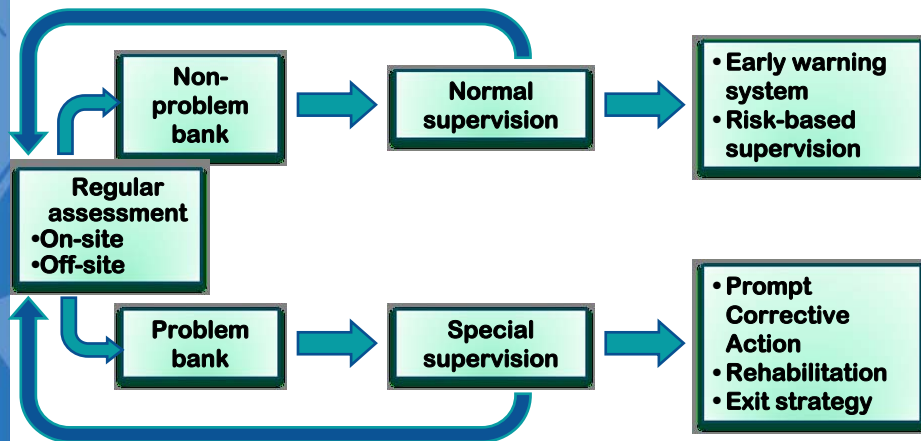
Extent of bank exposures to Lehman Brothers amounts to less than $\frac{1}{2}$ of 1% of total assets.

This includes transactions related to Special Purpose Vehicles (loans, bonds) as well as derivatives (CLNs, CDOs, repos)

Framework for BSP Supervision Risk-Based Approach

- Prioritization of supervisory activities
- Use of standards-based regulations vs. prescriptive rules
 - Risk-based capital regulation
- High quality supervisory data required
- Consolidated supervision
- Coordination with other financial regulators

Bank Supervision Strategy



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11

Bank Classification Criteria

Capital Category	CAR	BSP Intervention
Well Capitalized	12% or above	Normal supervision
Adequately Capitalized	10% or above	
Undercapitalized	Below 10%	Special supervision
CAMELS Rating below "3" or Management rating is below "3"		
Serious compliance issues		

12

12

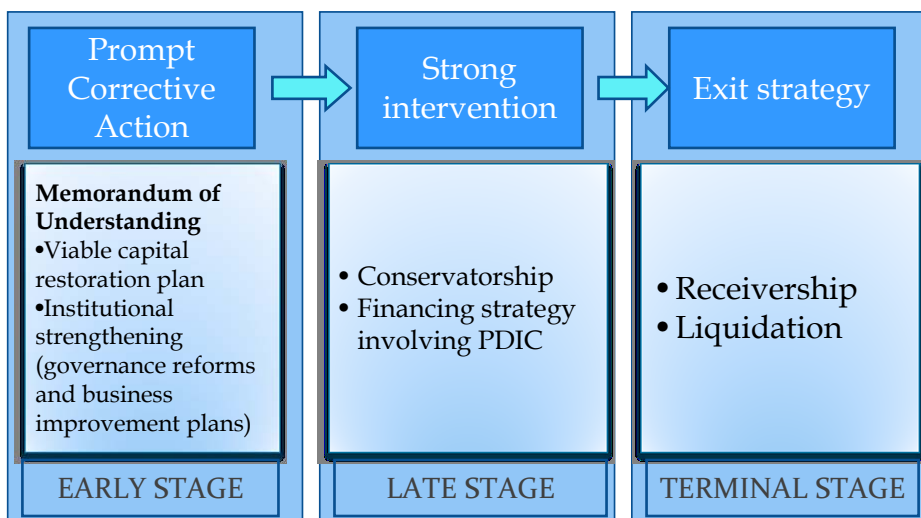
Normal Supervision

- Applying the risk-based approach
 - A process whereby risk exposures of banks and the quality of their management are systematically assessed by the BSP and the appropriate supervisory activities designed and executed in an efficient manner to promote continuing safety and soundness
- Use of early warning systems
 - On-site review
 - CAMELS Rating System
 - Risk Assessment System
 - Off-site review
 - Bank Performance Analysis
 - Off-site statistical analysis
 - Bank Failure Early Warning System

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13

Special Supervision



14

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Current Risk Management Practices

Risk Management	Risk Management Committee, Integrated Risk Management
Credit Risk	Standardized Approach, ICRRS
Market and Liquidity Risk	VAR, MCO
Operational Risk	Standardized Approach

15

The BSP's Implementation Plans A Snapshot

2005	2006	2007	2008	2009	2010
Gradual phasing in of certain Basel 2 provisions (securitization SA, past dues, highest credit quality corporates)		<u>Credit risk</u> -standardized approach <u>Operational risk</u> -basic indicator or standardized approach			<u>Credit risk</u> -FIRB and AIRB allowed <u>Operational risk</u> - AMA allowed

Pillar 2 (Supervisory Review) – a continuing process

Pillar 3 (Market discipline) – gradual implementation starting 2007

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Current Governance Practices

- Fit and proper standards for directors and officers
- Directors are required to attend special corporate governance seminar
- Election of independent directors
- Accreditation of external auditors
- Adoption of international accounting standards
- More stringent disclosure requirements

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BSP's RESPONSE TO THE FINANCIAL TURMOIL

18

BSP's Response to the Financial Turmoil

- Timely communication and transparency
- Ensuring adequate peso and dollar liquidity
- Reduction in bank reserve requirements
- Directed relief to banks by allowing reclassification of financial assets
- Information sharing with regional peers
- Active and regular dialogue with stakeholders

19

POLICY DIRECTIONS AMID GLOBAL CRISIS

20

Charting a course through the global financial storm: Policy directions to ensure financial stability in the Philippines

❖ Financial sector

- Strengthen prudential oversight of risk management
- Improve disclosure of risk on- and off-balance sheets
- Improvements in small businesses' access to credit
- Further deepening of the domestic capital market
- Supporting key legislative reforms
 - Amendments to the New Central Bank Act
 - Corporate Recovery Act

21

Headwinds to the Philippines

- **External**
 - Weaker external demand
 - Slower capital inflows
 - Pressure on balance of payments
 - Tighter external financing conditions
- **Real economy**
 - Risk of weaker remittances
 - Weaker fiscal revenue growth
- **Financial system**
 - Strains in dollar liquidity
 - Risk of weak corporate profitability

22

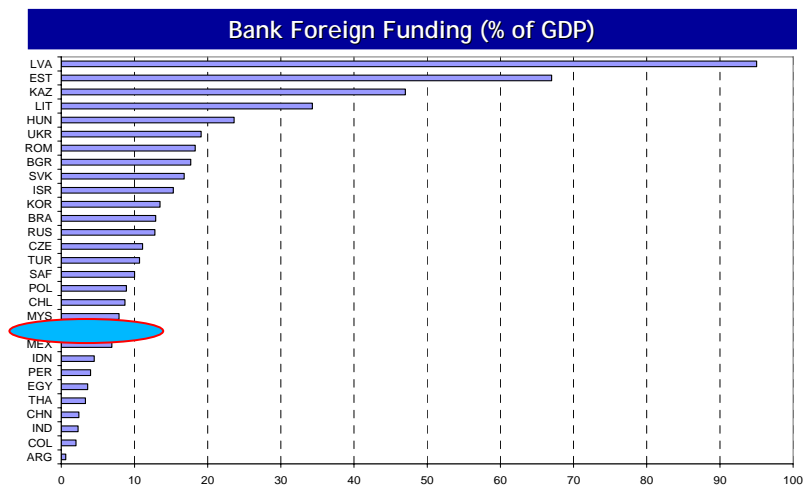
Initial Headways

- Domestic demand as major growth contributor
- Easing inflationary pressures
- Policy space for fiscal stimulus
- Manageable external payments position
- Well-capitalized banking system
- Low exposure to financial strains

23

The Philippines is less affected by key transmission channels of financial strains

Philippine bank exposure to foreign funding is low by EME standards



24

Source: IMF, July 2008

The Philippines is less affected by key transmission channels of financial strains

Reasons:

- (1) The Philippine financial institutions have relatively limited exposure to structured credit and related derivative products which were the main cause of the large losses of international banks. Derivative licenses have been given out prudently. (In particular, extent of Philippine bank exposures to Lehman Brothers amounts to less than 0.5% of assets of banking system)
- (2) Philippine banks rely more on traditional banking services such as deposits than foreign financing. Corporate sector bond financing is also minimal and private sector reliance on external loans is limited.
- (3) While credit growth has been strong, it has not fuelled concerns of overheating or asset price booms.

25

Source: IMF, July 2008

Shaping Up and Standing Up

- **Regional cooperation**
 - Macro surveillance, sharing of information and policy intent
 - Pooling of resources, e.g. Chiang Mai Initiative
- **Real sector**
 - Policy stimulus (fiscal, monetary)
 - ODA financing for government projects
 - Export competitiveness (power costs)
 - Continued vigilance in inflation management (including expectations management)

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Thank You!



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

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Session 2.3

Russia

An overview of Russian banking sector

Shanghai, 8th of December, 2008

Irina Yakimova, Banking Regulation and Supervision
Department, Bank of Russia

Yulia Trubinova, Department of Financial Policy, Ministry of
Finance of Russian Federation

I. Banks dominate on the Russian financial market

From the institutional point of view the banking sector is the foundation stone of the Russian system of financial intermediation

Number of credit organizations - 1136

Banks on 01.01.08 (bln. \$)

Assets - 724
Capital - 95,6

Financial mediators on 1.01.08 (bln. \$):

Insurance organizations, insurance premium - 27,3

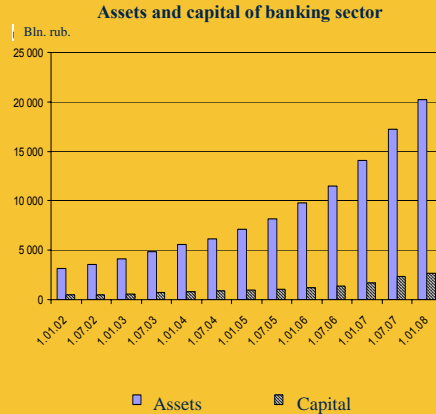
Collective investment undertakings (CIU), net assets - 25,5

Non-state pension funds, volume of own assets (on 1.10.07) - 20

The macroeconomic role of banking sector is growing in Russia

Strong growth is reflected by key macroindicators:

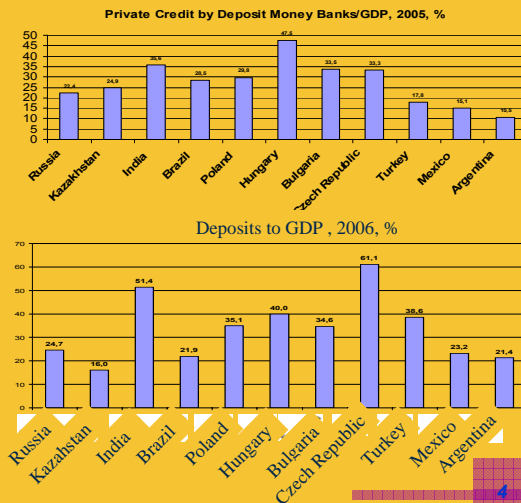
	1.01.08	1.01.02
Assets/GDP	61.4%	(35.3%)
Capital/GDP	8.1%	(5.1%)
Deposits of population/GDP	15.6%	(7.6%)
Credits to nonfinancial organizations/ GDP	27.4%	(13.7%)
On 01.12.2008 1\$ = 27.6 rub.		



3

The banking sector becomes more comparable internationally

By such indicators like credits/GDP (22%*) and deposits in banks/GDP (25%) Russia can be compared with the most countries with developing markets



*Source: World Bank, A New Database on Financial Development and Structure (1960-2005), information upon the last accessible date

4

II. Banking regulation issues

- # Current situation
- # Nearest future perspective
- # Long-term perspective

5

Current situation (Basel I)

- # **Assets are classified in 5 groups according to the level of risk – 0, 10, 20, 50, 100% (Instruction of the Bank of Russia № 110-I)**
- # **No capital requirements for OR**
- # **Capital adequacy ratios:**
 - 10% for the banks with capital at least 5 mln. euro
 - 11% for the banks with capital less than 5 mln. euro

6

Nearest future perspective (Basel II)

- # **Simplified Standardised Approach for credit risk (STA)**
- # **Basic Indicator Approach for operational risk (BIA)**

We have the draft of amendments to our Instruction № 110-I aimed to implement STA and separate draft of Regulation for OR

7

Long term perspective

- # **We are looking for advanced approaches**
- # **Collaboration with EU experts about IRB approach (agreement for mutual work until the end of 2010)**
 - 3 working groups
 - meeting once in a quarter (the first was in October 2008, the next will be in February 2009)
 - sharing experience by mutual visits and getting more understanding of advanced approaches

8

III. Our response to financial crisis environment – measures taken by the Bank of Russia

- # Loans without collateral for the terms up to 180 days (for 5 weeks – \$16 bln.; interest rate - 9-10%)
- # Lombard (secured) loans up to 30 days with the fixed rate
- # Intraday credits - \$71 bln., lombard credits for 14 days – \$53 mln., 30 days – \$378 mln., 3 month – \$171 mln.
- # Deposit interest rates were raised from 3,75% to 4,25%
- # Required reserves were reduced to 0,5% on any obligations (before on obligations to banks-nonresidents – 4,5%; to citizens – 1,5%)
- # Banks allowed to reclassify securities out of fair value through profit or loss category (amendments to IAS 39)

Other measures taken by Russian government

- # **\$33 bln. were provided to the major Russian banks (VTB, Rosselhozbank, Sberbank)**
- # **Guaranteed amount of deposits has raised from \$14 285 up to \$25 000**
- # **From 01.01.2009 profit taxes will be reduced to 20% (from 24%), payment on advanced basis have been cancelled**



Thank you!



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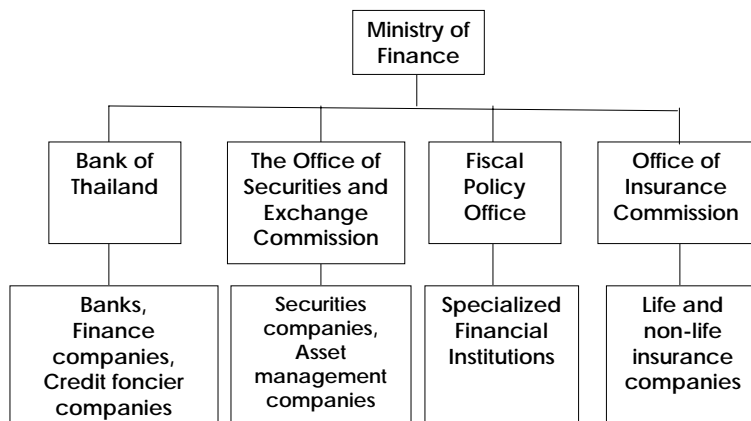
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Thailand

Financial Services Sector Supervision In THAILAND

Financial Services Sector Supervision



Current Risk Management Practices in Banking

- After the Asian Financial Crisis
 - ▣ Risk-base supervision (2000-today)
 - Strategic Risk
 - Credit Risk
 - Liquidity Risk
 - Market Risk
 - Operational Risk
 - ▣ Market Risk Capital Charge (2003-today)
 - ▣ Basel II (from 2008 onwards)

Current Governance Practices in Banking

- Qualification of BOD and Senior Management
- Composition of BOD and Sub-committee
 - ▣ BOD must have Independent Directors
 - ▣ Must have Risk-management Sub-committee and Audit Sub-committee
 - ▣ Should have Recruitment Sub-committee and Remuneration Sub-committee
- Roles and Responsibilities
- Code of Conduct

Regulatory challenges

- Current Crisis has minimal effect to Thailand
 - ▣ Small exposure to the innovative instruments
 - ▣ BOT closely monitor with the situation + stress test
 - ▣ Close communication with Banking Industry
 - ▣ Well experienced from the previous crisis
- Going Forward
 - ▣ Basel II – ready to implement
 - ▣ Deposit Insurance Scheme
 - ▣ Consolidated Supervision



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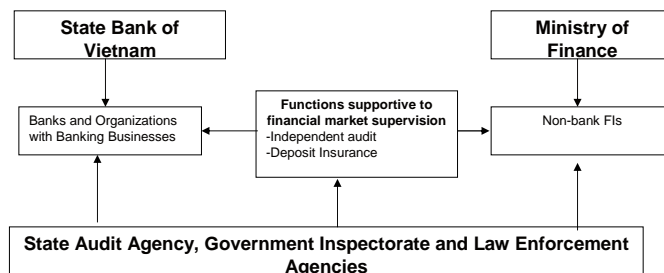
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Vietnam

Banking supervisory system of vietnam

CURRENT STATUS OF THE VIETNAM BANKING SUPERVISORY SYSTEM

Institutional structure and tasks of financial supervisory agencies



Legal framework on banking supervision

- Law on Supervision and its guidelines.
- Specialized legislations: Law on State Bank of Vietnam, Law on Credit institutions and respective guidelines.

Legal framework on banking supervision(continued)

- Decree No. 91/2005/ND-CP issued by the Government on the Organization and Operations of the State Bank of Vietnam's Inspectorate.
- Decrees issued by the Government on administrative fines in banking, insurance and securities businesses.

EXTENT OF COMPLIANCE WITH BASEL'S PRINCIPLES, STANDARDS IN VIETNAM

Basically, Vietnam is adopting Basel I, though it is limited only to capital adequacy ratio against credit risk. Full adoption of capital adequacy requirement as stated by the 1996 Revised Basel Accord has not yet been made.

-Definition and capital structure: Significant compliance with Basel I

Own capital of Credit institutions consist of:

- Tier 1 Capital: Chartered capital (paid-in capital), reserves supplementary to chartered capital, financial standby reserves, investment fund for professional development, retained earnings.
- Tier 2 Capital: 50% of increased asset value thanks to revaluation, 40% of increased investment securities value thanks to revaluation, convertible bonds or preferred shares, certain long-term liabilities, general reserves.
- Of which: maximum value of tier 2 capital is up to 100% of the value of tier 1 capital as own capital is calculated to comply with the required capital adequacy.
- Required capital adequacy ratio: 8% as minimum – in compliance with Basel I, however it covers only credit risk, not yet the operation risk.
- Resolution of credit risk relating to derivative trading: Vietnam adopts 2nd method (initial exposure)
- Asset classification: Basel I is complied with fundamentally
- Resolution of credit risk relating to off-balance-sheet transactions: Basel I is complied with fundamentally

Challenges to Vietnam's banking system in complying with Basel II

- Low development level of the banking system
- Poor governance of Credit institutions
- Severely constrained MIS and banking IT.

Challenges to Vietnam's banking system in complying with Basel II

(continued)

- Tremendous weakness of CI's personnel in quick access to international risk management techniques.
- Constrained capability of banking supervisory agencies in introducing incentive schemes and prudential regulations to improve banks' risk management capability.

Shortcomings and constraints that reduce effectiveness of banking supervision, inspection

- Severely constrained organizational structure of banking supervision, inspection
- Lack of mechanisms on information exchange and coordination among the Banking Inspectorate and local, international financial supervisors to detect, prevent, subdue and deal with banking risks.

Shortcomings and constraints that reduce effectiveness of banking supervision, inspection (continued)

- Current skills, ability of supervisory staff are far limited to absorb and adopt international practices, standards on banking supervision, even to fulfill their duties.
- Incomplete legal framework on banking supervision
- Insufficient infrastructure to secure efficient banking supervision and monitoring
- Poor risk management, especially on the part of Credit institutions.



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Bangladesh

Risk Management & Basel II implementation in Bangladesh

K.M. Abdul Wadood



BANGLADESH BANK
(Central Bank of Bangladesh)

Risk Management Guidelines

- Credit Risk Management
- Foreign Exchange Risk Management
- Asset & Liability Management
- Internal Control & Compliance
- Prevention of Money Laundering
- Information & Communication Technology



BANGLADESH BANK
(Central Bank of Bangladesh)

Supervisory Tools

- On-site & off-site Supervision
- CAMELS
- Early Warning System
- Problem Bank Monitoring



BANGLADESH BANK
(Central Bank of Bangladesh)

Regulation on Credit Concentration

- Large Loan Exposure
- SME Financing
- Micro Credit



BANGLADESH BANK
(Central Bank of Bangladesh)

Risk Based Capital Adequacy

- Risk Based Capital requirement in line with Basel I was introduced in 1996
- Risk Based Revised Regulatory Capital frame in line with Basel II work will be started from January 2008.



BANGLADESH BANK
(Central Bank of Bangladesh)

Crisis & Current Regulatory Challenge

- Reserve Management
- Foreign Trade
- Remittance



BANGLADESH BANK
(Central Bank of Bangladesh)

Thank You



BANGLADESH BANK
(Central Bank of Bangladesh)



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
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Session 2.3

Cambodia



Banking and Financial Sector Development in Cambodia



The APEC Workshop on Enhancing Risk Management and
Governance in the Region's Banking System to Implement Basel II
and to Meet Contemporary Risks and Challenges Arising from the
Global Banking System
8-12 December 2008, Shanghai

Presented By Cambodian Participants



Cambodia Macroeconomic Developments



In 2008, Cambodia's economy is under increasing strain, affected by global financial volatility and declining external demand, with macrocosmic and financial risk.

Real GDP growth is forecast to be around 6.5 percent in 2008, compared to 10.25 percent in 2007. Factors leading this slowdown include moderating growth in garment exports and tourism activities as well as agricultural output.



Financial Sector Overview

As September 2008, the Banking Sector consists of 28 Banks of which 22 Commercial Banks (19 locally incorporated and 3 foreign branches) and 6 specialized banks, 2 representative office of foreign banks, 17 licensed microfinance institution (MFIs) and 26 registered NGOs operating in rural areas.



Financial Sector Overview

The Insurance industry is very rudimentary in Cambodia and the insurance law was only promulgated in 2001. There are 5 licensed companies: Asia Insurance (Cambodia), Forte Insurance (Cambodia), Infinity Insurance (Cambodia) Caminco, and the re-insurer Cambodia Re. All licensed insurance companies are operated under the supervisor of the Financial Industry Dept, MEF.



NBC

PRUDENTIAL REGULATIONS

Solvency Ratio 15 %

- Net Worth / Risk Weight Assets

Liquidity Ratio 50%

- Liquid Assets / Weighted Deposits

PARTICIPATION

- Banks may hold equity participation 15% and 60% of own fund of the bank for each and total equity participation respectively.

INTEREST RATE

- Banks are allowed to set their own interest rates for loans and deposits.



Current Issues of the Financial Sector Development in Cambodia

Financial Infrastructure :

- **Capital Market:** There is no capital market and its development, although important, is unlikely to occur within the next years.
- **Payment System:** is underdeveloped. This is expressed in a lack of infrastructure and limited financial instruments in the market in addition to both a weak regulatory framework and supervisory body.



Current Issues of the Financial Sector Development in Cambodia

Financial Infrastructure :

- **Interbank/Money Market:** Banks have started lending to each other; however, the number of transactions are limited and limited to a few banks.
- **Deposit Insurance:** NBC put in place laws and regulations and supervision functions to protect depositors.

7



Current Issues of the Financial Sector Development in Cambodia

- **Accounting Standards:** an accounting law and common accounting standards were introduced in 2003. However, these are overly complicated and not yet in line with IFRS.
- **Rating & Credit Information:** There is no rating agencies presently in Cambodia. Major MFIs and some banks are rated using raters from abroad.

8



Regulatory Challenges with current global financial crisis environment

- **Increase Reserve Requirement** : In July, 2008 National Bank of Cambodia (NBC), increased RR to 16% from 8%.
- **Capital requirement**: The recent move by NBC to increase the minimum capital requirement for all banks to US\$37 million from US\$13 million by 2010
- **Strengthening other prudential regulations** : All banks must strengthen the prudential regulation such as Internal Audit, Governance, Fit and Proper Rule and Liquidity Management.

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Thanks you for your attention

10



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

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Session 3.1

Value at Risk

Dr Christine Brown
University of Melbourne

Value at Risk



Christine Brown
Associate Professor
Department of Finance
The University of Melbourne

Plan

- What is risk?
- How can we measure risk?
- Some experiments
- VaR as a useful risk measurement tool
- Three approaches to calculating VaR
- VaR applied to loan portfolios
- Conclusion

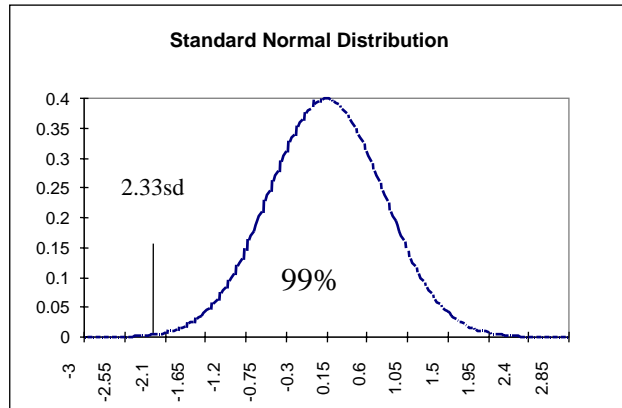
Risk

- Risk
 - variability of future values of key economic variables
 - possibility of both ups and downs
 - danger plus opportunity
 - technical measurement
 - standard deviation (volatility) of probability distribution of future outcomes
 - measures the dispersion around expected value weighted by the probability of occurrence

Probability Distributions

- One way of quantifying risk is to describe outcomes and probability of occurrence in terms of a probability distribution
- Most people have heard of the normal or bell-shaped distribution
- The normal distribution can be described by its mean and standard deviation

Normal distribution



99% of the distribution lies to the right of a point 2.33 standard deviations to the left of the mean

Risk quantification

- Risk is measured as standard deviation of returns
 - Then translated into dollar amounts for a particular situation
 - What is a one standard deviation price movement in a particular market (eg the price of oil)?
 - A tolerance for risk is defined either in terms of a probability or number of standard deviations
 - For example, there is a 66% probability of a one standard deviation movement either way
 - These concepts can be described in one term -
-

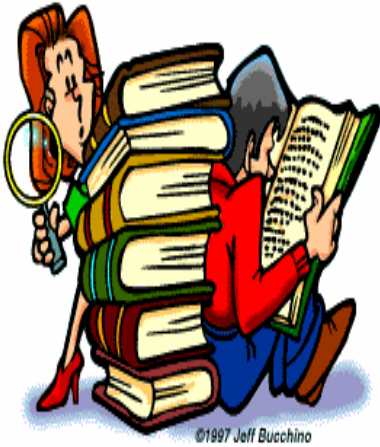
Value at Risk - VaR

- VaR is a measure of the minimum loss that would be expected over a period of time for a pre-specified small probability
- For example a VaR of \$1 million over the next day at a probability of 0.05 implies that the firm would expect to lose at least \$1 million over the next day 5 percent of the time - one day in twenty
- Or the firm can expect not to lose more than \$1m over the next day 95 percent of the time

VaR

- VaR is a useful device for measuring the market risk of a portfolio
- It is useful in management reporting
- Three attributes are required when reporting a VaR:
 - A dollar amount
 - A level of confidence
 - A time horizon or planning horizon

Quiz – Experiment 1



- Hersch Shefrin, “Beyond Greed and Fear”, Harvard Business School Press, 2000.

Overconfidence

- Count an answer as a hit if the correct answer lies between your low guess and your high guess
- Count an answer as a miss if the right answer falls outside the range between your high guess and your low guess
- What score did you get?
- Someone who is well calibrated should miss no more than one question.

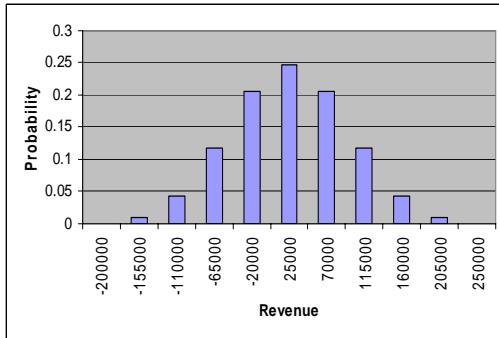
Lessons

- If you are overconfident then you will have more than one miss in the eight questions
- For risk management in order to have accurate confidence intervals we need to get reliable estimates of likely changes in interest rates, default frequencies etc
- We use history and statistics to develop a reliable VaR number

Experiment 2

- Imagine that you have a portfolio of 10 loans that will turn out to be “good” or “bad”.
- At the end of the year good loans earn a profit of \$25,000 each and bad loans lose \$20,000 each
- There is a 50% chance of making a good loan and a 50% chance of making a bad loan
- Write down the number that you think you will have a 5% chance of earning less (losing more) than.
- Best outcome is 10 \diamond \$25,000 (all good loans)
- Worst outcome is 10 \diamond -\$20,000 (all bad loans)

Outcomes



- Probability of loss = 38%
- For 10 tosses the VaR at a 5% confidence level is -\$110,000
- How close was your VaR estimate?
- I am 95% confident that I will not lose more than \$110,000 on my loan portfolio

Recall....

- There are three things necessary to document the VaR number:
 - A dollar amount
 - A level of confidence
 - A time horizon or planning horizon
- VaR is a tool to aggregate risks in to a single number
- It relies on models and/or market data....

Issues in Determining Value at Risk

- VaR is a single dollar amount that portfolio losses are not expected to exceed, with a specified degree of confidence, over a specified horizon, under normal market conditions.
 - What method will be used to calculate VaR?
 - What is the position ?
 - What is the time frame of interest ?
 - What are the critical financial prices causing exposure ?
 - How do we determine the probability of possible losses from position ?
 - What confidence level do we want to have ?
 - How do we determine whether calculated VAR is acceptable ?

VaR - methods of calculation

There are three main approaches to the calculation of a VaR number for a portfolio

1. The analytical method also called the variance-covariance method
2. The historical simulation method
3. The Monte Carlo simulation method

Each method has strengths and weaknesses

Three methods

- All methods can take comovements into account.
- The analytical technique assumes a normal distribution
- Historical simulation takes a current portfolio and ‘pushes’ it through past market data, to calculate gains and losses on the portfolio if the market behaved as it did in the future
- It then arranges outcomes from lowest to highest
- Monte Carlo simulation uses a model to simulate outcomes

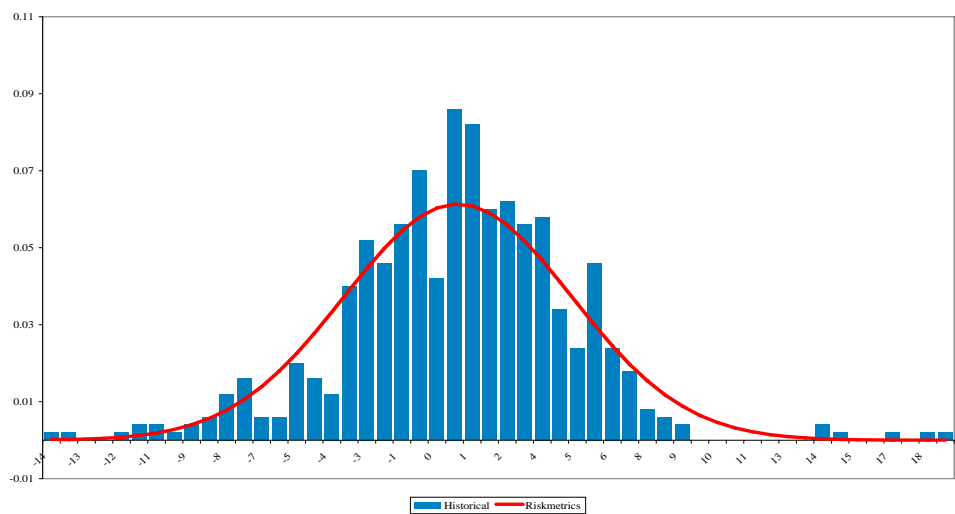
Example- Historical simulation

- The historical method estimates the portfolio’s performance by collecting data on the past performance and using it to estimate the future probability distribution
- Assume 500 days of past data
- Arrange portfolio outcomes from largest loss to largest profit
- The VaR at 95% will be the 25th observation

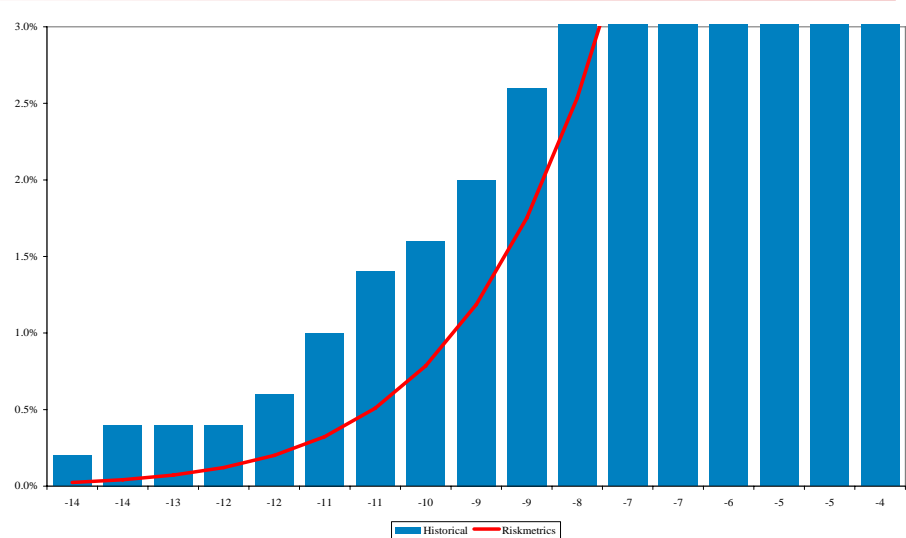
Exposure

-14.3802
-13.885
-12.20931
-11.78222
-11.66984
-10.92417
-10.92288
-9.966426
-9.73539
-9.234375
-8.956875
-8.866874
-8.784115
-8.428429
-8.421086
-8.074462
-8.072581
-8.010511
-7.990498
-7.680214
-7.511758
-7.503667
-7.452797
-7.445649
-7.405385
-7.397101
-7.386265
-6.815453

Distribution of portfolio returns



Fat-tails



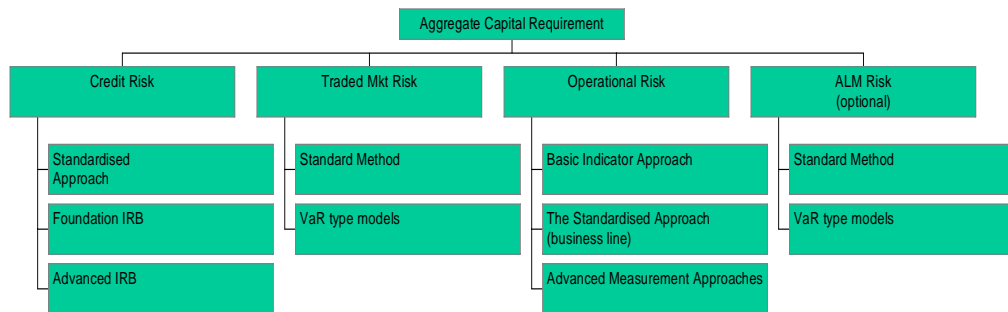
Examples

- LTCM had capital of \$4.7b and a monthly (95%) VaR of \$448m in April 1998 . On August 21 1998 it lost \$551m (more than 10 times daily target vol)
 - Why?
- Signs of a bad model
 - In the case of UBS, 2007 saw its first exceptions since 1998...In the third quarter of 2007, UBS reported 9 exceedances at 99%. (Risk, February 2008).
 - The period without excessions was 100 times less likely than the 9 exceedances assuming a good model.

Use of VaR in banks

- At the beginning of 1998 in the US (1997 for the European community) regulators allowed certain large banks discretion to calculate the capital requirement for market risk using the VaR approach.
- Correlations are taken into account
- VaR is to be measured at the 99% confidence level over a ten day horizon
- Models are backtested

Basel 2: structure



Market vs credit risk

- VaR applied to market risk seeks to answer the question: “If tomorrow is a bad day, how much will I lose on tradable assets such as shares, bonds, currency?”
- VaR applied to credit risk seeks to answer: “If next year is a bad year how much will I lose on my loans and loan portfolio?”

The Market Risk Capital

- The VaR measure used by regulators for market risk is the loss on the trading book that can be expected over a 10-day period 1% of the time
- The capital requirement is

$$k \times \text{VaR} + \text{SRC}$$

where k is a multiplicative factor chosen by regulators (at least 3), VaR is the 99% 10-day value at risk, and SRC is the specific risk charge (primarily for debt securities held in trading book)

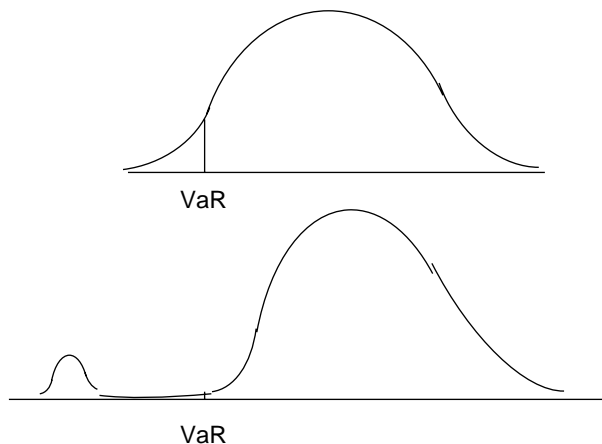
Credit VaR

- Loans are not publicly traded
- However using
 - available data on a borrower's credit rating
 - the probability that the rating will change over the next year
 - recovery rates on defaulted loans
 - credit spreads and yields in the bond (or loan) market
- It is possible to calculate the market value and the volatility of the loan portfolio
- These methods form the basis for the internal models approach under the new BIS standards

VaR vs. Expected Shortfall

- VaR is the loss level that will not be exceeded with a specified probability
- VaR does not specify the maximum possible loss
- Expected shortfall is the expected loss given that the loss is greater than the VaR level (also called C-VaR and Tail Loss)
- Two portfolios with the same VaR can have very different expected shortfalls

Distributions with the Same VaR but Different Expected Shortfalls



Conclusions

- VaR is a powerful tool for consolidating in a single number, risk across a portfolio of assets
 - It provides a mechanism for containing risk within acceptable limits
 - It is a powerful communication tool and for consolidating a measure of risk across portfolios
 - It **does not** predict the size of the maximum loss
 - VaR is used by regulators to set minimum capital requirements
 - CreditVaR can be used to measure the risk of a loan portfolio
 - It forms the basis of the new BIS standards
-

Enhanced Risk Management and Governance
AFDC and MAFC (Shanghai)
Session 3.1

Web Resources for VaR

Don Chance's teaching notes on VaR:

<http://www.bus.lsu.edu/academics/finance/faculty/dchance/Instructional/TN97-07.pdf>

Also read his note on the normal distribution function:

<http://www.bus.lsu.edu/academics/finance/faculty/dchance/Instructional/TN97-01.pdf>

All About Value at Risk (a web-site with links to other VaR sites)

<http://www.gloriamundi.org/>



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 4.1

Capital Adequacy Standards and the Role of Bank Capital

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Capital Adequacy Standards and The Role of Bank Capital

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Outline

- What is capital, what role does it play?
- How is capital measured?
- How much capital is desirable?
- How does capital influence bank behaviour?

Bank Capital: Alternative Perspectives

- For the Owner
 - Wealth tied up (measured as share market value)
 - Require adequate return as risk compensation
 - Provides control
- For Customers/Counterparties and Regulator
 - Buffer to absorb risk
 - providers of capital rank below liabilities to customers
 - buffer could consist of equity / subordinated debt / guarantees

Bank Capital: Alternative Perspectives

- For the Bank Manager
 - Funds provided to operate business (accounting value)
 - But must manage “to” stock market value
 - Return on capital achieved is performance measure
 - “Capital risk” is a risk to manage
 - meeting regulatory capital requirements
 - having adequate capital to get desired rating (AA etc) from ratings agencies
 - being able to pursue attractive expansion opportunities

Capital Measurement

- Capital is a balance sheet “residual”
 - difference between value of assets and other liabilities (and allowing for off-balance sheet/contingent liabilities)
- Alternative measurement approaches
 - Book value/historical cost
 - Mark to market/model
 - Stock market value

Example

- NewBank set up with \$10 equity (10 x \$1 shares) and \$90 deposits, buys \$100 of CDO's
- Subsequently
 - Stock market price of shares = \$1.50
 - Market for CDO's freezes, and mark to model value is \$80
- Size of bank's capital is
 - (a) \$10; (b) \$15; (c) -\$10; (d) other ?
- Valuation technique matters for measuring capital
 - How does the Basel Accord calculate capital?
 - How do International Accounting Standards calculate capital?

Capital Measurement Problems

- Bank Failures often involve sudden recognition of long standing, but unrecorded, losses
 - Write down of asset values to “true” value
 - Corresponding write down of capital
- US Examples
 - The Farmers Bank & Trust of Cheneyville
 - Closed December 17, 2002, fraudulent loans
 - Reported assets \$35.4 m, liabilities \$32.9 m
 - Cost to FDIC \$11 m
 - The Bank of Alamo
 - Closed November 8, 2002, Poor lending, insider abuse
 - Reported assets \$59.8 m, liabilities \$56.5 m
 - Cost to FDIC \$ 8 m

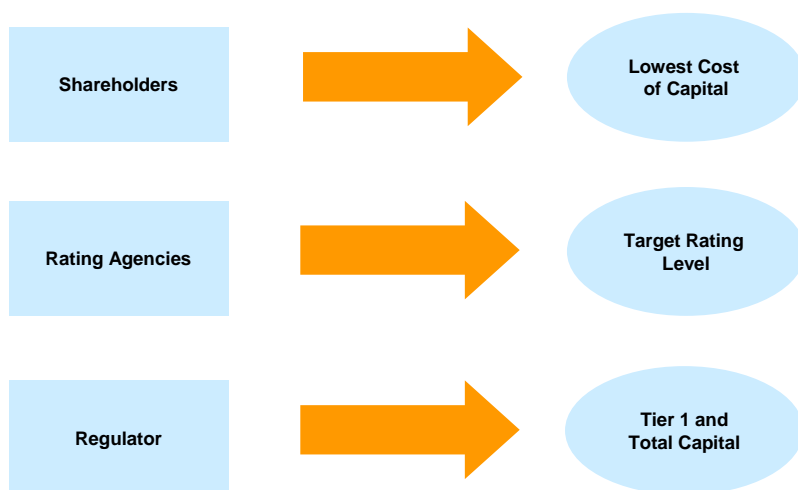
How Much Capital?

- Regulatory Capital requirements:
one or both of
 - Minimum Capital/Assets (leverage / gearing)
 - Minimum Capital/(Risk Weighted Assets) – Basel
 - Relate capital required to riskiness of activities
- May allow some non-equity liabilities as capital
 - Rank behind, and provide protection to, depositors
- Measurement by a mix of book and mtm value

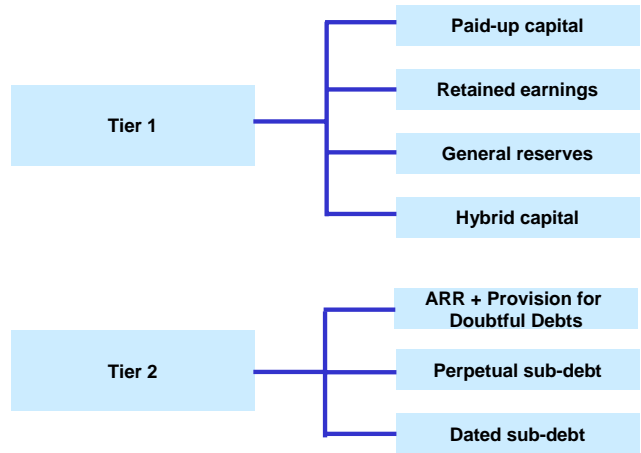
How Much Capital?

- Economic Capital
 - Banks determine economic capital based on preferred risk tolerance/appetite
 - Choose “acceptable” probability that losses over one year could exceed equity capital and lead to bankruptcy
 - Major banks appear to operate to risk tolerance of less than 1 in 500 (99.5% confidence interval)
 - Based solely on equity capital
 - Actual capital level may be higher to meet ratings agency requirements for target rating.

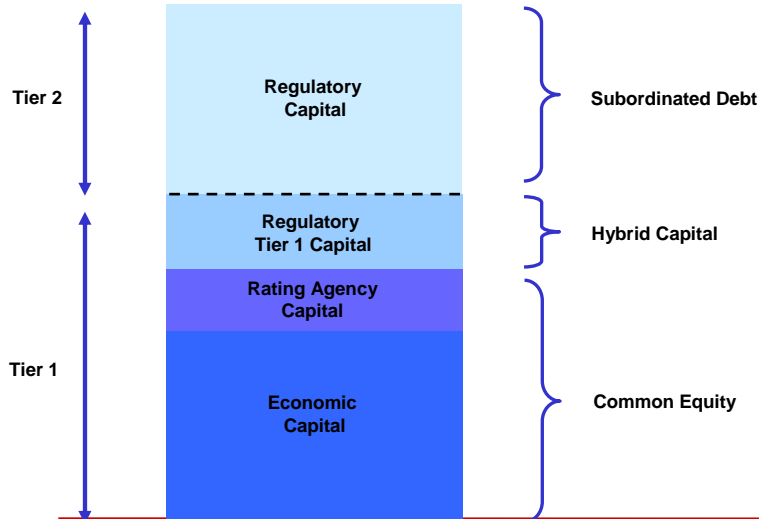
What Drives the Capital Structure?



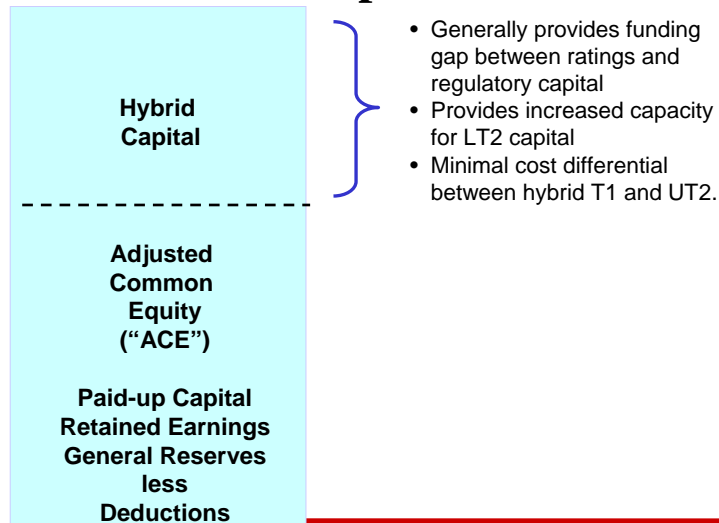
Components of the Capital Structure



Balancing the Competing Requirements



Tier 1 Capital Mix



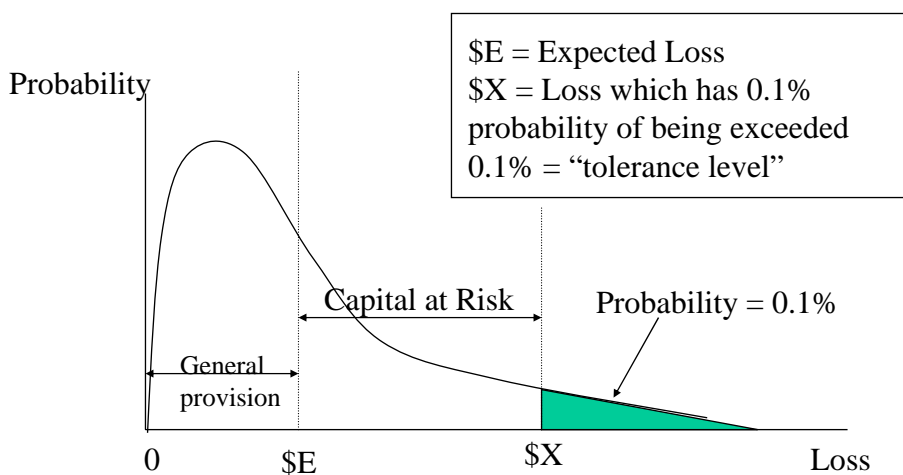
Determining Economic Capital: Example

- Consider a bank making a loan of \$100 to be repaid with interest in one year at an interest rate of 10% p.a.
 - Funded by \$90 of deposits and \$10 of equity
- Promised repayment = \$110, but
 - Assume probability of default = 10%
 - Recovery if default = \$80
- Expected repayment = $0.1 \times \$80 + 0.9 \times \$110 = \$107$
- “Expected (Average) Loss” = \$3
 - Possibility that loss could be greater or less
 - 10% chance of \$30 and 90% chance of \$0)

Bank Balance Sheet Effects

- Depend on accounting practices, for example:
- Assets
 - Loan (less provision) = $100 - 3 = 97$
- Liabilities
 - Deposits = 90
 - Equity (less provision) = $10 - 3 = 7$
- Note:
 - Expected losses should be “absorbed” by provisions and by loan pricing
 - Accounting values differ from economic values
 - Equity capital (after provisions) is the buffer to absorb unexpected losses – referred to as economic capital or capital at risk

Loss Function and Economic Capital



Capital and Bank Behaviour

- Capital constrains size of balance sheet
 - Current crisis situation: Losses reduce capital, low equity prices make equity raisings difficult, lead to restriction of loans
- Capital is costly, loan pricing reflects cost of capital (and of deposits)
 - Current crisis situation: high cost of equity capital (low bank share prices)

Conclusions

- Bank Capital Management involves managing both economic and regulatory capital
- Capital planning is critical
- Measurement and management of capital position requires correct accounting and valuation processes



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Session 4.2

Asset Liability and Management

Dr Christine Brown
University of Melbourne

Interest Rate Risk Management



Christine Brown
Associate Professor
Department of Finance
The University of Melbourne

Plan

- What is interest rate risk (IRR)?
- Where does interest rate risk come from?
- How can we measure interest rate risk in the banking book?
- Conclusion
- Next session we will work through a workshop example based on the Honk Kong Monetary Authority Return of Interest Rate Exposures (December 2003)
<http://www.info.gov.hk/hkma/eng/bank/spma/attach/IR-1-return.pdf>

What is Interest Rate Risk?

- Interest rate risk is the risk that a bank will experience a deterioration in its financial position as interest rates move over time
- Interest rate risk is typically split into
 - Traded interest rate risk
 - Non-traded interest rate risk (balance sheet)
- Interest rate risk in the banking book arises from a bank's core banking activities

Where does IRR come from?

- Repricing risk
 - Differences in maturity (fixed rate) and repricing periods (floating rate) for assets versus liabilities and off-balance sheet items (OBS)
 - Equal changes in all rates (parallel yield curve shift) affects bank value
- Yield curve risk
 - Differing dispersions of assets, liabilities and OBS could leave exposure to twist of yield curve (with no change in average rates)
- Basis risk
 - Positions with same maturity but priced off different market indicator rates
- Optionality
 - Some assets and liabilities have no contractual maturity or allow customers some option regarding maturity
 - Some assets and liabilities have administered rates –where dates and amount of repricing is at the bank's discretion

Regulation

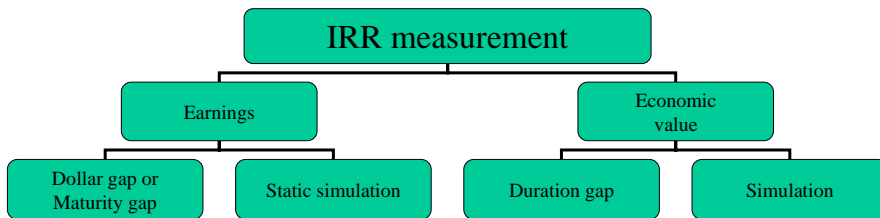
- Under the original Basel Accord banks were not required to hold capital against interest rate risk in the banking book
- But Basel 2 provides regulators with the discretion to require banks to hold capital for banking book interest rate risk
- The Basel Committee is of the view that this is a potentially significant risk and should be dealt with under Pillar 2 of the New Accord, particularly represented in Principles 12 to 15 and Annexes 3 and 4 of “Principles for the Management and Supervision of Interest Rate Risk” (July 2004)
- It will be up to individual regulators as to whether a bank will be required to hold capital against IRR in the banking book

Principles for Interest rate Risk Management

- There are 15 principles.
- Principles 1 to 11 are general and intended for management of both trading book and banking book interest rate risk
- Principles 12 to 15 specifically refer to interest rate risk in the banking book
- Rely on bank's internal measurement systems
- Banks must provide the results of their internal measurement systems, expressed in terms of the threat to economic value, using a standardised interest rate shock
- Principle 15 gives supervisors the power to enforce remedial action if the bank is deemed to be not carrying adequate capital for the risk held

Techniques for Interest Rate Risk Measurement

- The technique used depends on whether the focus is on earnings or economic value as the indicator of financial position



Simple calculations of IRR

- Allocate assets, liabilities, off-balance sheet items according to repricing/maturity buckets
- Gap analysis – focus is on exposure of earnings
 - Calculate exposure by applying interest rate shock to size of gap
- Duration analysis – focus is on exposure of economic value
 - Calculate exposure by applying sensitivity weights (based on duration) within each bucket

Simple approaches - Gap

- The net interest income approach to measuring and managing interest rate risk is the primary focus of the majority of banks
- This approach quantifies the potential change in net interest income using a specified shift in interest rates, eg 200 basis points, or a simulated future path of interest rates.
- A negative or liability sensitive gap means that an increase in interest rates could cause a decline in net interest income

Traditional Gap analysis

Method: rearrange the balance sheet by time to next interest rate reset date

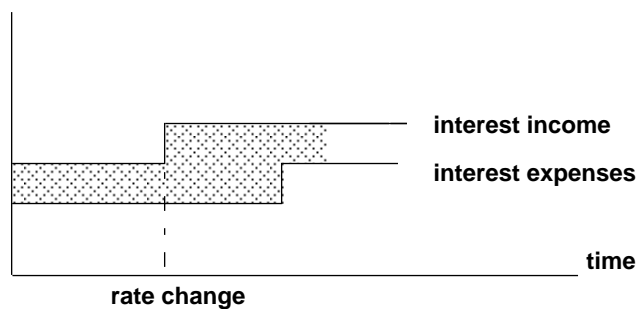
<u>Assets</u>	\$
At call and seven-day funds	50
Variable interest rate loans	30
Fixed rate 18-month loans	70
 <u>Liabilities</u>	
One month deposits	20
Four month deposits	30
Floating rate notes: 6 month resets	100

Example

Reset date	(months)				
	0-3	3-6	6-12	12-24	24+
Assets	80	0	0	70	0
Liabilities	20	130	0	0	0
Gap	+60	-130	0	+70	0
Cumulative Gap	+60	-70	-70	0	0

Interpreting the Gap

- Positive gap:
 - Interest rate increase leads to net interest income increase. More assets than liabilities at new higher rates.



Problems with Gap Analysis

- Categorisation of “buckets” is ad-hoc.
- It does not take account of variations within each time band
- It focuses solely on transactions exposure and ignores likely future balance sheet movements.
- It ignores other influences on interest rates, such as increased default risk, demand for new loans, etc.
- It ignores differences in the sensitivity of income from option-related positions

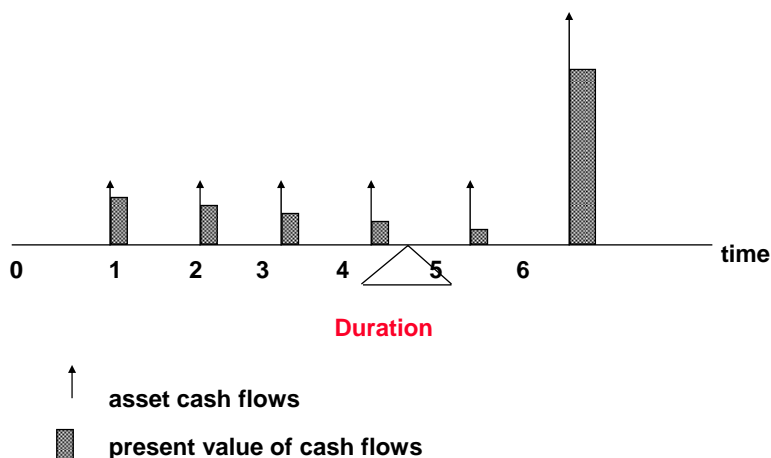
Gapping and equity value

- For our example will the relative share price rise or fall when interest rates increase?
- Answer: probably fall because the near cumulative gap is negative.
- But, gapping will not provide a definitive answer.

Duration based approach

- A maturity/repricing schedule can also be used to evaluate the effect of changing interest rates on a bank's economic value by applying sensitivity weights to each time band
- Weight can be based on estimates of the duration of assets and liabilities falling into each time band
- Duration is a measure of the percent change in the value of a position that will occur for a small change in the level of interest rates

Duration - A Graphic Depiction



Duration and Bond Price Sensitivity

- Duration directly measures the sensitivity of a bond's price to small yield changes (i.e price elasticity).

$$\Delta P/P = - [D/(1+r)]\Delta r$$

- $D^* = D/(1+r)$ is the modified duration
- Risk weight = $D^* \diamond$ yield change
- Risk weight \diamond asset size gives change in economic value

Simulation approaches

- Detailed assessment of potential effects of interest rate changes on both earnings and economic value can be made using simulations
- Usually involve a breakdown of products so that assumptions about product behavior can be incorporated into the analysis
- Static simulations focus on cash flows from the current on and off balance sheet positions
- Dynamic simulations model interest rates and expected changes in the balance sheet
- The use of third party modelling software is common

Conclusions

- IRR in the banking book constitutes a significant proportion of the overall risk that banks carry
- In Australia APRA intends to require banks using sophisticated modeling techniques to calculate regulatory capital for credit and operational risks to also hold capital against interest rate risk in the banking book.
- Most international regulators plan to accept only the economic value approach to measure IRR in the banking book

**Enhanced Risk Management and Governance
AFDC and MAFC (Shanghai)
Sessions 4.2 and 4.3**

Web Resources for Interest Rate Risk in the Banking Book

Bank for International Settlements, Basel Committee on Banking Supervision:
Principles for the Management and Supervision of Interest Rate Risk (July 2004):

<http://www.bis.org/publ/bcbs108.pdf?noframes=1>

Hong Kong Monetary Authority Supervisory Policy Manual for Interest Rate Risk
Management (December 2003):

<http://www.info.gov.hk/hkma/eng/bank/spma/attach/IR-1.pdf>

HKMA Return of Interest rate Exposures (December 2003):

<http://www.info.gov.hk/hkma/eng/bank/spma/attach/IR-1-return.pdf>

FDIC Law, Regulations, Related Acts: Joint Agency Policy Statement on Interest
Rate Risk (May 1996):

<http://www.fdic.gov/regulations/laws/rules/5000-4200.html>

Monetary Authority of Singapore: Guidelines on Sound Risk Management Practices
(October 2002):

http://www.mas.gov.sg/resource/publications/consult_papers/2002/riskguidelines.pdf

APRA has a nice short article on interest rate risk in the banking book:

<http://www.apra.gov.au/Policy/upload/Technical-paper-Interest-rate-risk-on-the-banking-book-May-2003.pdf>

Questions to think about

1. How is interest rate risk on the balance sheet defined?
2. Think of a couple of examples of how fee income might be subject to interest rate risk.
3. The standardized approach to measuring interest rate risk involves subjecting the balance sheet to a shock. What is the size of the shock? How would you go about determining whether the size of the shock is appropriate?
4. Should a financial institution be focusing on earnings or economic value when measuring interest rate risk on the balance sheet?
5. Give two examples of 'embedded optionality' that are affected by interest rate risk.
6. What is the difference between static and dynamic gap analysis?

Session 4.3

Workshop IRR Management

Solutions

This example is based on an example contained in HKMA Interest Rate Risk Exposure Returns available at:

<http://www.info.gov.hk/hkma/eng/bank/spma/attach/IR-1.pdf>

<http://www.info.gov.hk/hkma/eng/bank/spma/attach/IR-1-return.pdf>

ABC bank has the following items in the banking book.

ASSETS

- 1A. 1000 HKD of 20 year managed rate mortgages, which can be repriced in 2 month's time
- 2A. 400 HKD of 3 month fixed rate loans
- 3A. 500 HKD of 3 year fixed rate mortgage loans
- 4A. 100 HKD other non-interest bearing assets

LIABILITIES

- 1L. 1000 HKD of savings deposits
- 2L. 300 HKD of 5 month fixed rate deposits
- 3L. 300 HKD of 18 month fixed rate deposits
- 4L. 250 HKD of 2-year variable rate deposits to be repriced in 3 month's time
- 5L. 150 HKD capital

Off-balance sheet items and basis risk will not be considered in the simple analysis that we perform for this example.

The document at

<http://www.bis.org/publ/bcbs108.pdf?noframes=1>

contains the 16 principles promulgated by the BIS for interest rate risk management. The following paragraphs capture the main thrust of subjecting the gap to a 200 basis point shock and then testing whether the resulting change in economic value is acceptable

81. This standardised rate shock should in principle be determined by banks, based on the following:

For exposures in G10 currencies, either:

- (a) an upward and downward 200 basis point parallel rate shock, or
- (b) 1st and 99th percentile of observed interest rate changes using a one year (240 working days) holding period and a minimum five years of observations.

For exposures in non-G10 currencies, either:

- (a) a parallel rate shock substantially consistent with 1st and 99th percentile of observed interest rate changes using a one year (240 working days) holding period and a minimum five years of observations for the particular non-G10 currency, or

(b) 1st and 99th percentile of observed interest rate changes using a one year (240 working days) holding period and a minimum five years of observations.

84. Banks must hold capital to support the level of interest rate risk they undertake. Supervisors should be particularly attentive to the capital sufficiency of “outlier banks” – those whose interest rate risk in the banking book leads to a economic value decline of more than 20% of the sum of Tier 1 and Tier 2 capital following the standardised interest rate shock or its equivalent (as determined under Principle 14).

85. The response in cases where supervisors determine that there is insufficient capital will depend on a variety of factors. However, the response must result in the bank either holding additional capital or reducing the measured risk (through, for example, hedging or a restructuring of the banking book), or a combination of both, depending on the circumstances of the case.

Note that in the following solutions, the weightings in column 18a come directly from Annex 4 of the BIS document on Interest Rate Risk Management referenced above and reproduced below.

Table 1 Weighting factors per time band (second step in the calculation process)				
Time band	Middle of time band	Proxy of modified duration	Assumed change in yield	Weighting factor
Up to 1 month	0.5 months	0.04 years	200 bp	0.08%
1 to 3 months	2 months	0.16 years	200 bp	0.32%
3 to 6 months	4.5 months	0.36 years	200 bp	0.72%
6 to 12 months	9 months	0.71 years	200 bp	1.43%
1 to 2 years	1.5 years	1.38 years	200 bp	2.77%
2 to 3 years	2.5 years	2.25 years	200 bp	4.49%
3 to 4 years	3.5 years	3.07 years	200 bp	6.14%
4 to 5 years	4.5 years	3.85 years	200 bp	7.71%
5 to 7 years	6 years	5.08 years	200 bp	10.15%
7 to 10 years	8.5 years	6.63 years	200 bp	13.26%
10 to 15 years	12.5 years	8.92 years	200 bp	17.84%
15 to 20 years	17.5 years	11.21 years	200 bp	22.43%
Over 20 years	22.5 years	13.01 years	200 bp	26.03%

Source: <http://www.bis.org/publ/bcbs108.pdf?noframes=1>

From the duration formula we have the following relationship

$$\frac{\Delta P}{P} = -\frac{D}{(1+r)} \Delta r$$

The weighting factors are calculated as follows. For the time band 6 to 12 months

This relationship implies that when interest rates increase there will be a decrease in the economic value of an asset. The duration weights in column 18a have been entered as positive numbers when in fact as the formula above shows they should be entered as negative numbers to give the right direction of the effect of a change in interest rates. Given that we are concerned about the magnitude of the effect for a positive or negative 200 basis point shift in interest rates, the sign is of secondary importance. From our example if interest rates increase there will be a decrease in economic value of 16 HKD. Likewise, if interest rates increase there will be a decrease in earnings of 5 HKD. For the solutions from the workshop, the resulting impact on economic value is 10.67% which under the definitions above would be deemed acceptable.

Column 17a in the solutions is derived as the fraction of a year remaining times the interest rate change. This measures the impact on earnings over the remainder of the year if interest rates change. For example row A is $(364.5/365) \times 2\% = 1.997\%$. Row F is $(3/12) \times 2\% = 0.5\%$.

The Basel Committee is of the view that interest rate risk on the balance sheet is a potentially significant risk and should be dealt with under Pillar 2 of the New Accord, particularly represented in Principles 12 to 15 and Annexes 3 and 4 of “Principles for the Management and Supervision of Interest Rate Risk” (July 2004)

Principle 12: Banks must hold capital commensurate with the level of interest rate risk they undertake.

Principle 13: Banks should release to the public information on the level of interest rate risk and their policies for its management.

Principle 14: Supervisory authorities must assess whether the internal measurement systems of banks adequately capture the interest rate risk in their banking book. If a bank’s internal measurement system does not adequately capture the interest rate risk, the bank must bring the system to the required standard. To facilitate supervisors’ monitoring of interest rate risk exposures across institutions, banks must provide the results of their internal measurement systems, expressed in terms of the threat to economic value, using a standardised interest rate shock.

Principle 15: If supervisors determine that a bank is not holding capital commensurate with the level of interest rate risk in the banking book, they should consider remedial action, requiring the bank either to reduce its risk or hold a specific additional amount of capital, or a combination of both.

Interest rate risk exposure
Banking book

INTEREST BEARING ASSETS									
		1. Total interest bearing assets		2. Fixed rate assets		3. Variable rate assets		4. Managed rate assets	
		a. Total	b. Residential mortgage loans	a. Total	b. Residential mortgage loans	a. Total	b. Residential mortgage loans	a. Total	b. Residential mortgage loans
		2a+3a+4a	2b+3b+4b						
	Time Band								
A	Next day or less								
B	2 to 7 days								
C	8 days to 1 month								
D	1 to 3 months	1400		400	2A 400			1000	1A 1000
E	3 to 6 months								
F	6 to 12 months								
G	1 to 2 years								
H	2 to 3 years	500		500	3A 500				
I	3 to 4 years								
J	4 to 5 years								
K	5 to 7 years								
L	7 to 10 years								
M	10 to 15 years								
N	15 to 20 years								
O	More than 20 years								
	Total Book Value (total A to O)								
P	Non-interest bearing assets	1A 100							
	Total Assets (total A to P)	2000							

INTEREST BEARING LIABILITIES

		5. Total interest bearing liabilities		6. Fixed rate liabilities		7. Variable rate liabilities		8. Managed rate liabilities	
		a. Total	b. Deposits	a. Total	b. Deposits	a. Total	b. Deposits	a. Total	b. Deposits
		6a+7a+8a	6b+7b+8b						
	Time Band								
A	Next day or less	1000							
B	2 to 7 days								
C	8 days to 1 month								
D	1 to 3 months	250				250	4L 250		
E	3 to 6 months	300		300	2L 300				
F	6 to 12 months								
G	1 to 2 years	300		300	3L 300				
H	2 to 3 years								
I	3 to 4 years								
J	4 to 5 years								
K	5 to 7 years								
L	7 to 10 years								
M	10 to 15 years								
N	15 to 20 years								
O	More than 20 years								
	Total Book Value (total A to O)								
	Non-interest bearing liabilities (P+Q)								
P	Equity capital								
Q	Others	5L 150							
	Total liabilities (total A to Q)	2000							

IMPACT/SCENARIO ANALYSIS									
Time Band		17. Earnings perspective			18. Economic value perspective		19. Basis risk for both on and off balance sheet positions		
		16. Net positions	a. Time weight on earnings	b. Impact on earnings over the next 12 months if interest rates rise by 200 basis points	a. Weighting factor for standardised interest rate shock	b. Impact on economic value if interest rates rise by 200 basis points	Period for which changes in interest rates last	Impact on Earnings	
								Scenario (i) All rates except for fixed and managed rates on interest bearing assets rise by 200 basis points	Scenario (ii) Managed rates on interest bearing assets drop by 200 basis points while all other rates remain unchanged
		1a-5a							
A	Next day or less	(1000)	1.997%	(20)	0.0000%	0	1 mth		
B	2 to 7 days		1.975%	0	0.0200%	0	3 mths		
C	8 days to 1 month		1.896%	0	0.0100%	0	6 mths		
D	1 to 3 months	1150	1.667%	19	0.3200%	4	12 mths		
E	3 to 6 months	(300)	1.250%	(4)	0.7200%	(2)			
F	6 to 12 months		0.500%	0	1.4300%	0			
G	1 to 2 years	(300)			2.7700%	(8)			
H	2 to 3 years	500			4.4900%	22			
I	3 to 4 years				6.1400%				
J	4 to 5 years				7.7100%				
K	5 to 7 years				10.1500%				
L	7 to 10 years				13.2600%				
M	10 to 15 years				17.8400%				
N	15 to 20 years				22.4300%				
O	More than 20 years				26.0300%				
			Total (A to F)	(5)	Total (A to O)	16			
	Total capital base at reporting date				(P)	150			
	Impact on economic value as % of total capital base				(Total(A to O))/(P)	10.67%			



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 4.4

Current Issues in Bank Capital Planning

Prof Kevin Davis
Melbourne Centre for Financial Studies

The international credit crisis has seen many banks around the world suffer significant declines in their capital positions, reflecting the fact that capital is the difference between the value of assets and other liabilities. Thus when banks make losses, increase provisions for doubtful debts, or write down the value of assets held, their capital position declines.

That reduction in capital as measured on the balance sheet (book value), has been accompanied by reductions in bank share prices, such that the market value of banks has also declined. In general, the decline in market values has far exceeded the decline in book values. The reason is that market values reflect expectations of future earnings, and investors have reduced their expectations of future bank profits and resulting dividends. When expectations turn from high growth to no (or negative) growth, the effect on share prices can be particularly severe.

This is creating a major problem for world economies, because reduced bank capital is one key factor preventing expansion of credit to restimulate economic activity. Under the Basel capital accord rules, and subject to a few qualifications, bank capital needs to grow at a similar rate to lending and deposit growth. Unless banks can rebuild their capital, their willingness and ability to lend is limited.

But the banks face a major challenge of raising the equity (or other allowable forms of regulatory) capital to underpin growth.

Bank capital is unlikely to grow organically at anywhere near the rate required to meet expanded demand for bank services. Higher wholesale funding costs are eating into bank profits, increasing interest rate competition for retail deposits, and forcing them to increase loan interest rates. Greater provisions for losses from loans to now distressed companies are also going to eat into available capital.

One of the dangers for world economies is that attempts by banks to grow capital organically can adversely affect economic growth. If banks widen interest rate spreads in an attempt to increase profit (and thus generate capital internally) economic activity will be dampened. And in many countries, bank shareholders have become used to high and stable dividends from banks, which means that bank managers will be reluctant to decrease dividends (and retain earnings to boost capital) for fear of further depressing their bank's share price.

And with bank equity values already having been trashed by the stock market, this is not a good time to make new share issues. The cost of equity capital has increased significantly. This can be seen, for example, in lower price-earnings (P/E) ratios. Investors are demanding much higher earnings levels than previously to make them willing to hold existing bank shares, or buy additional shares, at the current share price. The consequent need to issue many more shares to raise a given amount of capital dilutes the interests of existing shareholders.

More generally, the potential share market reaction is a problem for any bank seeking outside capital. Is it in need of capital because of its poor financial position or because it has significant opportunities for profitable expansion of business? Great care needs to be taken to ensure that the market interprets any equity raising as growth-oriented good news rather than recapitalization bad news.

Here, fortuitously, the financial engineering skills that spread the sub-prime mess, may help resolve the problem. The Australian experience of the early 1990s, when large losses meant that at least two of the four major banks needed recapitalization, and share prices of some major banks had sunk dramatically, provides a good example.

That situation sparked the development in Australia of converting preference shares. This innovation enabled banks to issue permanent capital which, provided share prices recovered over the next few years, avoided the dilution costs arising from the (then) low share price. The “trick” was that investors received a fixed dividend for (say) five years, at which time the securities converted automatically into a fixed value of ordinary shares. If the bank’s share price had increased, a small number of shares would be received, but if it had fallen, a large number of shares would be received. Those securities had their deficiencies, and second and third generation variants have since emerged, and we should anticipate further such innovations as banks seek alternative forms of capital to underpin business growth.

Certain debt securities issued by banks can also count towards regulatory capital. While this is not a good time to issue debt (given the credit spreads prevailing in debt markets), its limited maturity may make it a cheaper solution than raising equity capital, particularly for banks whose low risk debt securities would prove attractive to many pension fund portfolios.

Another (simple) piece of financial engineering can help to resolve the conflicting demands of shareholders wanting high dividends and bank management wanting to retain earnings to build up capital. Dividend reinvestment schemes, whereby shareholders are given the option to take dividends in the form of additional shares (perhaps at a discount to the market price) rather than cash, reconcile these demands. However, because some shareholders may not exercise that option, the bank faces the risk of only partial participation leading to cash outflows. Thus a further response, as well as providing discounts on dividend reinvestment schemes, is to have them underwritten by securities firms and/or institutional investors, who take up any shares not purchased by dividend recipients.

A further problem facing banks, regulators, and the economy, is the tendency for bank capital requirements under the Basel Accord to operate pro-cyclically, involving increases in capital requirements in periods of recession. If ratings decline in a recession, as tends to happen, the capital charges for banks with existing loan exposures to customers with deteriorating ratings will increase. The need to improve capital positions may cause banks to cutback new lending, aggravating the economic downturn.

Hence, recapitalization of banks is an important current issue, and a number of countries have pursued this by way of government providing capital and taking equity stakes in banks. As a short run solution, this may have merit. However, it brings with it significant potential governance problems, as well as moral hazard and competitive neutrality concerns arising from public perceptions that such institutions are government guaranteed.

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Bank Capital Management Practices

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Outline

- Bank capital planning – the drivers
- Meeting capital targets – techniques
- The cost of bank capital – its importance
- Optimizing the capital mix

Capital Planning

- Capital/Asset (leverage / gearing) target
 - enforced by regulators or voluntary
 - regulatory capital standards based on accounting / actuarial measurements
- optimal leverage reflects cost, risk, information, tax issues
 - government guarantees to other stakeholders (policy holders / depositors) etc. gives incentive to increase leverage and/ or risk of activities
 - risk related capital ratios reflect this concern
 - But may not be adequately calibrated!

Capital Planning

- Expected Growth in Activity determines required growth in capital
- Growth in Capital = Earnings less Dividends plus External Capital Raisings
 - poor past performance creates difficulties in growing capital
 - And losses reduce existing capital base!
 - mutual organizations restricted in accessing external capital

Capital Planning and Allocation

- At aggregate level
 - Alternative forms of capital (in addition to equity) may be suitable for regulators
 - Optimal capital planning requires financing choices to minimize overall cost of capital
- At business unit level
 - Capital needs to be allocated across business units
 - So that product pricing reflects cost of capital
 - For business unit performance assessment

A workshop example

For bank A:

Start of year 0

Total Assets = \$100 (unchanged during year 0)

Risk weighted assets = $0.75(\text{Total Assets})$

Capital = $0.060(\text{Total Assets})$

Regulatory Capital Requirement = 8% of Risk weighted assets

For year 0

Return on Assets = 0.2%

For year 1

Expected growth in total assets = 20%

- Does bank A meet the minimum capital requirements at the start of year 0?
- Explain the dilemma faced by bank A at the start of year 1 and suggest possible solutions?

Workshop solution

Capital Position

Risk weighted assets = \$

Capital/ RWA =

For coming year Earnings =

End of year capital (if full retention) = \$

Expected Assets = \$, expected RWA = \$

Expected Capital/RWA = \$ = %

> or < minimum required?.

Solutions:

What is the cost of bank capital?

- The rate of return which shareholders (& other capital providers) require to compensate for risk
- The bank must meet their expectations that it will deliver this rate of return or else
 - The bank's share price will fall
- Example: required return = 20% p.a.
 - Interpret as an earnings/price ratio
 - If share price is \$10 and expected earnings are \$1 per share, the outcome is ?
 - Share price tumbles to \$5 (earnings/price = $1/5 = 20\%$)

The cost of capital as a key driver

- Important driver of bank earnings targets
 - Need to meet market expectations of return on both existing assets and franchise value (growth opportunities)
- Crucial for divisional performance assessment
- Fundamental to pricing decisions
 - Interest rates etc need to be set to generate adequate rate of return on capital allocated to that activity

Pricing Decisions

- RAROC (risk adjusted return on capital) Loan Pricing
 - “Break even (required)” quoted loan interest rate

Quoted loan interest rate	=	Expected default loss (%)	+	Operating cost (%)	+	Average Cost of funds
						= Weighted average of Cost of deposits + Cost of Equity
						92% deposit funding @3% 8% equity funding @15%
0.099 (9.9%)	=	0.01	+	0.05	+	0.92x0.03+0.08x0.15

Example

Pricing Decisions and Credit Techniques

- Managerial objective: price loans at higher rates than RAROC required loan rate
- Market constraint: what are competitors charging
- Better credit assessment techniques may allow competitors to cherry pick good customers
 - A bank which can't distinguish high and low risk customers must charge an "average" interest rate to both
 - Knowledgeable competitor sets higher rate for high risk customers and low rate for lower risk customers
 - Bank gets high risk customers, charges "average" interest rate
 - Not a good strategy for future survival!
- Implication: banks not able to implement "best practice" risk assessment (or without special knowledge) at risk of exit

Performance Measurement

- Cost of Equity is a fundamental input
- Some approaches
- RAROC = risk adjusted return on capital
 - Benefit: can be compared directly with cost of capital
 - Problem: ignores scale of activity (if judged on RAROC, businesses may pass up profitable business which reduces their RAROC even though it returns above the required rate of return)
- EVA = economic value added
 - Earnings – required return on capital employed
 - Needs careful accounting adjustments to convert earnings into a "cash flow" concept comparable to required return
 - Problems of allocating EVA across life of multi-year project

Bank Capital Innovations

- Optimal capital structure involves mix of funding instruments
 - Minimize cost of capital
- Hybrid instruments have a mix of debt and equity characteristics
 - Preference shares
 - Convertible debt
 - Mandatory converting securities
 - Undated debt “stapled” securities
- Alternative funding arrangements
 - “Covered” bonds
 - Off Balance Sheet Securitisation

Bank Capital Innovations: motivation

- Regulatory capital: Basel Accord
 - permits certain non-equity instruments to count as regulatory capital
 - Basel 1 created incentives to off balance sheet securitisation
- Tax arbitrage
 - Tax systems treat debt and equity differently
- Financial Market Imperfections
 - Hybrid instruments may be cheaper than deposits, straight debt, and equity

Popular Capital Instruments

- Converting Preference Shares
- Reset Converting Preference Shares
- Convertible Notes
- Income Securities

“Covered Bonds”

- Long standing financing vehicle in Germany known as “Pfandbriefe”
- Recent increase in popularity in Europe
 - Suggested that Basel 2 will further stimulate
 - Lower risk weights for residential mortgages mean less capital benefit from “off balance sheet” securitisation
- “On-balance sheet” securitisation
 - Bonds issued by bank which have position secured against a set of loans on the bank’s balance sheet
 - If issuing bank goes into liquidation, underlying loan assets split off and run as separate pool

“Covered Bonds”

- Risk to investors depends on
 - Risk of issuer failure
 - Risk of asset pool value and quality
- Low rated bank can issue higher rated bonds (at lower cost)
 - over-collateralisation (covering asset pool > bond issue)
 - Limit on max loan to valuation ratio of loans in asset pool

“Covered Bonds”

- Supervisory arrangements need to reflect bank activities
- Legal arrangements need to ensure investor's preferred status as claimant over asset pool
- Risk features include
 - Bond and asset pool interest rate mismatch
 - maturity mismatch
 - Asset pool substitution risk
 - Liquidity, currency, servicing risks

“Covered Bonds”

- Main motivation appears to be lower cost of funding vis a vis unsecured bonds
 - But what is impact on cost of other sources of finance?
 - Deposits, equity, unsecured bonds
 - What is source of “value added”?

Conclusion

- Basel distinction between Tier 1 and Tier 2 gives incentives to examine alternative hybrid forms of capital
- Banks well placed to issue such instruments
- Need to carefully assess cost of capital benefits from such instruments



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Session 5.1

Managing Liquidity Risks

Prof Kevin Davis
Melbourne Centre for Financial Studies

The global sub-prime crisis of 2007-8 has emphasized the importance of liquidity management in banking (and other organizations) and the potentially disastrous risks which exist. The Basel Committee has issued (June 2008) its “Principles for Sound Liquidity Management and Supervision”.¹

Liquidity management involves financial institutions implementing strategies of “self-insurance” or “purchased insurance” against shortfalls of cash required to meet current and forthcoming obligations in a variety of ways. The optimal mix will reflect the relative costs incurred in using each approach and the risks associated with each.

Determining the scale of potential liquidity needs is an ongoing daily activity with a number of dimensions. These include:

- Ensuring adequate “cash” is available at customer outlets (branches, ATMs) to meet withdrawals;
- Having sufficient settlement account balances to meet overnight settlements;
- Projecting likely net withdrawals/inflows (due to maturing deposits, loan drawdowns, customer transactions etc) on future dates such that actions can be taken to ensure the availability of adequate liquidity as these dates approach. As the time horizon involved gets longer, liquidity management morphs into “funding” and capital management arrangements.

There are a range of techniques available for these purposes, but an important component is that of “stress testing”. One such test which most regulators will require is for financial institutions to demonstrate that they are able to survive a “name crisis” in which their ability to access key sources of funds dries up for a number of days. Table 1 provides information on possible assumptions which might be required in stress testing.

Table 1: Stress Testing: Possible assumptions

asset market illiquidity and the erosion in the value of liquid assets
the run-off of retail funding
the (un)availability of secured and unsecured wholesale funding sources
the correlation between funding markets or the effectiveness of diversification across sources of funding
additional margin calls and collateral requirements
funding tenors
contingent claims and more specifically, potential draws on committed lines extended to third parties or the bank's subsidiaries, branches or head office
the liquidity absorbed by off-balance sheet vehicles and activities (including conduit financing)
the availability of contingent lines extended to the bank
liquidity drains associated with complex products/transactions

¹ In February 2008 it published “Liquidity Risk Management and Supervisory Challenges”

the impact of credit rating triggers
FX convertibility and access to foreign exchange markets
the ability to transfer liquidity across entities, sectors and borders taking into account legal, regulatory, operational and time zone restrictions and constraints
the access to central bank facilities
the operational ability of the bank to monetise assets
the bank's remedial actions and the availability of the necessary documentation and operational expertise and experience to execute them, taking into account the potential reputational impact when executing these actions
estimates of future balance sheet growth.
<i>Source: Basel Committee: BCBS144</i>

Potential sources of liquidity include the following:

- Holding “cash” or near-cash assets. This is generally perceived to be expensive – because providers of funds to the institution do not adjust downwards their required rates of return sufficiently to reflect the lower risk associated with higher liquidity. As financial markets have developed, cash holdings have fallen as a form of liquidity management – although there has been clear evidence of a flight to cash (such as Central Bank deposits) during the uncertain times of the sub-prime crisis.
- Holding readily marketable securities (financial assets). The sub-prime crisis has exposed the shortcomings in such a strategy for coping with market wide liquidity crises. It involves taking on market risk (due to volatility in the market prices of those assets), with the risk of having to sell into a depressed market. In a time of crisis, when many organizations are pursuing the same strategy, the cost can be significant – and particularly so if markets freeze up as has happened during the crisis.
- Holding securities which can be pledged as collateral for short term borrowings. The repurchase (repo) market, in which securities are sold and simultaneously repurchased for delivery at a future date, has become an important tool for liquidity management of this sort.
- Having in place lines of credit or other arranged borrowing facilities. The ability to draw on a committed line of credit or overdraft facility from another institution will typically involve incurring some cost for establishment and maintenance of that facility in addition to the cost of borrowing. Another option is to have facilities in place which enable the organization to issue securities (such as commercial paper) into the capital market. In some cases this may also be achieved by having an option attached to existing securities on issue which enables the issuer to extend their maturity.
- Having at-call or short term loans outstanding to other entities which can be called to provide cash when needed. The risk here is that such loans involve counterparty risk – and calling such loans may increase the likelihood of default if there is widespread stress in the financial market. Often, such loans may be

collateralized by marketable securities pledged by the borrower against the loan (such as via a loan made as a reverse repo). This reduces the risk of the borrower defaulting, but leads to potential exposure to market risk if default occurs and the value of the security has declined. Consequently, ensuring that margin requirements are continually met and the value of collateral maintained above the loan value becomes an important operational requirement.

- Having sufficient credit rating and standing with potential counterparties to be able to borrow at short notice in inter-bank markets. This is an important component of daily liquidity management in which banks with projected surpluses and deficits in their desired settlement account balances at the Central Bank trade with each other to correct those imbalances. Table 1 provides more detail on potential sources of “funding liquidity”
- For banks, the ability to access “Lender of Last Resort” loans or use discount window facilities at Central Banks provide further potential, albeit costly, sources of liquidity.

Table 2: Potential sources of funding

- deposit growth
- the lengthening of maturities of liabilities
- new issues of short- and long-term debt instruments
- intra-group fund transfers, new capital issues, the sale of subsidiaries or lines of business
- asset securitisation
- the sale or repo of unencumbered, highly liquid assets
- drawing-down committed facilities
- borrowing from the central bank’s marginal lending facilities.

Source: Basel Committee: BCBS144

Liquidity risks can arise from specific individual products or business lines, meaning that an overall framework is required for total liquidity management. Some of these risks can arise from contingent commitments – which may be contractual or non-contractual (where the reputational costs of not meeting that commitment are sufficiently severe as to make them effectively contractual). Liquidity risks and credit counterparty risks are inherently interrelated, and liquidity risk can easily transform into solvency risk for an institution.

Some questions which financial institutions need to address in examining their liquidity management arrangements include the following:

- How is liquidity risk of new (and existing) products to be measured?
- What liquidity risk costs should be incorporated into the funding costs of products (and how do internal systems achieve this)?
- How are all potential liquidity risks (such as contingent commitments and lines of credit provided) appropriately incorporated into centralized liquidity planning and management?

For Central Banks and Prudential Regulators, questions which warrant attention include:

- What are the appropriate structures for liquidity support facilities which Central Banks provide to individual institutions (lender of last resort, rediscount window etc)?
- How should system liquidity management techniques be designed (such as use of securities lending v repos; allowable collateral etc)?
- Can liquidity creation outside the banking sector and based on activities such as repos and securities loans be adequately controlled by use of traditional central Banking weapons?
- What are some possible early warning signs of institutions facing liquidity problems? Table 3 provides some suggestions.
- What information should regulators expect institutions to publicly disclose about their liquidity management practices? Table 4 provides some suggestions, and the disclosures by Deutsche Bank are also shown..

Table 3: Early warning indicators

• rapid asset growth, especially when funded with potentially volatile liabilities
• growing concentrations in assets or liabilities
• increases in currency mismatches
• a decrease of weighted average maturity of liabilities
• repeated incidents of positions approaching or breaching internal or regulatory limits
• negative trends or heightened risk associated with a particular product line, such as rising delinquencies
• significant deterioration in the bank's earnings, asset quality, and overall financial condition
• negative publicity
• a credit rating downgrade
• stock price declines or rising debt costs
• widening debt or credit-default-swap spreads
• rising wholesale or retail funding costs
• counterparties that begin requesting or request additional collateral for credit exposures or that resist entering into new transactions
• correspondent banks that eliminate or decrease their credit lines
• increasing retail deposit outflows
• increasing redemptions of CDs before maturity
• difficulty accessing longer-term funding
• difficulty placing short-term liabilities (eg commercial paper)

Source: Basel Committee: BCBS144

Table 4: Possible Liquidity Risk Management Disclosures

the aspects of liquidity risk to which the bank is exposed and that it monitors
the diversification of the bank's funding sources
other techniques used to mitigate liquidity risk
the concepts utilised in measuring its liquidity position and liquidity risk, including additional metrics for which the bank is not disclosing data
an explanation of how asset market liquidity risk is reflected in the bank's framework for managing funding liquidity
an explanation of how stress testing is used
a description of the stress testing scenarios modelled
an outline of the bank's contingency funding plans and an indication of how the plan relates to stress testing
the bank's policy on maintaining liquidity reserves
regulatory restrictions on the transfer of liquidity among group entities.
the frequency and type of internal liquidity reporting
<i>Source: Basel Committee: BCBS144</i>

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Liquidity Management

Liquidity Risk Management safeguards the ability of the bank to meet all payment obligations when they come due. Our liquidity risk management framework has been an important factor in maintaining adequate liquidity and a healthy funding profile during the year 2007.



Liquidity Risk Management Framework

Treasury is responsible for the management of liquidity risk. Our liquidity risk management framework is designed to identify, measure and manage the liquidity risk position. The underlying policies are reviewed and approved regularly by the Capital and Risk Committee. The policies define the methodology which is applied to the Group.

Our liquidity risk management approach starts at the intraday level (operational liquidity) managing the daily payments queue, forecasting cash flows and factoring in our access to Central Banks. It then covers tactical liquidity risk management dealing with the access to unsecured funding sources and the liquidity characteristics of our asset inventory (asset liquidity). Finally, the strategic perspective comprises the maturity profile of all assets and liabilities (funding matrix) on our balance sheet and our Issuance Strategy.

Our cash-flow based reporting system provides daily liquidity risk information to global and regional management.

Our liquidity position is subject to stress testing and scenario analysis to evaluate the impact of sudden stress events. Our scenarios are based on historic events, case studies of liquidity crises and models using hypothetical events.



Short-Term Liquidity

Our reporting system tracks cash flows on a daily basis over an 18-month horizon. This system allows management to assess our short-term liquidity position in each location and region and globally on a by-currency, by-product and by-division basis. The system captures all of our cash flows from transactions on our balance sheet, as well as liquidity risks resulting from off-balance sheet transactions. We model products that have no specific contractual maturities using statistical methods to capture the behavior of their cash flows. Liquidity outflow limits (Maximum Cash Outflow Limits), which have been set to limit cumulative global and local cash outflows, are monitored on a daily basis and safeguard our access to liquidity.



Unsecured Funding

Unsecured funding is a finite resource. Total unsecured funding represents the amount of external liabilities which we take from the market irrespective of instrument, currency or tenor. Unsecured funding is measured on a regional basis by currency and aggregated to a global utilization report. The Capital and Risk Committee sets limits by business division to protect our access to unsecured funding at attractive levels.



Asset Liquidity

The asset liquidity component tracks the volume and booking location within our consolidated inventory of unencumbered, liquid assets which we can use to raise liquidity via secured funding transactions. Securities inventories include a wide variety of different securities. As a first step, we segregate illiquid and liquid securities in each inventory. Subsequently we assign liquidity values to different classes of liquid securities.

The liquidity of these assets is an important element in protecting us against short-term liquidity squeezes. In addition, we continue to keep a portfolio of highly liquid securities in major currencies around the world to supply collateral for cash needs associated with clearing activities in euro, U.S. dollar and other currencies. Also to support our liquidity profile in case of potential deteriorating market conditions, as seen globally in the second half of 2007, we increased these dedicated portfolios by € 7.8 billion to € 25.4 billion as of December 31, 2007.



Stress Testing and Scenario Analysis

We employ stress testing and scenario analysis to evaluate the impact of sudden stress events on our liquidity position. The scenarios have been based on historic events, such as the 1987 stock market crash, the 1990 U.S. liquidity crunch, September 2001 terrorist attacks, liquidity crisis case studies and hypothetical events. The scenarios also incorporate challenges presented by the 2007 financial markets crisis: prolonged term money-market freeze, collateral repudiation, non-fungibility of currencies and stranded syndications. The hypothetical events encompass internal shocks, such as operational risk events and 3-notch ratings downgrades, as well as external shocks, such as market risk events, emerging market crises and systemic shocks. Under each of these scenarios we assume that all maturing loans to customers will need to be rolled over and require funding whereas rollover of liabilities will be partially impaired resulting in a funding gap. We then model the steps we would take to counterbalance the resulting net shortfall in funding. Action steps would include selling assets, switching from unsecured to secured funding and adjusting the price we would pay on liabilities (gap closure).

This analysis is fully integrated within the existing liquidity risk management framework. We track contractual cash flows per currency and product over an eight-week horizon (which we consider the most critical time span in a liquidity crisis) and apply the relevant stress case to each product. Asset liquidity complements the analysis.

Our stress testing analysis provides guidance as to our ability to generate sufficient liquidity under critical conditions and is a valuable input when defining our target liquidity risk position. The analysis is performed monthly.

Liquidity Management

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Outline

- The significance of liquidity management
- Techniques of liquidity management
- Sources of liquidity exposures
- Management structures
- Best practice guidance

Basel Committee Best Practice

- Guidance released Sept 2008 (BCBS 144)
- Key areas of enhancement to past guidance
 - the importance of establishing a liquidity risk tolerance;
 - the maintenance of an adequate level of liquidity, including through a cushion of liquid assets;
 - the necessity of allocating liquidity costs, benefits and risks to all significant business activities;
 - the identification and measurement of the full range of liquidity risks, including contingent liquidity risks;
 - the design and use of severe stress test scenarios;
 - the need for a robust and operational contingency funding plan;
 - the management of intraday liquidity risk and collateral; and
 - public disclosure in promoting market discipline.

Liquidity Management Goals

- Objective: ensuring ability of bank to meet all payment obligations when they come due
 - Deposit outflows, non-rollover of capital market funding, customer drawdown of facilities, off balance sheet commitments
- Goal of liquidity risk management
 - Identify potential future payment/funding problems
 - Ensure that funds can be obtained to meet those problems

Liquidity Management Problems

- What is risk tolerance and costs of emergency actions?
- What future scenario(s) should be assumed?
- How is information about potential future cash flows aggregated and analysed?
- What are suitable indicators of the liquidity position of firms relying primarily on liability management?

Sources of liquidity exposures

- On balance sheet
 - Deposit outflows, debt maturities, loan fundings etc
- Off balance sheet
 - Collateralisation
 - Standby/Liquidity support facilities
 - Derivatives
 - Pipeline business
 - Revolving credit facilities
 - Liabilities on bill acceptances

Three levels of liquidity management

- Operational – management of intra-day and next/near day positions
 - Cash flows, central bank account positions, interbank markets, central bank access
 - Systems for aggregating information
 - Limits on mismatch positions for future days
- Tactical – short term unsecured funding and asset liquidity
- Strategic – funding/capital markets access

Tools

- Quantitative forecasting
- Limits on certain business activities
- Early warning indicators
- Stress testing
- Contingency funding plans

Liquidity disruptions: sub-prime crisis

- Closure of ABS commercial paper markets
- Closure of securitization markets
- Delays in loan syndication completions and underwriting exposures
- Interbank market disruptions
- Exposures to off balance sheet SIVs/conduits

Fundamental Issues for Regulators

- How to identify institutions with possible liquidity problems?
- How to best design liquidity support facilities to individual institutions (lender of last resort, rediscount window etc)?
- How to best design system liquidity management techniques (securities lending, repos, allowable collateral etc)?
- How to control liquidity creation outside the banking sector based on activities such as repos and securities loans?

Session 5.2

Workshop Comprising Small Groups

Please provide responses to the following question:

“You are a regulator in an economy currently experiencing a significant degree of financial market turbulence and are concerned about the liquidity positions and liquidity management and planning by the banks your supervise. What are the five most important pieces of information (which could be particular numbers/statistics, descriptions of policies and procedures, commercial arrangements, simulations, etc.) you would demand from your banks to assess their liquidity exposure and their ability to manage this?”

You should also note other pieces of information you would like. Appoint a group representative to report back to facilitated discussion where similarities and differences between the lists developed by each group will be discussed.

Group 1

1. Maturity schedule (assets & liabilities) including duration and liquidity ratio
2. Money and interbank marketing
3. Collateral
4. Liquid assets
5. Off balance exposures

Group 2

1. Current condition of the bank – CAMEL relationships ‘solvent bank/not’ – ‘good money chases bad money’
2. Gap analysis structure of their assets and liabilities and off – B/S
 - a. Adequacy of liquid assets
 - b. Source of liquidity risk exposure
3. Policies on liquidity risk management – ‘do they actually follow policies?’
4. Robustness of EWS and stress test analysis
5. Contingency funding plans – strategy to access funding, arrangements with third party and support from parents?

Group 3

1. Ask banks about their investment portfolios structure
2. Supervisors ask banks to do some stress tests
3. Ask bankers to provide a detailed contingency plan
4. Daily reports of liquidity positions (domestic – foreign currency)
5. Liquidity reserves

Group 4

1. Liquidity risk management policy / strategy
2. Banking liquidity conditions (deposit profile, interbank lending, of B/S, underwriting exposure, liquefiable assets, intra-group liquidity)
3. Stress test and scenario analysis (institution specific, general market crisis)
4. Liquidity gap, maturity profile report in local and foreign currency
5. Contingency plan and contingent funding source



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Session 5.4

Australian Banking Perspective on Managing Liquidity Risk

Mr Bruce Lebransky
National Australia Bank

In its recent Annual Report, the Australian Prudential Regulation Authority (APRA) said the immediate and most intense focus of its supervisory activities during 2007/8 was the management of liquidity and funding by ADIs (ie banks, building societies and credit unions) reflecting the substantial disruption to global financial markets.

As part of its response, APRA in early 2008 established a dedicated team to handle liquidity risk management issues including the collection of weekly information on liquidity positions and forward cash flows.

In more recent times, APRA says it has been seeking to ensure that ADIs have realistic approaches to funding planned asset growth of up to 12 months ahead and that such planning should be responsive to changing market conditions.

The Reserve Bank of Australia (RBA) also acted to re-define the manner in which it conducted repo transactions with market counterparties including as to types of acceptable security collateral, haircuts applied and terms of permissible transactions. More recently, governments and regulators have introduced a variety of direct support measures including deposit guarantee arrangements and recapitalisation measures. A close relationship exists between a Central Bank's liquidity operations and regulator assessments about the realism of ADI's internal liquidity-risk management processes and forward planning.

One of the difficulties for a bank with global operations such as NAB is that regulatory requirements and Central Bank initiatives are not consistent across countries. This lack of consistency has the potential to raise issues about transparency of market disclosure and therefore market confidence in understanding reported liquidity risk positions.

2008 has also seen the release of a number of significant reports on liquidity risk management issues including from a business experience perspective. These have come after official reports in the UK concerning the collapse of Northern Rock Bank PLC in 2007. They include:

- FSA DP 07/7: Review of Liquidity Requirements for Banks and Building Societies (December 2007) and Feedback on DP 07/7 (May 2008)
- Senior Supervisors Group: Observations on Risk Management Practices during Recent Market Turbulence (March 2008)
- Basel Committee on Banking Supervision: Principles for Sound Liquidity Risk Management and Supervision (September 2008).

Several supervisors have commenced (or indicated that they soon will be) issuing significantly revised liquidity risk management regulatory standards eg the Reserve Bank of New Zealand Liquidity Policy Consultation Paper.

The release of revised standards may cause new issues about regulatory consistency including permissible and required assumptions of funding withdrawals and renewals, appropriate periods for risk measurement under different assumptions, scenario testing, definitions of liquid assets and required disclosure requirements. It is also unclear what role the Supervisory Colleges now being established for the largest financial institutions will have a role in the determination of best practice expectations for smaller institutions. The balance between a principles based approach and a prescriptive approach to liquidity risk management is still to be determined.

ADIs have been reviewing and revising their liquidity risk management policies. NAB's process of review has included the key areas of:

- Governance / management arrangements
- Funding and liquidity outcome targets
- Limits on funding concentration and restrictions on short-term wholesale funding
- Scenario testing
- The working definition of liquidity
- Escalation triggers and procedures

Important decisions for NAB included the decision to establish a Liquidity Risk sub-committee of the Asset and Liability committee and establishing forward looking outcome targets much longer than required under existing prudential standards. Restrictions on accepting short-term wholesale funding were also imposed.

In its recent annual report, APRA noted experience had confirmed liquidity requirements needed to consider more than a loss of confidence in an individual ADI. They should be supplemented with a broader focus on the risk that key funding markets ceased to operate smoothly even when the individual ADI remains sound. One way of addressing this issue is to establish a variety of contingent funding sources that are accessed by banks as part of their "normal" liquidity risk management operations. NAB has done this during the past year including with respect to utilising the changing requirements of the RBA on acceptable security collateral for repo transactions.

What is less clear at this time is how such a broader focus should in turn influence the assumptions being applied by ADIs about maintaining lending volumes during such periods. This of course has broader implications for economic management.

This past year has seen much more detailed disclosure by Australian ADI's of their liquidity position and how they manage funding requirements and concentration issues. This is of course an important way to maintain market confidence in individual banks and the financial market more generally.

Matters covered in these disclosures include the following:

- Estimates of funding requirements for the current and next financial year and funding completed to date
- Composition of existing funding including by type and by source (geography) as a way of addressing issues of concentration
- Maturity profile of existing funding arrangements
- The amount of "liquid asset holdings" including the major components of their composition

These disclosures have been a focus of annual report presentations by banks' CEOs and market presentations by Chief Risk Officers. This has helped to assure the market about the significance banks place on having well-developed and well-considered liquidity risk management policies.

MAFC / APEC / AFDC Shanghai Conference: Session 5.4 - Liquidity Risk

8 – 12 December 2008
Bruce Le Bransky



Clydesdale Bank

Yorkshire Bank

Bank of New Zealand

nabCapital



Key points to be covered

- ▶ The failure of liquidity risk management
- ▶ What is liquidity risk?
- ▶ NAB: Key changes in liquidity risk management –
 - ▶ Governance
 - ▶ Internal Targets
 - ▶ Funding Profile
 - ▶ Policies and Assumptions
 - ▶ Escalation Plan Procedures

The Failure of Liquidity Risk Management

- ▶ Liquidity risk has contributed to several bank failures in 2007/8.
 - ▶ Inadequate focus on funding concentration risks
 - ▶ Inadequate contingency plans
 - ▶ Inadequate identification of stress situations: market closures and contingent commitments
- ▶ Consequence:
 - ▶ Significant re-view / re-writing of banks' liquidity risk management policies
 - ▶ Significant revisions to regulatory liquidity risk principles and requirements now occurring. Eg Reserve Bank of New Zealand. Potential for home-host regulatory differences as "national discretions" exercised.
 - ▶ Calibration of liquidity risk models to market events. Changing assumptions on product / customer behaviour in light of actual / new behaviours being observed in the global economy.

3



What is Liquidity Risk?

- ▶ Ability to fund increases in assets and meet obligations as due without incurring "unacceptable losses" (BIS September 2008)
- ▶ The management of intra-day liquidity requirements are viewed separately to liquidity risk.
- ▶ NAB measures liquidity risk on a standalone entity and group basis on a daily basis.
- ▶ Branches are viewed as having their own separate set of measurable liquidity risks – primarily for regulatory reporting

4



NAB: Key changes in liquidity risk management

- Governance

- ▶ Primary governance committee is GALCO (group asset and liability committee). Regional ALCOs for the separate licensed banking subsidiaries.
- ▶ 2008. Establish sub-committee to focus on liquidity risk (chaired by the CFO includes Group Treasurer). Meets daily / weekly and reports weekly to GALCO. Similar committees in other regions.
- ▶ 2008. Weekly reporting to APRA on standardised spreadsheet for all majors includes regulatory definitions of terms. Forecast position on a monthly basis for the calendar year.
- ▶ 2008. Review escalation procedures including description of triggers: Three levels – Group Treasurer, Board, Regulators.
- ▶ 2008. Enhance annual report disclosures about liquidity risk management and funding requirements.
- ▶ No additional engagement with internal audit on liquidity risk issues. Audit reviews are part of annual planning process.

5



NAB: Key changes in liquidity risk management

- Internal Targets

Significant expansion of internal triggers and limits :

- ▶ The regulatory stress test for name crisis – 5 business days - not sufficient for day to day management.
- ▶ Focus on wholesale funding targets (issues of concentration):
 - Maximum refinancing in any one month limited as a % of annual wholesale refinancing requirements.
 - Stop short-term funding of one month or less: Preferred minimum 6 months maturity.
 - Targeting higher days cash flow positive
 - Cash flow positive without the impact of central bank support of at least also raised. Regulatory minimum is shorter but includes retail run-off
- ▶ Contingent liquidity demand: Assume drawdown % over actual forecast balance sheet growth. Include these drawdown assumptions in reporting to APRA on monthly forecast positions.
- ▶ Establish specific escalation triggers for retail funding based on a rising level of funding decline.

6



NAB: Key changes in liquidity risk management – Funding Profile

	Balance date September 2008 AUD billion	% change on March 2008
Term deposits	161.1	20.2
On demand and short-term deposits	112.9	-2.0
Due to other banks	45.5	-14.1
Short-term borrowings	36.7	5.3
Long-term borrowings	99.0	11.5

7



NAB: Key changes in liquidity risk management - Policies and Assumptions

- ▶ Review existing policies and assumptions:
 - ▶ Establish additional “market disruption” scenarios eg impact of a “name crisis” for a major competitor.
 - ▶ Haircuts applied to “liquidity” of paper.
 - ▶ Definition of liquid asset reviewed. Focus no longer on the counter-party but eligibility for repo transactions with local Central Banks (and required haircut).
 - Consequently a greater inconsistency in the actual composition of “defined” liquid assets across the Group.
 - Possible benefits of liquidity transfers across group to capture differences in Central Banks repo practices not captured in calculations.
 - ▶ Group liquid asset calculations aggregation of local / host regulatory requirements.

8



NAB: Key changes in liquidity risk management – Escalation Plan Procedures

- ▶ Objectives:
 - ▶ Early warning of stressed conditions causing or will cause liquidity position to deteriorate – name and systemic issues
 - ▶ Reviewed processes to monitor, identify, escalate and respond.
 - ▶ Triggers monitored by liquidity risk committee
- ▶ Review Plan: half-yearly or when significant change in the business
- ▶ Effectiveness of Plan: Practical use of contingent funding sources eg using assets acceptable as collateral or repo transactions with local Central Banks

9



Escalation Procedures (cont.)

Level 1 Significant Incident: <i>Heightened Monitoring</i>	Name Related: - decline in retail funding over 10 days - spreads on NAB commercial paper widening relative to peers	Systemic: - major bank funding spreads increasing across system
Level 2 Severe Incident <i>Contingent Liquidity Access</i>	Name Related: - loss of multiple counterparty lines over short period. - increased declines in retail funding - widening of CDS levels compared to peers - reduced appetite for NAB paper	Systemic: - default of a bank likely to cause systemic problems - key funding markets closing / restricted
Level 3 Critical Incident <i>Central Bank Special Assistance</i>	Name Related: - run on group or a subsidiary - unable to obtain wholesale funding at any cost	Systemic: - All banks experiencing funding difficulties - Reliance on central banks for funding

10



Key points covered

- ▶ The failure of liquidity risk management
- ▶ What is liquidity risk?
- ▶ NAB: Key changes in liquidity risk management –
 - ▶ Governance
 - ▶ Internal Targets
 - ▶ Funding Profile
 - ▶ Policies and Assumptions
 - ▶ Escalation Plan Procedures



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 6.1

Operational Risk Management and Capital Regulation

Mr Luo Ping
CBRC



Operational Risk Management and capital regulation

A perspective of Chinese banking regulator

Luo Ping

Luoping@cbrc.gov.cn

China Banking Regulatory Commission

At APEC workshop Shanghai, Dec 10
2008

outline

- What is Op risk?
- Internal governance for ORM
- Key risk indicator
- Capital requirement for OR
- Loss distribution for OR
- Issues to implement ORM of Basle II



What is operational risk?

Operational Risk (OR) is the risk of loss resulting from inadequate or failed internal processes, human behaviour, systems, or from external events. The definition includes legal Risk but excludes strategic and reputational risk



Nature of operational risk

f(people, processes, systems and external)
f(complexity and volume)

Nature of OR

Endogenous

Diverse

Dynamic / Non-stationary

HFLS vs LFHS (cost / going-concern)

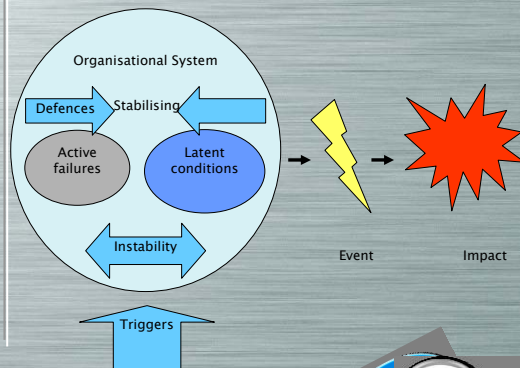
Non FLLP

Impacts

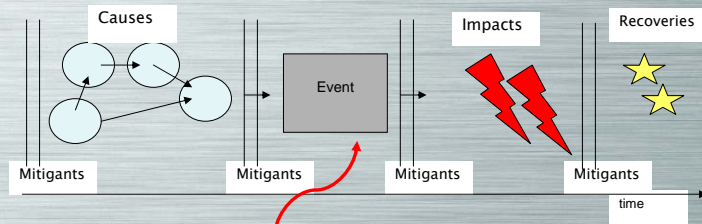
Causes

Events

Complex causality



Causality



- Basel [Event](#) type Category

Internal Fraud, External Fraud, Employment Practices & Workplace Safety, Clients, Products & business practices, Damage to Physical Assets, Business Disruption & System Failure, Execution, Delivery & Process Management

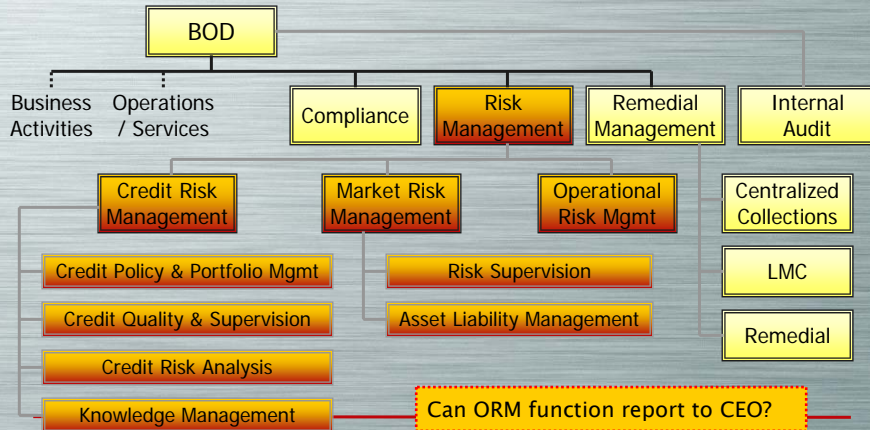
It is important to identify systematically the causes, events and impacts of Operational risk

Outline

- What is Op risk?
 - Internal governance for ORM
 - Key risk indicator
 - Capital requirement for OR
 - Loss distribution for OR
 - Issues to implement ORM of Basle II
-

Developing an appropriate

Risk governance environment



Roles and responsibilities of each

Different level of authority will have different roles & responsibilities that need to be set clearly. For example:

Operational Risk Committee

- Assists the BOD to ensure op risks are managed in a manner consistent with the overall ORM policy as approved by the BOD.
- Initiates the development of minimum control standards to manage op risk.
- Evaluates control weaknesses and agrees on appropriate mitigation plans.

Head of Risk Management

- Is an integral member of the senior management team and reports to risk management committees.
- Ensures that all identified risks are managed effectively within appropriate and agreed risk parameters.

Head of Operational Risk

- Is the overall facilitator for ORM.
- Reviews op risk profile and carries out quality assurance reviews of control standards.
- Monitors and analyses risk indicators / loss data.

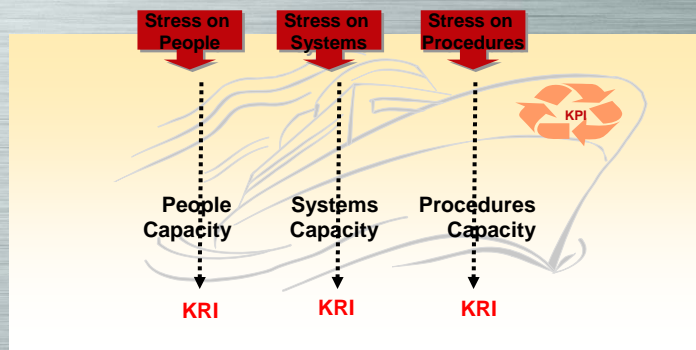
Outline

- What is Op risk?
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Monitor and report, Key Risk Indicators

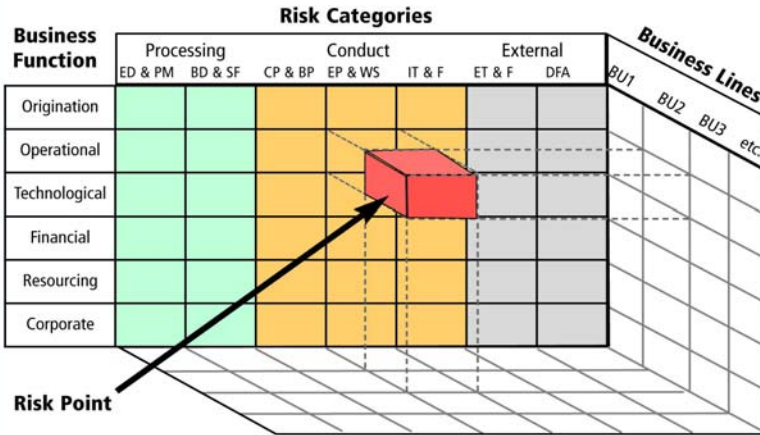
KRI are sets of parameters for a business process which are assumed to be highly predictive regarding changes in the operational risk and control profile of that process

- ♦ Key Risk Indicators allow the bank to pro-actively monitor the operational risk status
- ♦ Where do Key Risk Indicators come from?

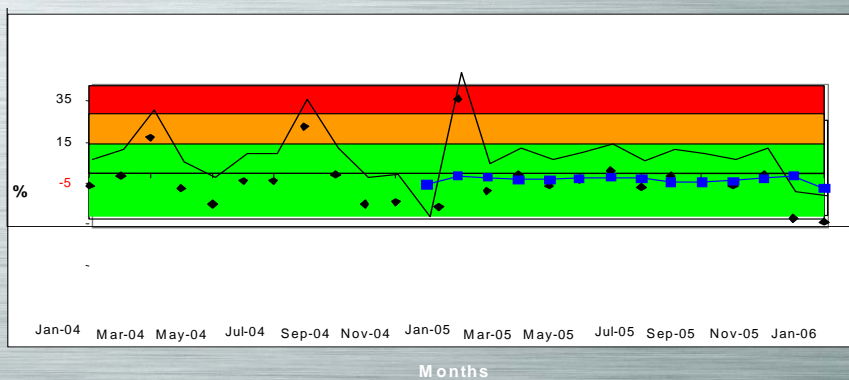


The KRI Framework

The 3-D Matrix: Functions, Risks, and Businesses

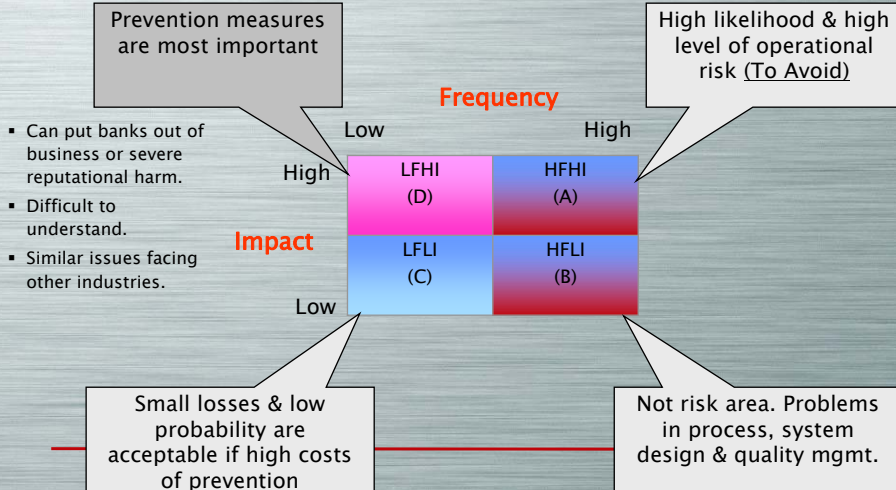


KRIs are monitored against Thresholds



OPERATIONAL RISK

MANAGEMENT PROCESS



outline

- What is Op risk?
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BASIC INDICATOR APPROACH

- Capital charge is based on the average of a fixed percentage (alpha) of positive annual gross income (GI) **over the previous 3 years**

$$\text{Capital charge} = [\sum(GI_{t-n} \times \alpha)] / n$$

- GI : net interest income + net non-interest income **as defined by national supervisors and/ or national accounting standards**
- $\alpha = 15\%$
- No qualifying criteria – encouraged to comply with sound practices paper
- Not expected to be used by internationally active banks or banks with Significant operational risk exposures

THE STANDARDISED APPROACH

- **Bank activities mapped to 8 business lines framework**
- Capital charge for each business line calculated by multiplying an indicator by a factor assigned to that business line
 - Indicator: annual GI (as described in BIA)
 - Factor: beta (β) established by the BCBS
- Total capital charge is based on the 3 year average of the simple summation of the regulatory capital charges across each of the Business lines in each year

$$\text{Capital charge} = \{\sum_{\text{years } 1-3} \max[\sum(GI_{t-s} \times \beta_{1-s}), 0]\} / 3$$

ALTERNATIVE STANDARDISED APPROACH

- Option available at national discretion
- Same as TSA except for two business lines
- For retail banking (RB) and commercial banking use 'loans & advances' Instead of gross income
- The multiplier is set at 0.035

$$\text{RB Capital charge} = LA_{RB} \times 3.5\% \times \beta_{RB}$$

- Capital for those other 6 business lines remain the same.

AMA & APPROACHES

Concept	Main input	Advantages	Disadvantages
Loss Distribution Approach (mainly top down)	Internal and / or External data	<ul style="list-style-type: none"> ▪ Objective, if data is representative and sufficient, complete and accurate. ▪ Well known statistical concepts can be used to establish the capital charge. 	<ul style="list-style-type: none"> ▪ Data might not be representative ▪ Data scarcity ▪ Statistical concepts ▪ Backward looking
Scorecard approach (mainly bottom up)	Risk and Control assessments	<ul style="list-style-type: none"> ▪ Forward looking, if leading risk information (e.g. KRIs) is used. ▪ Utilises business experience and intelligence. 	<ul style="list-style-type: none"> ▪ Subjective ▪ Aggregation issues ▪ Statistical concepts less well developed
Scenario approach (Top down and / or Bottom up)	Scenarios	<ul style="list-style-type: none"> ▪ Utilises expert experience and their views methodologically to reduce bias. 	<ul style="list-style-type: none"> ▪ Remains subjective ▪ Aggregation issues ▪ Issue of completeness (e.g. how many scenarios?)

Outline

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Loss distribution for LDCE

% of total gross loss amounts
% of total # of loss events

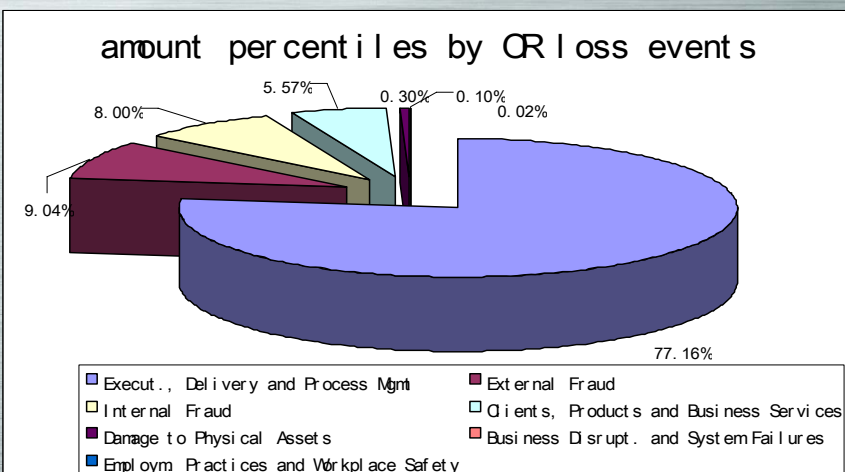
LOSS EVENT TYPE BUSINESS LINE	Init Fraud	Exit Fraud	Employ, practices and Workplace Safety	Clients, Products and Business Services	Damage to Physical Assets	Business Disrupt. and System Failures	Execut., Delivery and Process Mgmt	Total
Corporate Finance	0.04%	0.04%	0.15%	0.15%	0.03%	0.02%	0.45%	0.89%
Trading and Sales	0.63%	0.06%	0.03%	2.03%	0.10%	0.01%	0.64%	3.51%
Retail Banking	0.10%	0.20%	0.21%	0.23%	0.07%	0.29%	9.74%	10.9%
Commercial Banking	0.76%	0.52%	0.83%	2.48%	1.13%	0.23%	8.96%	14.9%
Payment and Settlement	2.68%	36.2%	4.36%	4.50%	1.10%	0.34%	11.2%	61.1%
Agency and Custody Services	4.26%	10.1%	4.36%	3.26%	1.12%	0.34%	5.45%	29.4%
Asset Management	0.18%	3.81%	0.17%	0.65%	0.11%	0.10%	2.14%	7.22%
Retail Brokerage	0.27%	4.17%	0.26%	2.01%	13.8%	0.23%	7.95%	29.0%
Total	0.05%	0.68%	0.11%	0.05%	0.02%	0.17%	2.82%	3.92%
Corporate Finance	0.29%	0.27%	0.15%	0.13%	0.19%	1.01%	1.20%	3.25%
Trading and Sales	0.01%	0.03%	0.04%	0.06%	0.02%	0.07%	2.92%	3.15%
Retail Banking	0.00%	0.05%	0.10%	0.06%	1.28%	0.51%	2.23%	4.25%
Commercial Banking	0.06%	0.09%	0.08%	0.28%	0.01%	0.03%	1.77%	2.35%
Payment and Settlement	0.08%	0.06%	0.13%	0.99%	0.03%	0.03%	1.45%	2.78%
Agency and Custody Services	0.12%	0.04%	1.68%	1.14%	0.01%	0.11%	3.75%	6.91%
Asset Management	0.79%	0.02%	0.65%	2.03%	6.58%	0.36%	1.25%	11.7%
Retail Brokerage	3.31%	42.4%	8.52%	7.17%	1.40%	1.14%	35.1%	100%
Total	7.23%	15.5%	6.76%	13.1%	24.3%	2.73%	29.4%	100%

* Sample of 89 banks, 47,269 loss events and €7.8 billion in OR-related losses reported in "The 2002 Loss Data Collection Exercise."

Loss distribution for some local banks

Loss causes	Event numbers	Number percentile	Amount percentile
Human factors	1982	41.44%	53.60%
Internal process	1756	36.71%	32.69%
External events	525	10.96%	12.55%
System factors	521	10.89%	0.10%

Loss distribution for some local banks



Note: it is only for reference.

outline

- What is Op risk?
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-

10 implementation issues

Processes, systems and capital allocations are easy

– the problems are the “people issues”:

1. Creating **the framework** – consensus on the right risk categorisation structure
 2. Getting **user involvement** – the necessary amount from the right people
 3. Deciding on **how much data** to collect – too little = poor statistics, too much = inaccurate data
 4. Gaining **regulatory approval** – different interpretations/numerics in different jurisdictions
 5. Building a **risk culture** – everyone knows what risk is
 6. Achieving **user acceptance** – “why am I doing this?” “I have better things to do!”
 7. Ensuring **clean data** – completing data correctly
 8. Integrating **feedback** and statistics – to improve the system
 9. **Cleaning previous data** – which may be incomplete
 10. **Updating the system** – changing processes, risk categories (framework) and upgrading systems
-



Thanks!



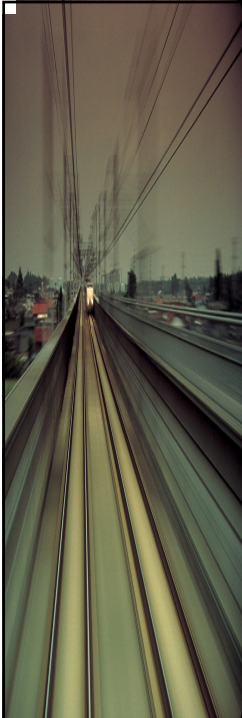
Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 6.3/4

How to Implement the Operational Risk Management Proposal under Basel II


Dr Zhao Xian Xin
Shanghai Pudong Development Bank




Ho to Implement the Operational Risk Management Proposal under Basel II ?

Some Viewpoints of China Banks

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13817578236




Outline of This Presentation



- I. An Overview of China Banking Industry
- II. Challenges for Operational Risk Management
- III. Implications of Basel II Proposal for Our Operational Risk Management
- IV. China's Regulatory Guidelines for the Capital Requirement under Basel II

2009-1-13 2



Structure of Banking Industry in China

- Four-layer Structure of China Banking Sector
 - First layer : Big 5, in the past, it was called Big 4
Up to date, ICBC, BOC, CCB, ABC, and CBC account for two thirds domestic market share.
 - Second layer: 12 share holding commercial banks.
 - Third layer: Foreign Banks' domestic operation.
 - numerous newly licensed commercial banks
- ICBC, BOC, CCB, CBC have been listed in Shanghai and Hong Kong stock markets, ABC is preparing for going public. However, China central government still keeps the major share.
- For the rest commercial banks, except for the foreign banks, local governments keep the controlling right and have direct influence on them.

2009-1-13

3



Governance of Banks as Enterprises

- There are so called "Three New Committees vs. Three Old Committees"
- Three Old Committees:
 - Committee of Communist Party (CCP), Labor Union, and Employee Representative Committee
 - Under traditional regime in the past, the three old committees, especially the CCP played critical roles in banking governance.
- Three New Committees:
 - Shareholders Representative Committee, Board of Directors, and Board of Supervisors.
 - According to Corporate Law in China, the three new committees should stay in the center of the power.
- A compromise status quo: CCP in charge of senior management nomination, whilst the three new committees function in the fields of daily operation decision and areas not so important.

2009-1-13

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Typical Organization of China Banks

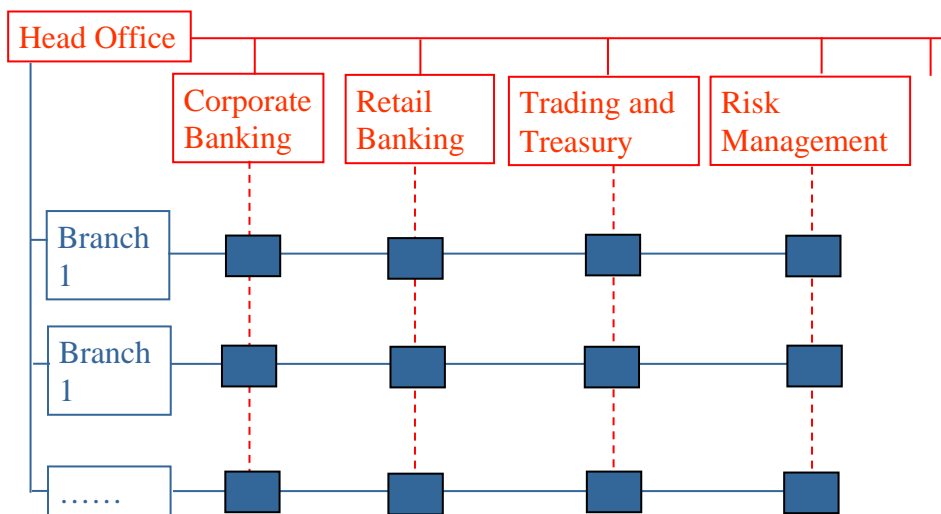
- Head Office with multiple branches
- The whole bank is viewed as a unified legal person which is represented by the Head Office.
- The branches are *de facto* profit centers, which makes them look like independent smaller banks.
- Management functions of various business lines at Head Office are relatively weak:
 - They are not responsible for operating result in terms of performance;
 - They have no direct influence on business operation at branch, instead, they focus on giving directions and guidelines to business at branch level.

2009-1-13

5



Chart of Organization Structure



2009-1-13

6



Regulation on Banking Industry

- China has been adopting a strict financial law which is very much similar to Glass- Steagall Act in the US since 1995, insisting separation of bank types according to their business (commercial and investment banking).
- According to *Law of the People's Republic of China on Commercial Banks*, Chapter IV, Article 43 No commercial banks shall undertake the businesses of trust and investment and securities dealing business, nor shall they invest in the non-self-use real property or non-bank financial institutions and enterprises, unless it is otherwise prescribed by the state.

Adopted at the 13th Session of the Standing Committee of the Eighth National People's Congress on May 10, 1995, and amended according to the Decision on Modifying the Law of the People's Republic of China on Commercial Banks as adopted by the Sixth Session of the Standing Committee of the Tenth National People's Congress on December 27, 2003

- Since then, there has been calls from banking industry for deregulation
- Before the amendment in 2003, Article 43 stated that 43?A commercial bank shall not engage in trust investment or stock business, or invest in real estate not for its own use within the People's Republic of China.
- Now, in the shadow of current crisis, these calls should be revalued.

2009-1-13

7



Challenges for Operational Risk Management

- Insider Control due to insufficient monitoring from head office.
 - How to increase risk transparency at branch level?
- Product Complexity.
 - How to ensure the quality of products and services;
 - How to control the inherent risk?
- Process Complexity
 - How to make process more transparent and henceforth to reduce process related risk?
- System Failure
 - How to keep hazard rate of IT system under control?

2009-1-13

8



Challenges for Operational Risk Management -cont'd



Market Evolution and Threats of Disintermediation

- Stock markets are becoming increasingly important in meeting financing needs of companies.
- Threat of disintermediation trend
 - On the lending side, commercial banks have to compete with stock market to attract qualified borrowers.
 - On the liability side, commercial banks need to provide competitive return to abstract depositors.
- Challenges of Interest rate liberalization.
 - The 1970s of the US was considered bankers' "3-6-3" time. Up to date, Chinese bankers have been enjoying this kind of time.
 - Time is in fast change.

2009-1-13

9



Challenges for Operational Risk Management -cont'd



Crime Waves: Internal Theft and Fraud

- Following the economy and society transition, internal crime incidence is increasing.
 - Before 1999, crimes within banking industry were merely connected to loan business: taking bribery or kickbacks from borrowers were once very common.
 - After 1999, internal crimes take new forms: Stealing money from clients' accounts become a new trendy problem. eg. Bank of China suffered a huge amount of losses due to internal money theft.
- Following the rapid commercialization of banks, operational risk related to people emerges:
 - Higher turn over rate of staff,
 - Inappropriate incentive caused by improper compensation package, short sightedness of client manager.

2009-1-13

10



Challenges for Operational Risk Management -cont'd



Crime Waves: External Theft and Fraud

- Retail banking market is growing at fast pace. Unfortunately, there are no effective ways to screen customers.
 - In mortgage lending business, there is so called “Three Fakes” problem; In credit card business, defaults are increasing.
- Safety of IT system.
 - How to guarantee the security of online banking
- It's increasing hard to manage public relations in the time of internet, in particular when some bad news about your bank begins to circulate.

2009-1-13

11



Transformation of the Banking Sector



- Banking business in China is en route from traditional model to modern model.
 - Business lines will play more critical role in daily operation management. More power will be expected to be transferred from branches to Head Office.
 - In line with centralized monitoring and reporting, heavy investments have been put into IT system.
 - New risk management culture: streamlining the process of credit business.
 - New Accountability Culture: separating operational risk from credit risk.
 - Deposit based banking, rather than asset based banking.

2009-1-13

12



Strengths of Basel II Proposal for Operational Risk Management



- Increased transparency both at branch level and business line level will help to control operational risk.
- Risk tolerance level could be set.
- Implementation of Basel II will facilitate the transformation process of banking operation.
 - Management functioned by business line will be strengthened;
 - Give incentive to improve operational risk management and henceforth to reduce operational losses.
- Encourage banks to allocate more resources to strengthen their operational management.

2009-1-13

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China Version of Guidelines for the Implementation of Basel II



- Three approaches recommended by CBRC
 - The Standardized Approach in China Version
 - The Alternative Standardized Approach
 - The Advanced Approach
- No detail about AMA, reflecting low expectation for implementation.

2009-1-13

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The Standardized Approach of CBRC

The total capital charge can be expressed as

$$K_{TSA} = \frac{\sum_{j=1}^3 \max \left\{ \sum_{k=1}^8 GI_{jk} \times \beta_k, 0 \right\}}{3}$$

Standardized Approach Beta Factors	
Business Lines	Beta Factors
Corporate Finance	18%
Trading & Sales	18%
Retail Banking	12%
Commercial Banking	15%
Payments & Settlements	18%
Agency Services	15%
Asset Management	12%
Retail Brokerage	12%
Other Business	18%

No Big Difference!

2009-1-13

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The Alternative Standardized Approach of CBRC

Two Choices under CBRC ASA

One is the same as ASA under Basel II, the other is pretty much a short version.

ASA Beta Factors	
Business Lines	Beta Factors
Retail Banking	12%*3.5%*alo
Commercial Bankin	15%*3.5%*alo
Other Business	18%

2009-1-13

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Advanced Measurement Approach

Should be No Difference!

2009-1-13

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谢谢



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 6.4

**Australian Banking Perspective on
Managing Operational Risk**

Mr Bruce Lebransky
National Australia Bank

One of the distinguishing characteristics of the Basel II Framework from Basel I is its separate recognition and explicit measurement of operational risk - although regulators have had longstanding prudential requirements covering operational risk issues such as outsourcing and business continuity management.

(i) The Issue of Regulatory Approval

In Australia, APRA's implementation of the Basel II framework has required that for it to approve use of the IRB approach to credit risk measurement an authorised deposit taking institution (ADI) must also seek approval to use an AMA approach to operational risk plus approval to use an internal model for estimating interest rate risk in the banking book.

This regulatory requirement has contributed to ADIs having a focus on developing similar levels of "sophisticated" risk measurement and management capability and so be less likely to approach risk issues on a differentiated basis including with respect to issues of governance and use & experience. Integrated risk identification and management was highlighted in the Report of the Senior Supervisors Group (March 2008) as a characteristic of those firms dealing more successfully with current market challenges.

Amongst APRA's use and experience requirements for ensuring the integration of operational risk management (ORM) into day to day risk management are that:

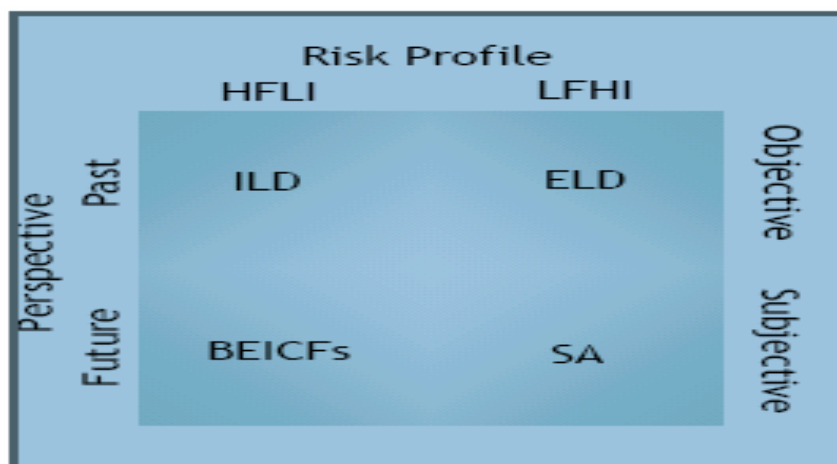
- Management decision making considers both inputs and outputs of the ORM system and can provide evidence of where this has occurred.
- Business unit heads/ staff are able to explain the drivers of their operational risk profile.

(ii) The Characteristics of Operational Risk Data

The process of risk estimation is the essential first step to effective risk management.

All Australian banks with AMA accreditation have included the four data elements identified under the Basel II Accord in their risk measurement approach and the derivation of their aggregate loss distribution.

The following highlights the different characteristics of these data elements:



(iii) Internal Loss Data (ILD)

ILD contributes approximately 50% of NAB's total measurement of operational risk.

At NAB, internal loss events of greater than \$10,000 per event are the mandated capture threshold across the group for internal modelling. The largest event-type component categories are the classifications of: "internal fraud" and "execution, delivery and process management".

Senior management and the Board are informed of significant losses through escalation policies. For NAB the reportable events threshold at group level is \$500,000 and its foreign currency equivalent throughout the group.

The NAB group event management policy states events must be (initially) captured within 5 working days of the event having been discovered. This is consistent with APRA requirements. Formal data integrity policies require the business unit to record the loss and for management to approve this with the separation of risk management acting to ensure the validity of loss events as recorded.

As data capture has expanded so has the ability to conduct more granular risk analysis particularly in identifying common issues across different business activities and regions. This is clearly helpful to BEICF analysis.

APRA's Prudential Standard *APS115: Capital Adequacy – Advanced Measurement Approaches to Operational Risk*, prescribes a method for the classification of credit and market risk related operational losses within this data collection:

- Credit related operational losses must be treated as credit risk, with the exception of fraud by parties other than the borrower (e.g. credit card fraud);
- Market related operational losses must be treated as operational risk.

(iv) External Loss Data (ELD)

External loss data (ELD) contributes to building information on low-frequency – high impact events. It also helps as a reference point for discussions in scenario analysis workshops.

NAB subscribes to external loss data from 3 sources:

- publicly available information (Algo First)
- as a member of a consortium (ORX)
- insurance information (previously from AON-Op base but no longer collected)

There is significant reporting bias in all three sources of ELD for analytical purposes so ELD is more useful for qualitative assessments of risk:

- Public data: the probability that a loss is reported by the media tends to increase with the severity of the loss. Consequently the proportion of large losses tends to be overstated.
- Insurance data: biases will arise from policy terms and conditions.

- Consortium data: the data thresholds used by individual banks may differ from the threshold used by the consortium. Nevertheless NAB considers this data to be increasingly robust as its time of collection has increased and the level of institutional participation has increased.

NAB does not employ a scaling of ELD. It considers there to be limited correlation between the size of an entity and the size of any recorded event. However, entity size is considered to impact the likelihood of an event occurring so that there is important qualitative information with ELD as well as information for better estimating the shape of the distribution tail.

(v) Scenario Analysis

The process for developing scenarios is common across the group. It is a requirement that meaningful challenge processes be incorporated in the scenario construction process.

Different scenarios can and are constructed to reflect regional and business differences. It is a regulatory requirement that documentation be provided on the assumptions used and rationale for this in the making of scenarios in workshops.

(vi) BEICFs – (business environment and internal control factors)

BEICFs are incorporated into the NAB's scenario analysis through qualitative overlay to the operational risk assessment and calculation. The BEICF processes are important learning and decision tools for the business about its operational risks and risk mitigation actions.

- Business Environment factors are the characteristics of a bank's internal and external operating environment that create operational risk exposures.
- Internal Control factors reflect those parts of the bank's internal control system that are used to mitigate these risk exposures.

(vii) Risk Mitigation Recognition in the Calculation of Operational Risk Capital Requirements

At this time APRA does not recognise insurance as a risk mitigation tool. It is possible that this position may alter. NAB has insurance arrangements in place with limits on the permissible size of excesses at both group and subsidiary bank level.

NAB also calculates expected operational risk loss but this too is not recognised for purposes of calculating regulatory operational risk capital.

During the current financial turmoil, NAB has not sought to change its insurance arrangements or experienced material fluctuation to its expected operational risk loss. However there seems to have emerged some reluctance in direct insurance markets to accept higher risk categories of insurance and the bank has sought to obtain more direct access to the re-insurance markets.

(viii) Operational risk tolerances:

These include the following:

- Qualitative tolerance: the tolerance for exposure which without appropriate mitigation has the potential for unacceptable levels of financial loss or damage to reputation.
- Profit and loss tolerance: the maximum tolerance for the P&L impact of operational risk losses each year.
- Insurance self-retention level: the degree to which individual regions are willing to accept the losses arising from insurable operational risk events.
- Economic capital tolerance: the maximum tolerance for operational risk in e-cap terms.
- Financial volatility tolerance: which are expressed in terms of financial outcomes under 1 in 5 year and 1 in 20 year events.

Operational risk is allocated to the subsidiary banks of the group by way of the construction of a separate operational risk model and outcomes for each legal entity - a bottom-up approach.



National Australia Bank

MAFC / APEC / AFDC Shanghai Conference: Session 6.4: Operational Risk

8 – 12 December 2008
Bruce Le Bransky



Clydesdale Bank

Yorkshire Bank

Bank of New Zealand

nabCapital



Key points to be covered

- ▶ Operational Risk Management is Important
- ▶ Operational Risk of Australia's largest banks
- ▶ Operational Risk Data Elements
- ▶ NAB Operational Risk Measurement
- ▶ Operational Risk Framework (ORF)
- ▶ Operational Risk Principles at NAB:
 - Business as First Line of Defence
 - Independent Risk Management as Second Line of Defence
- ▶ Policy & Standards - NAB's Group Events Management Policy
- ▶ Event escalation and reporting to GORS
- ▶ BEICF – Establishing Operational Risk Profile
- ▶ ORECS – Tool for ILD collection
Integrity of ILD capture
- ▶ Appendix A ORECS - loss data collection system and process
- ▶ Appendix B ORECS - risk event capture



National Australia Bank

Operational Risk Management is Important

- Effective Operational Risk Management Minimises:
 - Financial losses
 - Disruption to business processes
 - Non-financial impacts including regulatory, reputation & customer impacts.
- Not actively sought as with credit or market risk. Inherent part of business and so is “different”.

3



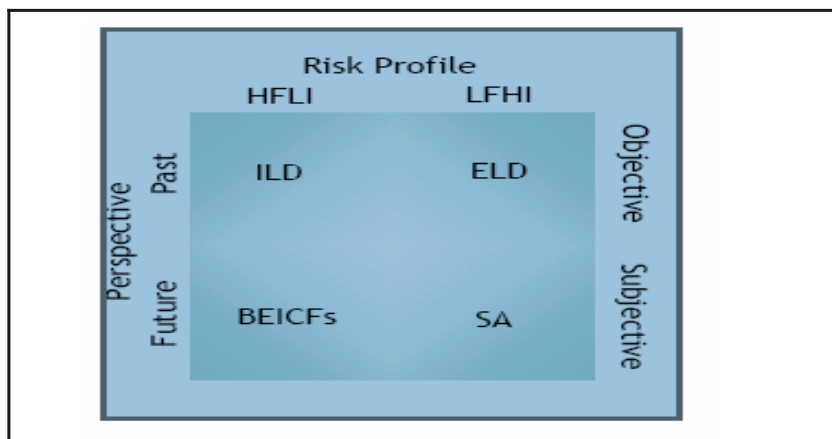
Operational Risk of Australia's Largest Banks

Name of Bank	AMA Operational RWA as a % of total reported Pillar 1 RWAs (includes IRRBB)
Westpac	7%
NAB	6.9%
ANZ	6.6%
CBA	6.6%

4



Operational Risk Data Elements



ILD accounts for nearly 50% of NAB's operational risk measurement

SA and ELD comprise the balance. Impacts the risk tail.

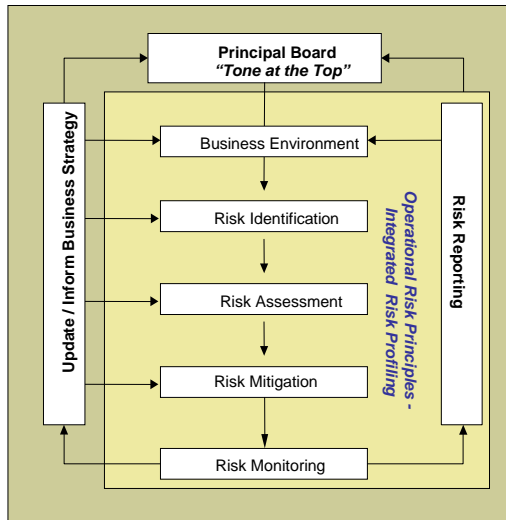
BEICFs are inputs into the scenario analysis - reflect current risk profile



NAB Operational Risk Measurement

- ▶ AMA regulatory capital calculation is determined separately for each jurisdiction / entity and summed to reach Group level figure.
- ▶ Regulatory capital measurement does not include any adjustment for insurance.
- ▶ Group determines insurance coverage and limits.
Regions have input into self-retention / excess decisions.
- ▶ Regulatory capital measurement covers both expected and unexpected loss unlike credit risk.

Operational Risk Framework (ORF)



- The Operational Risk Framework outlines the principles by which NAB manages operational risk as part of BAU.

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Operational Risk Principles at NAB – Business as First Line of Defence

- ▶ Accountable for the management of risk – acceptance, avoidance and mitigation.
- ▶ Identify and assess business operating environment and risk profile (BEICFs outcomes).
- ▶ Responsible for accurate reporting of events and their impacts. Escalate as necessary.
- ▶ Accountable for implementation and monitoring of controls. Appropriate training – embed risk management within business.

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Operational Risk Principles at NAB – Independent Risk Management as Second Line of Defence

- ▶ Group Operational Risk and Security (GORS) –
Establish & operate the Group Events Management Policy (next slide)
- ▶ Design supports for ORF - policies, tools, processes and training.
Includes scenario analysis.
- ▶ Monitor implementation and review effectiveness. Review event capture, timeliness and completeness.
- ▶ Review outcomes for common trends across group
- ▶ Review risk mitigation actions of the business
- ▶ General Manager part of Group Risk Leadership Team. Risks types are not considered in isolation.

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Policy & Standards - NAB's Group Events Management Policy

This Policy aims to make NAB Operational Risk Framework effective.

- ▶ **Objective** - transparent and verifiable processes for complete and accurate internal event reporting.
- ▶ **Timing** – event recording is 5 business days (APRA expectation)
- ▶ **Data Collection Threshold** - events with a gross financial impact exceeding \$10,000.
- ▶ **Reporting Escalation** (next slide)
- ▶ **Policy Renewal** - Annual Review
- ▶ **Application** - all employees and business lines

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Event escalation and reporting to GORS

- ▶ Covers “reportable” operational risk events:
 - ▶ Regulatory impacts:
 - significant breach of regulatory compliance obligation
 - formal regulatory enquiry / investigation / fine
 - ▶ Reputational impacts:
 - widespread adverse media coverage
 - potential for significant litigation if not adequately addressed
 - ▶ Customer impacts:
 - ▶ Financial impacts: AUD 500,000 (initial regional escalation threshold is \$100,000)

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BEICF - Establishing Operational Risk Profile

Business Environment	Objectives – What is the Business Model Products and services offered) Systems) Are changes occurring?
Risk Identification	Risks / uncertainties facing business Event experience and actual trends. Scenarios and extreme event risks
Risk Assessment	Three buckets: Expected, Exceptional, Extreme Assessment of risk mitigation and controls External events and scenarios – potential impact on business Latest internal audit reports – ratings and responses
Risk Mitigation	Identification. Plans for improving control environment. Tolerance for risk acceptance eg excess on insurance coverage. Acceptance of calculated capital – hurdle rates of return.
Risk Reporting	How is this structured: content / frequency / to whom. Escalation

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ORECS – Tool for internal loss data collection

ORECS provides:

- ▶ Detailed description of what happened including process being undertaken
- ▶ Risk that materialised
- ▶ Controls that failed or were not performed
- ▶ Causes
- ▶ Cost and impact
- ▶ Escalation and notification functions

- ▶ Operational risk related credit risk losses also captured.

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ORECS - Integrity of internal loss data capture

Requirement - Events identified / captured / approved / verified.
Appropriate independence of duties.

- ▶ **Business identifier** – Gathers event information and records in ORECS.
- ▶ **Business approver** – Review and approve the event within ORECS. Accountable for the completeness and accuracy of the event record. To be completed within 10 days of event being submitted.
- ▶ **Operational risk reviewer** – Ensure record is complete, accurate and comparable with other ORECS entries.
- ▶ **Operational risk portfolio analyst**

Independence - Risk staff report to the regional head of operational risk. Clear separation of reporting lines and duties from the business.

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Key points covered

- ▶ Operational Risk Management is Important
- ▶ Operational Risk of Australia's largest banks
- ▶ Operational Risk Data Elements
- ▶ NAB Operational Risk Measurement
- ▶ Operational Risk Framework (ORF)
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- ▶ BEICF – Establishing Operational Risk Profile
- ▶ ORECS – Tool for ILD collection
 - Integrity of ILD capture

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Appendix A: ORECS – Loss Data Collection Systems and Process

**Operational Risk Event Capture System (ORECS)**Log Off

[Intranet Home](#) [ORECS Home](#) [ORECS Help](#) [Live FAQ](#) [Print Friendly](#)

The system provides a means of capturing information about operational risk events.

All staff can use the system to: <ul style="list-style-type: none">■ Add a new risk event■ View my risk events■ Link related risk events■ Search for existing risk events	New Risk Event My Risk Events Risk Event Groups Search Existing Events
Business unit approvers can use the system to: <ul style="list-style-type: none">■ Approve risk events	BU Approver Events
Op risk reviewers can use the system to: <ul style="list-style-type: none">■ Review mid-value risk events	Op Risk Reviewer Events
Op risk portfolio analysts can use the system to: <ul style="list-style-type: none">■ Review high-value risk events	Portfolio Analyst Events
Administrators can use the system to: <ul style="list-style-type: none">■ Query and extract ODW data	ODW Query

Support Manuals

- [Help File \(User Guide\)](#)
- [Quick Reference Cards & Guidelines](#)
- [Op Risk Policy](#)

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Appendix B: ORECS – Risk Event Capture

New Risk Event - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address <https://naunb662.au.thenational.com/Doug/ORECS-SURF/OpRisk.nsf/Risk7OpenForm> Go Links

New Risk Event
My Risk Events
BU Approver Events
Op Risk Reviewer Events
Risk Event Groups
Search Existing Events
My Reportable Events

Risk event details
Use the fields below to record the details of the risk event.
* = required

Classification	Event Details	Event Impacts	Workflow
Ref no.: Not allocated yet	Status: Draft		Not grouped yet

Event overview


Is this a Compliance related event? See the online help


Description* (0/500 Characters) See the online help

Please describe what happened and why the event occurred.

Event discovery

When did the event happen?
If the event is ongoing, just enter the start date.

Start date*  Calendar

Discovery date*  Calendar

General classification

Risk impact type* See the online help

Product type*

Transaction type*

Please select the Risk Event Type

Level 1	Level 2
Risk Event Type* See the online help <input type="button" value="Please select"/>	<input type="button" value="Please select"/>

Please select the causes of this risk event

For definitions of causes, see the online help



Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 7.1

Governance Reform Progress of China's Banking Industry

Dr Qian Yi
ICBC

**Governance Reform Progress of China’s
Banking Industry and the Practice in ICBC**

Ph.D. Qian Yi

Yi.qian@icbc.com.cn;Tel:86-10-66107729

Chief of the Board of Directors’ Office of ICBC

APEC Workshop

10 Dec, 2008, Shanghai

Content

Part I	Background, Progress and Achievements of Governance Reform in China’s Banking Industry
Part II	Progress, Features and Practice of ICBC Corporate Governance
Part III	Issues and Reflections

Part I: Background, Progress and Achievements of Governance Reform in China's Banking Industry

- 1.1 Background of Governance Reform in China's Banking Industry
- 1.2 Progress of Governance Reform in China's Banking Industry
- 1.3 Main Achievements of Governance Reform in China's Banking Industry

- 3 -

1.1 Background of Governance Reform in China's Banking Industry

□ In 1979, Deng Xiaoping pointed out, “we should build banks into real banks.”

□ From 1978 to 1984, a state-owned specialized banking system based on Agricultural Bank of China, Bank of China, China Construction Bank and Industrial and Commercial Bank of China was shaped.

□ In 1993, the State Council put forth the item of separating policy finance from commercial finance in the *Decisions on Reform of the Financial System*. Thereafter, the establishment of three policy banks marked the establishment of a banking system in which policy banks and commercial banks co-exist.

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1.1 Background of Governance Reform in China's Banking Industry (Cont'd)

- In 1995, the promulgation of China's first *Law on Commercial Banks* laid a legal foundation for state-owned specialized banks to grow into commercial banks. The *Law on Commercial Banks* has for the first time stipulated that "the business operations of commercial banks should be governed by the principles of safety, liquidity and efficiency. Commercial banks shall make their own decisions regarding their business operations, take responsibility for their own risks, assume sole responsibility for their profits and losses and exercise self-restriction".
- As of the end of 1996, 12 new joint-stock commercial banks had been established throughout China in succession, marking the shaping of a new banking organizational system pattern featured by multiple levels and different types and meeting the requirements of socialist market economy.
- The outbreak of the Asian financial crisis in 1997 attracted keen attention of Chinese leaders and those responsible for making financial decisions.

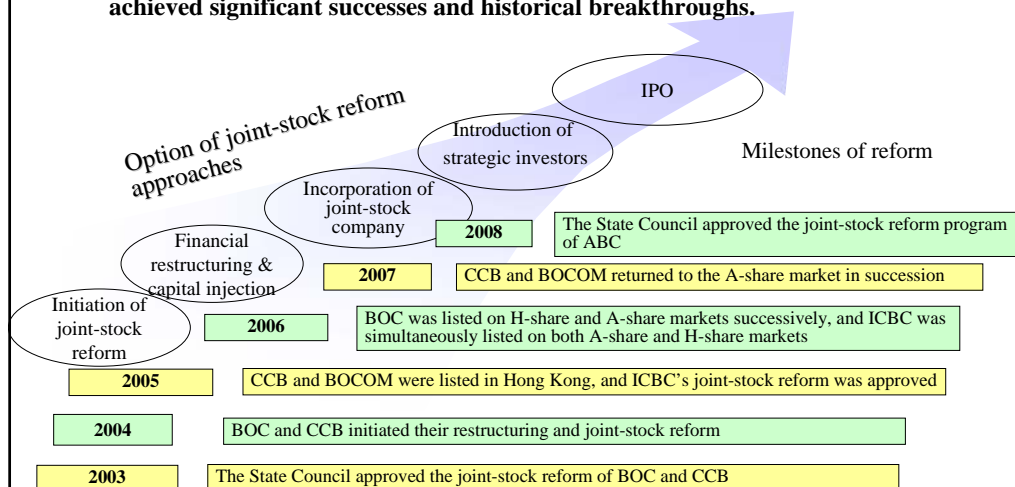
1.2 Development of Governance Reform in China's Banking Industry

- The second national financial conference was held in 2002, putting forth the objective of transforming state-owned commercial banks into modern financial enterprises with a sound governance structure, mature operation mechanism, explicit business objectives, solid financial status and strong international competitiveness. The banks may be restructured into joint-stock commercial banks controlled by the state and get listed at the opportune time once meeting the conditions.
- The joint-stock reform of state-owned commercial banks was initiated after 2003.
- Premiere Wen Jiabao once stressed that, the reform of commercial banks is the top priority among the reform of China's banking system. It is our last-ditch battle in which we could not afford any failure.

1.2 Development of Governance Reform in China's Banking Industry (Cont'd)

ICBC 中国工商银行

□ In recent years, the joint-stock reform of state-owned commercial banks achieved significant successes and historical breakthroughs.



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1.3 Main Achievements of Governance Reform in China's Banking Industry

ICBC 中国工商银行

□ Owing to the 30 years of diligent reform and innovation since October 1979 when Deng Xiaoping pointed out that “we should build banks into real banks,” a multi-functional new banking system has been established and are steadily being improved. Under the system, policy banks and commercial banks co-exist with explicit functions and duties, state-owned commercial banks, joint-stock commercial banks, urban commercial banks, rural commercial banks and post savings banks closely cooperate with each other, seed commercial banks and foreign-funded commercial banks complements. The system is playing a vital role in promoting sound and rapid development of China's economy.

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1.3 Main Achievements of Governance Reform in China's Banking Industry (Cont'd)

ICBC  中国工商银行

China's banking industry achieved a historical breakthrough during its development

□ A modern corporate governance frame and mechanism was originated from scratch

The organizational structure consisting of Shareholders' General Meeting, Board of Directors, Board of Supervisors and the senior Management was shaped, and the mechanism with clear duties and responsibilities, independent performance of duties, effective balancing and checking and harmonious development was preliminarily developed

□ The business management philosophy was updated

To deliver quality services to customers through legal, compliant and prudent operation based on the customer-focused and market-oriented principle, create the best returns for shareholders, continuously improve the enterprise value and promote the development of economy and society

□ The risk management ability was enhanced

The content of risk management extends, the management procedure is vertical, the management method diversifies and the management measures become more comprehensive

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1.3 Main Achievements of Governance Reform in China's Banking Industry (Cont'd)

ICBC  中国工商银行

□ The business innovation was accelerated

The banks adjusted their business structures, strengthened financial innovation and continuously launched new products in the fields of personal wealth management, QDII business, asset securitization, derivative products and trade finance on the precondition of risk control. Accordingly, income from intermediary businesses substantially increased

□ The risk conditions were ameliorated

The banks achieved significant increase in capital adequacy ratio, continuous decline in non-performing loan ratio, enhancement of risk offsetting ability, remarkable improvement in profitability and brilliant results of case governance

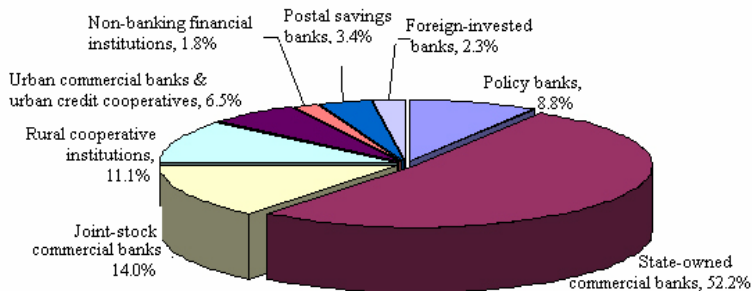
□ The reputation on international market was upgraded

As of the end of 2007, ICBC, CCB and BOC ranked the top three in the global banking industry with capitalization of USD338.94 billion, USD202.56 billion and USD197.74 billion respectively. There was also a substantial improvement in the international credit rating of banking institutions. (In November of 2007, Standard Poor adjusted the credit ratings of ICBC, CCB and BOC from BBB+ to A-.)

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1.3 Main Achievements of Governance Reform in China's Banking Industry (Cont'd)

ICBC 中国工商银行



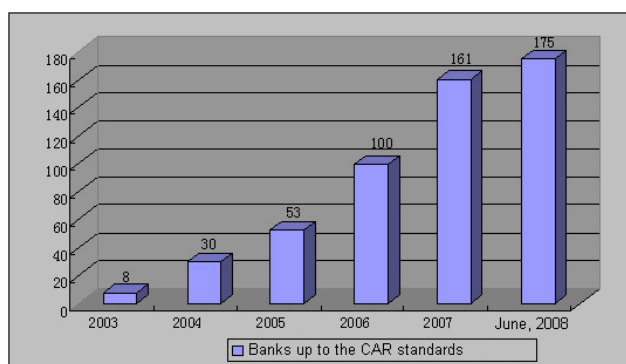
Asset Proportions of Financial Institutions in China's Banking Industry

- As of the end of June 2006, the total balance of RMB and foreign currency assets of banking institutions stood at RMB57.7 trillion, an increase of 19.0% year on year; the total outstanding liabilities amounted to RMB54.4 trillion, an increase of 18.4% from last year.

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1.3 Main Achievements of Governance Reform in China's Banking Industry (Cont'd)

ICBC 中国工商银行



- As of the end of June 2008, 175 Chinese banks reached the required capital adequacy ratio of commercial banks, an increase of 14 banks from the year beginning. Assets of the up-to-standard banks accounted for 84.2% of the total assets of commercial banks.

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1.3 Main Achievements of Governance Reform in China's Banking Industry (Cont'd)

Operation Indicators of ICBC, BOC, CCB and BOCOM in 2008

(As of the third quarter of 2008)

	Capital adequacy ratio (%)	NPL ratio (%)	Net profit (RMB100 mn)	Provision coverage ratio (%)
ICBC	12.62	2.37	927.29	121.16
BOC	13.89	2.58	617.9	121.49
CCB	12.1	2.17	842.67	119.41
BOCOM	13.77	1.75	227.89	169.28

Source: 2008 interim reports and third quarterly reports of related banks

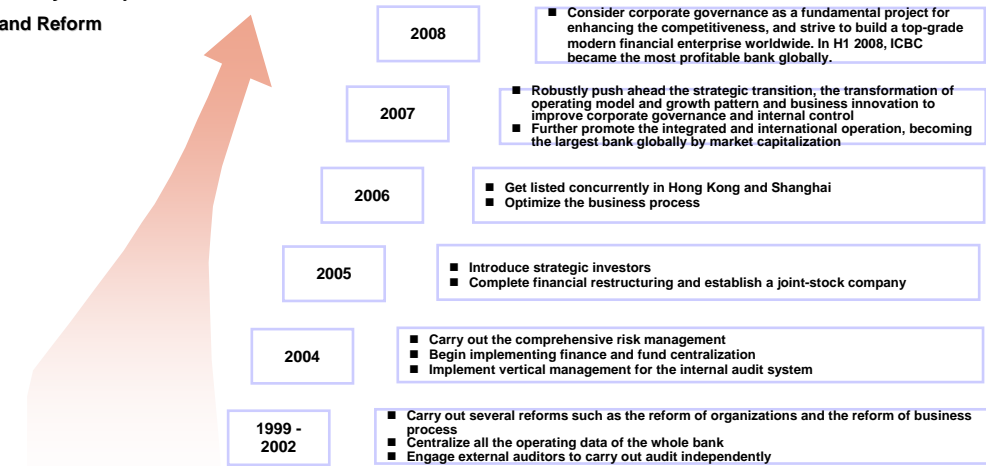
Part 2 Profile, Features and Practices of ICBC Corporate Governance and Reform

- 2.1 Profile of ICBC Corporate Governance and Reform
- 2.2 Features and Practices of ICBC Corporate Governance and Reform
- 2.3 Positive Effects of Corporate Governance and Reform in Recent Years

2.1 Profile of ICBC Corporate Governance and Reform

ICBC 中国工商银行

History of Corporate Governance and Reform



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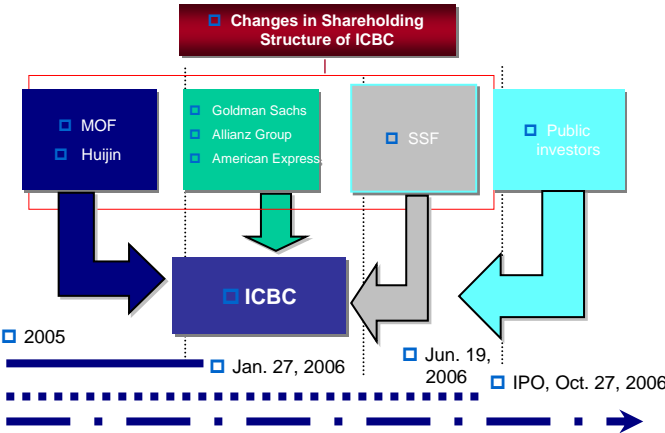
2.1 Profile of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

ICBC has become a well-regulated joint-stock company and a listed company with diversified ownership

The ownership structure of ICBC has changed significantly since its incorporation in 2005 and IPO in 2006. Through financial restructuring, strategic capital introduction and IPO, ICBC has become a listed company with diversified ownership from a state-owned commercial bank.

At present, ICBC has a total of 334 billion shares, of which, A shares account for 75% and H shares account for 25%; and shareholders spread over major countries and regions in Asia, America and Europe.

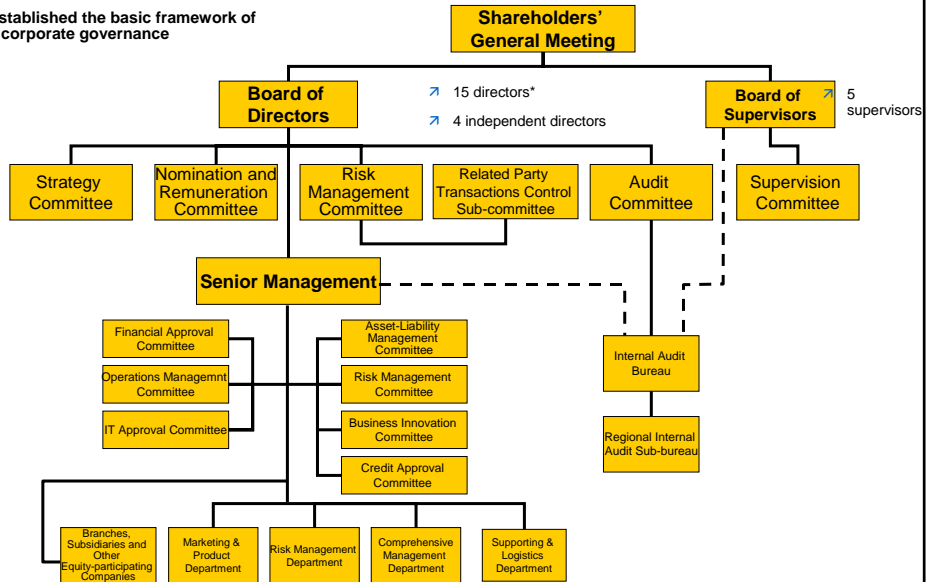


- 16 -

2.1 Profile of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

ICBC has established the basic framework of corporate governance



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2.1 Profile of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

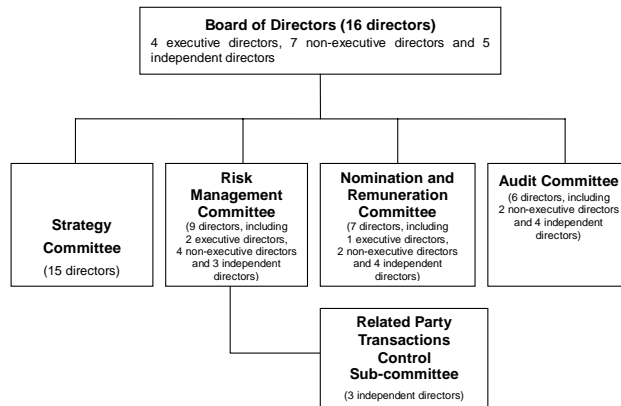
Clearly-defined roles and responsibilities of the Shareholders' General Meeting, the Board of Directors, the Board of Supervisors and the Management

	◆ Shareholders' General Meeting	◆ Board of Directors	◆ Board of Supervisors	◆ Management
◆ Roles and position	<ul style="list-style-type: none"> Shareholders' General Meeting is the organ of power of ICBC Make decisions on significant matters of ICBC under applicable laws 	<ul style="list-style-type: none"> The Board of Directors is the decision-making organ of ICBC Responsible to the Shareholders' General Meeting 	<ul style="list-style-type: none"> The Board of Supervisors is the supervisory organ of ICBC Responsible to the Shareholders' General Meeting 	<ul style="list-style-type: none"> The Management is the executive organ of ICBC Responsible to the Board of Directors
◆ Major responsibilities	<ul style="list-style-type: none"> Decide business policy and major investment plan Elect and replace directors, supervisors served by shareholder representatives and external supervisors, and decide the remuneration of directors and relevant supervisors Review and approve the work report of the Board of Directors and the Board of Supervisors, annual budget plan, final accounts plan, profit distribution plan, and loss make-up plan Amend the Articles of Association of ICBC 	<ul style="list-style-type: none"> Responsible for convening the Shareholders' General Meeting and implementing resolutions of Shareholders' General Meeting Decide the business plan, development strategy and investment plan of ICBC Formulate basic rules and regulations, and appoint senior management members Decide risk management and internal control policies Manage the information disclosure and matters authorized by Shareholders' General Meeting Supervise and guarantee effective performance of duties by the President and other senior management members 	<ul style="list-style-type: none"> Supervise the performance of duties by the Board of Directors, the Senior Management and their members, and make inquiry of directors and senior management members Supervise the financial activities, business decision-making, risk management and internal control of ICBC 	<ul style="list-style-type: none"> Responsible for organizing the operations management of ICBC Exercise power according to applicable laws and regulations, the Articles of Association of ICBC, and authorization of the Shareholders' General Meeting and the Board of Directors

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2.1 Profile of ICBC Corporate Governance and Reform (Cont'd)

Composition of the Board of Directors and its Special Committees



In accordance with the Interim Report for 2008 of ICBC

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2.1 Profile of ICBC Corporate Governance and Reform (Cont'd)

Focuses of Corporate Governance and Reform in Last 3 Years

Standards	Major Activities	Major Achievements
<ul style="list-style-type: none"> Guidelines for corporate governance issued by international organizations, such as <i>Enhancing Corporate Governance for Banking Organizations</i> issued by the Basel Committee on Banking Supervision and <i>OECD Principles for Corporate Governance</i> Rules and regulations on corporate governance in China, such as the <i>Company Law</i>, the <i>Securities Law</i>, the <i>Law on Commercial Banks</i>, the <i>Code of Corporate Governance for Listed Companies</i> issued by CSRC, and the <i>Guidelines on Corporate Governance of State-owned Commercial Banks</i> issued by CBRC The <i>Code of Corporate Governance Practices</i> (Appendix to the Listing Rules) issued by the Stock Exchange of Hong Kong Limited, and the Listing Rules issued by Shanghai Stock Exchange 	<ul style="list-style-type: none"> Restructuring. Complete financial restructuring and establish a joint-stock company Capital introduction. Introduce Goldman Sachs, Allianz Group and American Express as strategic investors IPO. Get listed in Shanghai and Hong Kong simultaneously with the same price Assess the corporate governance, improve the comprehensive risk management and internal control system, and strengthen the transparency 	<ul style="list-style-type: none"> The first company in China that is listed both in Shanghai and Hong Kong simultaneously with the same price A basic framework and system of corporate governance in place The communication and coordination system among the Shareholders' General Meeting, the Board of Directors, the Board of Supervisors and the Management has taken shape and continuously been improved The independence of the Board of Directors is continuously strengthened, the decision-making level and operating efficiency are improved and the effect of special committee is brought into play ICBC has made progress in information disclosure, investors relation management, internal audit and control, risk management and performance of social responsibilities

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2.2 Features and Practices of ICBC Corporate Governance and Reform

ICBC  中国工商银行

Independent and efficient Board of Directors is the core of corporate governance

- The Board of Directors takes charge of significant matters, direction and strategy of ICBC, and plays the role of scientific decision-making
- The communication between the Board of Directors and the Management is attached great importance, and the effective operation of the Board ensures the efficient decision-making
- Carrying out the special program on corporate governance according to regulatory requirements and attempting to assess the Board of Directors

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC  中国工商银行

Bringing the supervisory role of the Board of Supervisors into full play

- Strengthening financial supervision, and focusing on major income and expenditures, accounting matters significantly affecting the operating results, matters significantly affecting the owners' equity, and work quality of external auditors
- Strengthening the supervision over the duty performance by directors and senior management members, and focusing on their compliance with applicable laws, Articles of Association of ICBC and regulatory regulations, exercise of power, performance of duties, implementation of resolutions and authorization made by the Shareholders' General Meeting, execution of reporting regulations and management of related party transactions
- Strengthening the supervision over risk management, internal control and finance, and focusing on the building and operation of comprehensive risk management system, effectiveness of internal control system and independence of internal audit

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

Strengthening the building of corporate governance mechanism, and promoting the coordinated operation of the Board of Directors, the Board of Supervisors and the Management

- The Board of Directors pays due regard to the communication with the Board of Supervisors and the Management so that the Management could timely and effectively provide adequate information to the Board of Directors. As to issues found by the Board of Supervisors in the supervision, the Board of Directors attaches great importance and communicates with the Board of Supervisors for solutions
- The Board of Supervisors earnestly performs the duty of supervision over the Board of Directors and the Management, briefs the Board of Directors and the Management about the supervision and inspection on a regular basis, and puts forth suggestions on further enhancing corporate governance and operations management
- The Management actively establishes channels for effective and smooth communication with the Board of Directors and the Board of Supervisors, and are subject to the supervision of the Board of Directors and the Board of Supervisors. In addition to regularly reporting to the Board of Directors and the Board of Supervisors about the operations management, the implementation of authorization to the President by the Board of Directors and the implementation of resolutions made at the Board meeting, the Management listens to suggestions from the Board concerning the significant or exceptional matters in operations management, ensuring that major operating activities conform to the strategy and risk decision-making of the Board of Directors.

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

Attaching equal importance to the “introduction of capital, talents and system” and actively establishing complementary strategic partnership

- In 2006, ICBC introduced Goldman Sachs, Allianz Group and American Express as strategic investors, and established the complementary strategic partnership with commercial bank + investment bank, insurance company and credit card company. With the introduction of strategic investors, ICBC has established a special cooperative team and mechanism under the principle of attaching equal importance to the “introduction of capital, talents and system”.
- In 2007, ICBC established an overall cooperative framework with Standard Bank of South Africa in fields of resources banking, corporate banking, investment banking, global markets, African and international business, and global resources fund.
- A large number of talents and system introduction activities with personnel training, business cooperation, technology introduction, expert dispatching, external consultation and joint building of business units as various carriers, approaches and modes help ICBC to bring in advanced operating management concepts, push forward the reconstruction and upgrading of business process, promote the transformation of management model and growth pattern, and strengthen core competitiveness and comprehensive strength of ICBC.

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC  中国工商银行

Establishing sound authorization system supported by effective incentives and restraints mechanism

▣ Defining duties and responsibilities as well as internal decision-making rules and procedures through authorization management

Formulating the *Plan on Authorization to the Board of Director by the Shareholders' General Meeting*, the *Plan on Authorization to the President by the Board of Director*, the *Administrative Measures on Authorization* and the *Working Rules of the President*; formulating authorization of various businesses to enhance the management over branches, sub-branches and subsidiaries; building process bank

▣ Continuously improving the incentives and restraints mechanism

Establishing the plan on remuneration and performance evaluation of senior management members; establishing the profit-oriented internal grade management system; implementing the human resources enhancement project; initiating the career development work, and assisting employees in their career planning

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC  中国工商银行

Ensuring the rights of domestic and overseas shareholders and continuously improving transparency of ICBC

▣ Equal rights of participation for domestic and overseas shareholders

In the Annual General Meeting for 2006 and 2007, ICBC took the lead to convene meetings by video conference concurrently in Beijing and Hong Kong, which greatly facilitated domestic and overseas shareholders to attend the meeting, participate in the discussion, put forth suggestions and exercise their rights of voting.

▣ Further regulated information disclosure, and continuously strengthened external supervision

Adopting the pre-disclosure mechanism, as the first among H-share companies; solving various difficulties in domestic and overseas information disclosure in a creative manner; gradually increasing in proactive disclosure, and publishing regular reports for 7 times and interim reports for over 150 times; disclosing information on the sub-prime loan backed bonds, Lehman Brothers bonds, and Fannie Mae and Freddie Mac related bonds on a proactive, timely and complete basis.

▣ More mature investor relations management and more diversified approaches for investment to learn about ICBC

Establishing and improving the organizational framework and regulations for investor relations management; establishing the information communication platform and channels to facilitate all-round communication with investors; improving the investor relations management database; launching the hotline of corporate governance assessment, and conducting the survey of *Questionnaire for the Special Program of Corporate Governance*

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

Continuously improving risk management and internal control

Standardization

- Most sophisticated 12-category classification of loans and customer credit rating system
- Taking the lead to establish the comprehensive risk management framework among domestic banks
- Applying the results of the Internal Rating Based Approach Non-retail Project, with the risk measurement level ranking top among domestic banks
- Applying COSO overall framework of internal control all over the bank

Centralization

- Centralization of credit strategy, policy and approval
- Centralization of treasury operations at the Head Office
- Real-time and centralized risk monitoring by integrated IT system

Independence

- Separation of credit approval management from the marketing function
- Separation of trading from the function of market risk control
- Establishment of the independent Internal Audit Bureau in 2004
- The first among the four largest banks in China to conduct international audit on domestic branches and sub-branches

Accountability

- Adoption of employee accountability policy and procedures in 2002, and timely revision to the code of conduct
- Remuneration system linked to risk management performance
- Cultivation of risk culture all over the bank and enhancement in the awareness of risk

- ICBC published the audited *Report of Industrial and Commercial Bank of China Limited on Internal Control Self-Assessment for 2007*.

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

Establishing intensive management system of fund, finance and business

□ Gradually establishing the centralized fund management system

Establishing a sound capital management system, asset-liability management system and treasury operation system; strengthening the liquidity risk management all over the bank; enhancing the capability of product pricing and bargaining

□ Further improving the process and system of financial management

Establishing prudent, regulated and transparent accounting system; further sophisticated financial management; the first among the four largest banks in China to centralize expense management at tier-one branches

□ Gradually establishing the centralized processing system

Implementing the branches and sub-branches reform and process bank building, thus improving the organization and business process system; continuously improving the standardization and intensiveness of business processes; focusing on the core competitiveness enhancement of outlets

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2.2 Features and Practices of ICBC Corporate Governance and Reform (Cont'd)

ICBC 中国工商银行

Actively performing social responsibilities, and building an image of responsible large bank

Value bank	<ul style="list-style-type: none"> Outstanding performance and sound shareholder return. The dividend distribution accounted for 55%-60% of net profit for the period since the IPO. Continuously enhanced corporate governance. ICBC took the lead to convene the Annual General Meeting by video conference in two cities, with the Board and the President answering questions of shareholders respectively. One of the largest tax payer among financial enterprises
Green bank	<ul style="list-style-type: none"> Taking the lead to launch "Green Credit" among domestic banks, with borrowers and loans which comply with the state environment policy accounting for over 99.8%
Charity bank	<ul style="list-style-type: none"> Actively participating in poverty and disaster relief activities, and supporting the undertaking of culture and education and volunteer services The first bank which resumed operation in earthquake-hit area in 2008, the largest donation from employees
Brand bank	<ul style="list-style-type: none"> Paying regard to the experience of customers Providing safe, efficient and convenient financial services
Harmonious bank	<ul style="list-style-type: none"> "People-oriented", respecting the value and creation of employees, and attaching importance to protect legitimate rights of employees Actively carrying out trainings and career planning for employees Achieving the coordinated growth of shareholder return, corporate value and employee benefits
Creditworthy bank	<ul style="list-style-type: none"> Insisting on compliant operation and the philosophy of reputation first, guaranteeing the rights of customers, and performing the obligation of anti-money laundering

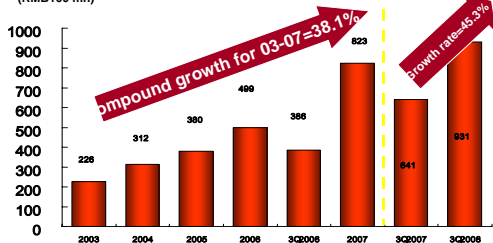
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2.3 Positive Effects of Corporate Governance and Reform in Recent Years

ICBC 中国工商银行

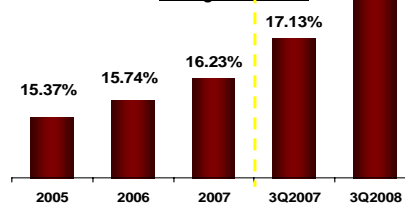
Continuous and Rapid Growth of Profit after Tax

(RMB100 mn)



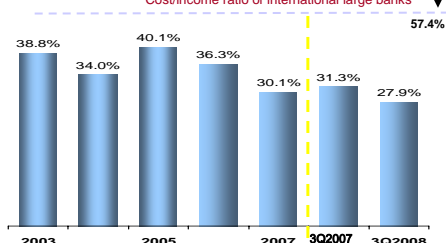
Continuous Enhancement in ROE

Return on Weighted Average Net Assets

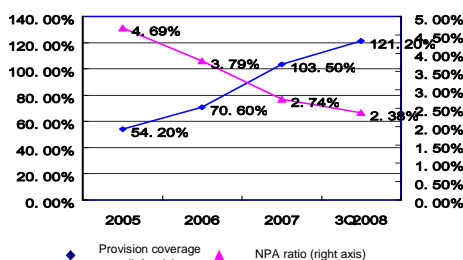


More Competitive Cost/Income Ratio

Cost/income ratio of international large banks



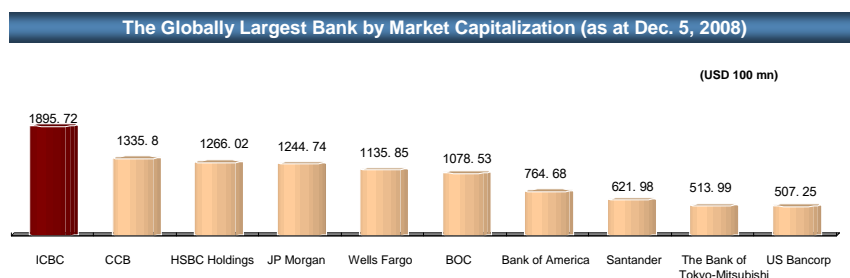
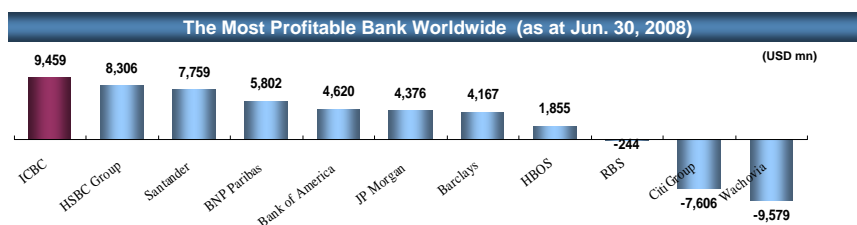
Continuous Improvement in Asset Quality and Provisions



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2.3 Positive Effects of Corporate Governance and Reform in Recent Years (Cont'd)

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2.3 Positive Effects of Corporate Governance and Reform in Recent Years (Cont'd)

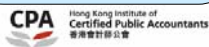
ICBC 中国工商银行

Corporate Governance gets recognition



The modern corporate governance, strong risk management and internal control, sound investor relations, strengthened advisory and extensive social responsibilities of ICBC contributes to its robust financial performance. By domestic and overseas standards, ICBC has adequate capital and liquidity ratio, and the board of directors supervises the risk and strategy, which guarantees that ICBC would withstand the current financial crisis.

- Comments of the Judge Committee for Hong Kong Corporate Governance Excellence Awards



"ICBC has innovatively resolved some differences between the regulatory standards on the offering markets, fully studied and compared relevant laws and regulations in Hong Kong and Mainland China, and sought the goal of pursuing the best practice of corporate governance to improve corporate governance and continuously promote the business performance."

- Report on the Special Program on Corporate Governance of Listed Companies of CSRC Beijing Office"

The annual report 2007 of ICBC contained an extensive and detailed Corporate Governance Report which clearly set out the bank's governance framework and its enhancement in corporate governance policies and practices; risk management structure, policies and strategies were set out properly; the social responsibility section provided use information on the bank's efforts in fulfilling social responsibilities, and it had received recognition and awards for its work in this area; reference was also made to the bank's website for further information on investors relation.

- Comments of Hong Kong Institute of Certified Public Accountants on "Gold Awards for Best Corporate Governance Information Disclosure"

- IR Innovation of the Year 2006
- Top 100 Best Investors Relation Management of the Year 2006
- Social Responsibilities Example of the Year 2007 awarded by Top 100 Chinese Management Annual Meeting
- Golden Calf-Top 100 Listed Companies of the Year
- In Top 100 Chinese Listed Companies by Value of the Year 2007, the Bank was also awarded Top 100 Listed Companies by Value and Top 10 Listed Companies by Social Responsibilities
- Hong Kong Corporate Governance Excellence Awards 2007
- Gold Awards for Best Corporate Governance Information Disclosure of the Year 2008
- Best Board of Directors of Chinese Listed Companies of the Year 2008
- Hong Kong Corporate Governance Excellence Awards 2008
- Best Chairman in terms of Investors Relation of the Year 2008, Best CEO in terms of Investors Relation of the Year 2008
- No.1 of Top 100 in terms of Investors Relation, Best Board Secretary and Best IR Website of the Year 2008
- Best Enterprise Citizen in China of the Year 2008
- 2008 CBN - Excellence Awards of Corporate Social Responsibilities

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2.3 Positive Effects of Corporate Governance and Reform in Recent Years (Cont'd)

ICBC 中国工商银行

Gaining many international awards, 83 domestic and international awards in all in recent 3 years

GLOBAL FINANCE



Bank of the Year (China)
Best Corporate Loan Bank (China)
Best Sub-Custodian (China)
Best Consumer Internet Bank (China)
Best Enterprise Internet Bank (China)

THE ASSET



Best Transaction Bank (China)
Best Domestic Custodian (China)
Best Cash Management Bank (China)

EURO MONEY



Bank of the Year
Best Custodian Service (China)
Best Management of Fixed Income Investment Portfolio (China)

FINANCEASIA



Best Bank
Best Cash Management Bank

THE BANKER



Bank of the Year 2007 (China)
Deal of the Year 2007 (Global)
Best Bank of China
Best Bank of Asia

THE ASIAN BANKER



Best State-owned Retail Bank
Best Large-scale Retail Bank (China)
Multi-channel Retail Banking

Recently the international credit rating agencies have raised the credit rating of ICBC one after another:

Standard Poor's: "A -"; Moody's: "A1"; Fitch Ratings: "A" .

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ICBC 中国工商银行

Part 3 Issues and Reflections

- 3.1 Several implications of the global economic and financial crisis
- 3.2 Issues should be highlighted in respect to the corporate governance of Chinese banking sector

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3.1 Several Implications of the Global Economic and Financial Crisis

- ❑ The sub-prime loan crisis breaking out in 2007 resulted in massive bankruptcy of financial institutions and turmoil of capital markets
- ❑ Now, the international financial crisis has deteriorated from regional coverage to the whole world, from developed countries to emerging economies and from financial sector to real economy, bringing about serious impacts upon economic growth and people's lives of different countries worldwide
- ❑ Reasons of many aspects contribute to the financial crisis, including misappropriate macro-economic policies, inadequate financial regulation and deficient risk management in the financial system

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3.1 Several Implications of the Global Economic and Financial Crisis (Cont'd)

Implications of the global financial crisis

- ❑ As banks, “at any moment, don't lend money to borrowers that cannot repay”. This is an unshakable rule banks must pursue
- ❑ Financial innovation should be within certain limits, and adhere to principles such as clear structures, adequate and transparent information and controllable risks
- ❑ At anytime, it is essential enough for the banking sector to practice prudent and strict regulation

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3.1 Several Implications of the Global Economic and Financial Crisis (Cont'd)

- ❑ The board of a bank cannot neglect or humor the management's risk-taking behaviors for seeking high profits, nor unilaterally emphasize shareholders' interests while overlooking appeals of customers, employees and other stakeholders
- ❑ Different national conditions decide that the world has no universally applicable "standardized and sound corporate governance". "Sound corporate governance" is only a relative and dynamic choice, but corporate governance is a long-term process of making continuous improvement.

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3.2 Issues Should Be Highlighted in Respect to the Corporate Governance of Chinese Banking Sector

- ❑ The simplified view of "shareholder first" should be prohibited as to the understanding of corporate governance concept
- ❑ The independence and professionalism of bank directors should be further improved
- ❑ To improve corporate governance, it is necessary to address the relationship between "efficiency" and "balancing and checking" properly
- ❑ The shareholding incentive measure can be practiced, but should be pushed ahead in a steady and prudent way
- ❑ With respect to corporate governance, Chinese banking sector should both study and draw reference upon strong points and good practices of domestic and overseas excellent commercial banks, take their relevant lessons, and continue to explore and improve modern corporate governance modes and mechanisms accommodating to characteristics of China in line with our own advantages and features

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**Our mission: to build ICBC into the most profitable,
excellent and respectable top bank in the world**

Thank you !





Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 7.2

**Challenges to Governance Structures Caused
by International Financial System
Turbulence – Australian Banking Responses**

Mr Bruce Lebransky
National Australia Bank

The experience of the past 12 months has been a significant challenge to banks' governance structures.

An important early analysis of these challenges and the identification of the characteristics of banks that have been more successful than others in addressing them is the Report of the Senior Supervisors Group presented to the Financial Stability Forum in March 2008. Amongst its conclusions the Report refers to firms that “demonstrated a comprehensive approach to viewing firm-wide exposures and risk, sharing quantitative and qualitative information more effectively across the firm and engaging in more effective dialogue across the management team”.

The Report goes on to list defining characteristics of successful firms as including:

- being more adaptive rather than static risk measurement processes and systems and displaying a willingness to consider a range of risk indicators
- a greater willingness to challenge and alter underlying risk management assumptions to reflect current circumstances including with respect to the effectiveness of risk transfer and risk mitigation
- more use of scenario analysis and more effective stress testing to reconsider potential risk outcomes

These factors reflect issues of organisational culture and the effectiveness of senior management engagement and oversight.

It is for these reasons that the opening slide to my presentation starts with the foreign currency option losses that impacted NAB in 2004. The report prepared by APRA (the Australian Prudential Regulation Authority) described “cultural issues” as being at the centre of the risk management failings and losses that occurred at the time.

As a consequence of its findings, APRA imposed a series of requirements on the NAB Board with the objective of ensuring established structures worked effectively in achieving risk management outcomes consistent with sound and prudent management.

The composition of the NAB Board is now based on the following factors:

- the Board will be of a size to assist in efficient decision-making
- the Chairman of the Board should be an independent non-executive director
- the Chairman of the Board must not be a former executive officer of the Group
- the Board should comprise a majority of independent non-executive directors
- the Board should comprise directors with a broad range of expertise, skills and experience from a diverse range of backgrounds including sufficient skills and experience appropriate to the group's business.

These factors are consistent with APRA's prudential standard APS 510 *Governance* and the Australian Stock Exchange's Corporate Governance Principles.

The bank's risk management model in the business was reviewed with the introduction of the “three lines of defence” framework. This emphasises the responsibility and accountability of the business for risk management outcomes and the manner in which the effectiveness of the accompanying risk management structures was enhanced, in particular, the evolution of the role of the company secretary into a chief governance

office. The Group's senior management risk committee governance structure and functionality was also re-designed, strengthened and centralised under the same office.

The APRA report also drew attention to an issue of now increasing focus – the appropriateness of remuneration structures for achieving a balance between short-run and longer-run performance with sound risk practice and outcomes. A recent example of these same issues can be found in the 13 October 2008 Letter to CEOs entitled *Remuneration Policies* from the Financial Services Authority of the UK.

The present difficulties in financial markets are raising numerous issues around the effectiveness of governance and risk oversight. Again there are few suggestions that organisational structures have been established in a flawed fashion. What is of concern is that committee structures can allow, if unchecked, an emergence of “organisational silos” with insufficient attention being made to ensuring that what is established is an integrated risk management view of business activities that is sufficiently forward looking.

Yet it is fair to say that the supervisory review principles of Pillar 2 of Basel II have been written with the aim of building such checks particularly those principles dealing with sound capital assessment and the comprehensive assessment of risks. These are further supported by the regulatory expectations surrounding the internal capital adequacy assessment processes of banks, including with respect to the use of economic capital calculations as part of business and strategic decision making.

For NAB these past 12 months has caused it to significantly review and reset risk management priorities. This includes the following:

- Review key risk policies including limit structures and incorporation of responsive and identified escalation processes
- “Cross-silo” meetings of both board and management risk committees including agreement on the establishment of a liquidity risk sub-committee to assist the group asset and liability committee.
- The establishment of this committee has led to the development of new forward looking risk targets, and liquidity and capital management strategies particularly with respect to funding including concentration limits.
- Priorities of committee and board meetings – key issues have been re-prioritised with less focus on business as usual matters.
- Greater frequency of meetings where appropriate – including the updating of information at intervals more frequent than scheduled meetings
- Ensuring the Principal Board is provided with information and market updates by key senior Group personnel (i.e. Group Treasury, Head of Institutional Banking divisions etc) as appropriate and according to market conditions
- Holding of additional meetings between the Chair of the Board risk committee, and the Chairs of all subsidiary board risk committees to share information on challenges and issues in each region
- Ensuring any higher risk business areas throughout the Group are priority reviewed and their strategies revisited

The consequence has been a review and close monitoring of capital and funding requirements and the bank's risk appetite position. This has resulted in deliberately increasing holdings of liquid assets and higher capital adequacy ratios after taking into account the potential cyclicity of risk outcomes.



MAFC / APEC / AFDC Shanghai Conference: Session 7.2: Challenges to Governance Structures

8 – 12 December 2008
Bruce Le Bransky



Key points to be covered

- ▶ Governance –The FX Currency Options Loss (2004):
- ▶ Regulatory Changes in Governance Expectations
 - established regulatory expectations
 - emergent regulatory requirements
- ▶ Risk Committee Structure at NAB
- ▶ NAB Risk Management Model in the Business - The Three Lines of Defence
- ▶ Significant NAB Governance Changes



Governance –The FX Currency Options Loss (2004):

Subject of special APRA report.

“Cultural Issues” viewed as a central cause. Board to state standards of behaviour, professionalism and openness it expects of the organisation.

Requirements imposed on the Board included:

- ▶ Establish effective escalation channels to enable Board / Committees to consider serious risk issues
- ▶ Review own composition and structure. Possession of necessary expertise to discharge its duties in relation to risk management
- ▶ Review charters of executive risk committees to ensure roles are carried out as described.
- ▶ Incentive arrangements to promote behaviours with appropriate regard for risk

Many of these issues are re-appearing in commentaries about current market issues.

3



Regulatory Changes in Governance Expectations:

▶ Established Regulatory Expectations-

- ▶ APS 510 “Governance” and ASX “Corporate Governance Principles”:

The Board is ultimately responsible for sound and prudent management of the ADI.

Board capabilities include issues of its composition (independence), skills and experience, effectiveness/size, renewal and accountability.

Minimum Board Committee requirements – must be a Board Audit Committee.

External auditor independence including constraints on subsequent employment with bank.

4



Regulatory Changes in Governance Expectations (cont):

► Emergent Regulatory Requirements-

- The Basel II Prudential Standards:
 - Pillar 1 requires Board and management knowledge of and approval of processes, model design and operation.
 - Board and management responsible for ensuring the establishment of effective systems to measure and monitor risks. Limit risks to prudent levels.
 - Pillar 2 requires all material risks to be addressed by a bank's capital adequacy assessment process
 - Pillar 3 – establishment of Board approved formal disclosure policy: where approval covers issues of disclosure appropriateness, validation and frequency.
- Recent addition are issues of remuneration policies eg The FSA's recent letter to CEOs

5



Risk Committee Structure at NAB

- Principal Board – PB Risk Committee and PB Audit Committee.

Principal Board establishes formal risk appetite statement for the Group.

Approves all material risk policies, monitors and reviews adequacy of the risk governance framework
- Group Risk Management Committee (chaired by CEO).

Principal body for risk strategy and risk policy decision making.
- Executive Risk Committees (reflect Basel II classifications) for:
 - Capital
 - Operational Risk and Compliance
 - Market Risk
 - Asset and Liability Management
 - Credit Risk
- Role of company secretary includes that of a chief governance office for committee structure

6



NAB Risk Management Model in the Business – The Three Lines of Defence

- ▶ **Key Principle:** Risk management capability embedded in front line teams for effectiveness -

- ▶ **First Line: The business:**

All business decisions pro-actively consider risk and are accountable for its effectiveness

Employees are responsible for risk-management in their day-to-day activities and is a core competency

- ▶ **Second Line: Risk Management:**

Develop and implement policies, processes and tools

Accountable for independent monitoring, oversight and reporting of risk issues

- ▶ **Third Line: Internal Audit:**

Reviews effectiveness of risk management practices and confirms level of compliance

Reports to PB Audit Committee

7



Significant NAB Governance Changes During 2008

- ▶ **Priorities** - PBRC and PBAC joint meeting to review emergent market issues. BAU processes considered inappropriate / insufficient for market conditions and emergent risk management issues - review of policies:

- single large exposures
 - risk concentrations
 - limit structures
 - delegated credit authorities
 - product usage authorities
 - stress testing

- ▶ **Organisational** - Establishment of liquidity sub-committee of GALCO:

- Limits: Liquidity and funding limits revised, new forward looking targets, risk escalation triggers reformed.

- Meetings: Weekly / monthly depending on market circumstances

- Seniority: Chaired by Chief Finance Officer

8



Significant NAB Governance Changes During 2008 (cont)

- ▶ **Focus** - The order of meeting agendas:
 - Shift from BAU reporting to forecast positions and risks.
 - Emphasis on key issues of: capital adequacy, liquidity & funding
- ▶ **Engagement** - greater frequency:
 - Chair of PBRC meeting with Chairs of the subsidiary banks' risk committees
 - Board Committees meeting more frequently - "as necessary"
 - Regular flow of "updated information" between meetings
- ▶ **Review**
 - Higher risk business activities and their strategies.
 - Meeting outcomes and issues discussed by secretaries to committees.
- ▶ **Consequent Impacts** -
 - Capital and funding requirements have changed
 - Risk appetite position reconsidered

Key points covered

- ▶ Governance –The FX Currency Options Loss (2004):
- ▶ Regulatory Changes in Governance Expectations
 - established regulatory expectations
 - emergent regulatory requirements
- ▶ Risk Committee Structure at NAB
- ▶ NAB Risk Management Model in the Business - The Three Lines of Defence
- ▶ Significant NAB Governance Changes



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SHANGHAI, CHINA

Session 7.3

Best Practice in Corporate Governance in Australian Financial Institutions

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INTRODUCTION

This short paper provides an overview of best practice in corporate governance in major financial institutions in Australia.

The four major banking groups in Australia (viz ANZ Banking Group Ltd, Commonwealth Bank of Australia, National Australia Bank Ltd, and Westpac Banking Corporation) are all among the 100 largest banks in the world and are all AA rated (only 12 of the 100 largest banks have been accorded this rating). Each of these banking groups is committed to embracing best practices in governance and to monitoring developments in corporate governance internationally. They therefore represent a useful case study in sound governance standards.

From a structural perspective, the governance framework of the banking groups can be summarized as follows:

- Board of directors (including board committees)
- CEO
- Heads of business units (direct reports to CEO)
- Chief financial officer (direct report to CEO)
- Heads of central risk management, compliance and audit functions (usually reporting to the chief finance officer or direct to the CEO ie they are independent of the business units)

This paper concentrates on practices at the board level on the grounds that the board of directors is the focal point of corporate governance in a commercial enterprise.

Governance practices can be grouped according to their relationship to structural, process or people issues.

STRUCTURE

The more important structural issues are tabulated below.

1) Board chairman

In each of the four banking groups the chairman is an independent non-executive director (ie there is separation of the roles of the group chairman and the chief executive officer)

2) Board size

Modern thinking is towards more compact boards in the interests of efficiency in decision-making and debate. The size of the boards of the major banking groups ranges from 8 to 13 directors.

3) Majority non-executive directors

Non-executive directors comprise the majority of the board in every case. In fact in three of the four banking groups there is only one executive director (the CEO).

4) Majority independent directors

All of the non-executive directors in each banking group meet formal tests of independence (notably those specified by the Australian Stock Exchange and the particular bank's own independence criteria).

To qualify as "independent", a director must be a non-executive who is free of any business or other association – including those arising out of a substantial shareholding, involvement in past management, acting as a current or past advisor, consultant or auditor, or being a customer or supplier – that could impair the exercise of independent judgement.

5) Tenure

Limits on the time directors may serve vary across the four banking groups but a common pattern involves appointment (subject to election by shareholders at the next AGM) for a term of three years, with a limit (subject to re-election) of three or four terms ie a tenure limit of 9 to 12 years.

6) Board committees

Each of the banking groups has the following board committees:

- Audit
- Nominations (alternative titles being "governance" and "board performance and renewal")
- Remuneration (alternative titles being "people" and "people and remuneration")
- Risk

In addition to these four core committees, one banking group has a "technology committee" while another has a "corporate responsibility and sustainability committee".

7) Committee composition

All committees comprise a majority of independent directors.

Only the nominations committee is chaired by the board chairman. The other committees are chaired by independent directors other than the board chairman.

Membership by the board chairman in other committees varies between banking groups – at the extremes, in one case the chairman is not a member of any other committee while in another the board chairman is an ex-officio member of all committees.

CEO participation in board committees is strictly limited. In three of the four banking groups the CEO is not a member of any of the four core committees (in the banking group that is the exception, the only committee that includes the CEO is the risk committee).

A primary objective of the committee process is that deliberations and decision-making should be free of undue influence by the board chairman or the CEO.

8) Access to management

In the case of the audit and risk committees, there must be provision for the committee to meet as regularly as it deems appropriate (and at least annually) with the head of internal

audit and the chief risk officer respectively in the absence of other management. The purpose of these private meetings is to enable the committee to be satisfied as to the independence of the function and the objectivity of views and information provided to the committee.

Apart from these formal arrangements, directors have complete and open access to management, subject to keeping the CEO informed to ensure that there is no confusion as to reporting lines and accountability.

PROCESS

A brief overview of selected process issues is provided below.

1) Charters

In each of the four banking groups, the functions and responsibilities of the board are clearly defined in the board charter.

Similarly, each board committee has a charter, approved by the full board, that defines the committee's role, objectives and powers.

Each bank also has a detailed statement that outlines the various components of its corporate governance policies and practices. This statement is included in its annual report to shareholders and is publicly available on each bank's website.

2) Delegated authorities

Each of the banking groups has a comprehensive written delegations policy that specifies matters preserved for decision by the board or its committees, those delegated to the CEO, and those delegated through the CEO to other levels within the organization.

The entire delegated authorities document is typically reviewed annually.

Accountabilities are linked to these authorities.

3) Meeting frequency

The board meeting schedule typically provides for about 10 meetings per year, with provision for additional meetings to deal with urgent or complex matters as deemed necessary.

At least one board meeting per year (usually two meetings) is devoted entirely to strategy development and normally extends over two days at an offsite location.

Board committee meetings occur at least quarterly – and generally more frequently for the audit and risk committees.

4) Meeting agenda and proceedings

Care is taken in designing the board meeting agenda to ensure that priority is given to strategic matters (both strategy design and strategy execution), overall financial performance and sustainability.

The chairman, with input from the CEO, designs the core components of the meeting agenda over a 12 month time horizon to ensure that there is balanced coverage of financial, strategic and major risk areas throughout the year.

Without careful management, board meetings and board papers can become overly immersed in short-term operating and performance issues, to the exclusion of the board's core responsibilities.

In conducting the board meeting the chairman also needs to have close regard for the three distinct functions the board performs:

- It decides (those things preserved for decision by the board)
- It monitors (the performance and financial standing of the business)
- It advises (by acting as a sounding board for senior management and a source of council and advice based on the experience and wisdom of the directors)

5) Ethics

In addition to the legal obligations of directors, each banking group has comprehensive codes of conduct (or statements of professional practice) that set out the ethical standards to which directors are expected to adhere (practice varies as to whether there is a code specifically for directors or whether there is a single code that applies equally to directors, senior executives and all employees).

6) Conflicts of interest

With a board comprised of high calibre directors, the other activities and business connections of directors will inevitably raise conflicts of interest from time to time.

In addition to directors' obligations under the corporations law, each banking group's governance practices specify that when a potential conflict of interest arises, the director concerned must declare that conflicted position. On such declaration, the director concerned:

- Does not receive relevant board papers
- May not be present during board deliberations on the matter
- Is precluded from exercising any influence over other directors on the matter concerned
- May not vote, or be present during a vote, on any related board resolutions

7) Securities trading

In addition to insider trading prohibitions under corporations laws (both in Australia and overseas jurisdictions) each banking group has prescriptive restrictions on trading by directors (and employees) in the shares of the company.

The specifics of these restrictions vary, but it is common for dealing to be restricted to specified "windows" during the year and, even when dealing is permitted, directors are precluded from engaging in trading of a short-term nature.

8) Director education

Common practice involves-

- A directors' handbook containing a broad range of information on matters relevant to the role
- A formal induction program
- Provision for continuing education, involving information sessions and workshops (conducted by internal and external experts) and site visits (both within the business and to other entities, both within Australia and overseas, which may be repositories of knowledge and experience of particular relevance to the business).

9) Advice

The board collectively, and each director individually, has the right to seek independent professional advice, at the company's expense, to help them to discharge their responsibilities.

In the case of directors acting individually, the chairman's approval is needed before seeking advice, but this may not be unreasonably withheld.

Where an individual director obtains such advice it should be made available to all directors.

10) Performance evaluation

A major development over recent years has been an intensified and formal process of assessing and reviewing the performance of the board collectively, of board committees and of each director individually.

Evaluation practices include:

- A defined process for annually reviewing the board's performance, policies and practices
- Completion of written surveys/questionnaires by directors and senior executives
- One-on-one meetings by the chairman with individual directors
- Engagement of an external expert/consultant to facilitate the board evaluation process every second year
- Assessment of the quality and effectiveness of board papers and other information made available to directors
- A separate review of the effectiveness of the board chairman (commonly undertaken by the nominations committee in the absence of the board chairman)
- Allocation of time at the end of each board meeting for non-executive directors to meet in the absence of the CEO and other executives
- One bank employs the practice of appointing a director at each meeting, on a revolving basis, to critique the meeting and report his/her findings at the conclusion of the meeting.

PEOPLE

1) Primacy of people

The people dimension is of critical importance.

Good governance occurs through good behaviours, leading to good outcomes.

Well designed structures and efficient processes do not guarantee good behaviours.

Selecting the right people to serve as directors is therefore of paramount importance.

2) Fit and proper

Each of the banking groups has a comprehensive and robust framework to ensure that individuals considered for board or senior executive appointments have the fitness and propriety to discharge their prudential responsibilities.

These internal requirements can readily be dovetailed with the fit and proper compliance standards set by the prudential regulator (APRA in the case of Australia).

3) Selection criteria

The banking groups have their own specific criteria (undisclosed) for director selection but generic requirements embrace propriety, skills, qualifications, experience, communication capabilities and community standing.

A useful framework that can be applied to the essential qualities of directors involves the six "I's":

- **Integrity** - the highest ethical standards are sought in bank directors
- **Intellectual capacity** - given the complexities involved and the cerebral nature of the role, bank directors need to be highly intelligent
- **Independent thinking** - this attribute involves both an instinct to get to the heart of complex issues and an ability to exercise independent judgement without being unduly influenced by the views of management or other parties
- **Interpersonal skills** - directors must be able to work within the board as a collegial process, with the capacity to express their views forthrightly but also to respect and absorb alternative perspectives of fellow directors
- **Interest** - a director must be genuinely interested in the company itself and the financial services industry more generally, with that interest being reinforced by the experience and expertise that the director brings to the board table
- **Intent** - all directors must have the capacity and commitment to devote the time required to be fully effective as a director of the bank.

4) Mix

Commensurate with the tendency for boards to be of smaller size, increased attention is now given to finding the right combination of skills and experience among the directors when considered collectively. This is one of the key responsibilities of the nominations committee of the board.

Each banking group strives to create a board of directors with the optimum balance of skills, knowledge, and diversity of experience and perspective across the ranks of the directors.

5) Renewal

A further critical role of the nominations committee is to undertake succession planning, both for the role of chairman and by having a selection of potential candidates to replace each director in the event that this may be required.

In addition to replacement planning, careful regard is paid to the desirability of new director appointments to ensure that the board receives the benefit of new thinking and recent or

different experiences. While a core of experienced directors is sought, the injection of new ideas and expertise is also desirable, particularly given the change dynamics in the financial services industry.

Notably, one banking group has renamed its nominations committee as the “board performance and renewal committee” as a clear signal of the importance placed on the renewal dimension.

CONCLUSION

The PowerPoint material that accompanies this paper includes a checklist that can be used to compare governance practices of other institutions in other regimes with the best practices outlined above.

The intention is not to prescribe these practices as mandatory but to create a means to identify variances. Where non-compliance is apparent, the reason for the variation can then be sought. In other words, the approach being suggested is along the lines of “if not, why not?” Where, after due consideration, a different practice can be confidently judged to deliver good governance outcomes there ought not to be reason for concern. But where there are material gaps or deviations that could lead to inferior governance outcomes, regulators ought to take remedial action.

Effective corporate governance of financial institutions is critical to the maintenance of public confidence in those institutions, with linkages to systemic stability and national economic performance. Careful attention to corporate governance practices is therefore an integral component of prudential supervision of financial institutions.

Further information about the practices of the four major Australian banking groups can be obtained from the comprehensive corporate governance statements that are available on their respective websites.

Paul McCarthy
December 2008

Best Practice in Corporate Governance

Presented by
Paul McCarthy

APEC – Enhancing Risk Management and Governance
December 2008

PWMC

Agenda

- Concepts
- Structures
- Process
- People
- Checklist

PWMC 2

Agenda

➤ Concepts

- Structures
- Process
- People
- Checklist

The Genesis of Corporate Governance

Corporate governance has only recently emerged as a discipline in its own right, although the strands of political economy it embraces stretch back through centuries.

The World Bank, 1999

Corporate Governance – How Broad?

- Our focus is on the role of the Board of directors
- Reconcile separation of ownership and control
- Governance is not management

What do we mean by Corporate Governance?

- System by which companies are directed and controlled. It influences how the objectives of the company are set and achieved, how risk is monitored and assessed and how performance is optimised.
- The process by which corporations are made responsive to the rights and wishes of stakeholders.

Best Practice from Australia's Big Banks

- Four major banks are AA rated (only 12 in the world)
- Among the 100 biggest banks in the world
- Have remained financially sound and profitable
- Committed to highest standards of governance

Agenda

➤ Concepts

➤ **Structures**

➤ Process

➤ People

➤ Checklist

Structures – the leaders

- Chairman separate from CEO
- In practice as well as name
- Processes to obviate “dominance by personality”

Structures – the Board

- Mix of skills and experience (minimum size)
- Efficiency in decision-making and debate (maximum size)
- Compact size – about 10/12 directors
- Board renewal – tenure limits and injection of new talent

Structures - Independence

- Majority of independent directors
- Non-executive director (not current or past employee)
- No association with a substantial shareholder
- No connection with supplier or customer
- Not past or present auditor, consultant or adviser
- Objective – independence in thinking, debate & decisions

Structures – Executive Directors

- Compact Board size and majority independent directors
- Strictly limits room for executive directors
- Board's role is to oversee management – challenge, motivate, advise
- Strong case for CEO as only executive director

Structures – Board Committees

- Nominations Committee
 - Audit Committee
 - Remuneration Committee
 - Risk Committee
 - Nominations is only committee chaired by Board chairman
 - Chairs of other committees based on expertise & experience
 - Committee members normally all independent directors
 - CEO attends (as required) as executive not as director
-

Agenda

- Concepts
 - Structures
 - **Process**
 - People
 - Checklist
-

The Three Dimensional Board

1. Monitor
2. Decide
3. Advise

Board Process - Charters

- Board charter – functions and responsibilities
- Committee charters – role, objectives and powers
- Delegated authorities – board, committees, CEO, staff
- Accountabilities linked to authorities
- Delegations policy document reviewed annually
- Detailed corporate governance statement

Board Process - Meetings

- Meet monthly
- Annual meeting plan
- Agenda linked to priorities (strategy, risk & financials)
- Two meetings exclusively on strategy
- Audit and Risk Committees meet every 2 months
- Other committees at least quarterly
- Audit Committee access to head of internal auditor
- Risk Committee access to chief risk officer

Board Process - Ethics

- Code of conduct – statement of ethical standards
- Confidentiality a critical requirement
- Conflicts of interest to be disclosed
- Not receive papers, absent from discussion, not vote
- Restrictions on share trading – “windows” & short-term

Board Process – Support for Directors

- Formal induction program
- Directors' handbook
- Continuing education
- Access to independent professional advice

Board Process – Performance Evaluation

- Formal annual review of Board, committees, directors
- Use of external consultant every second year
- Separate assessment of effectiveness of Board chairman
- Assessment of quality of Board papers
- Regular discussions in absence of executives (incl CEO)

Agenda

- Concepts
- Roles
- Structures
- **People**
- Checklist

Essential Qualities of Directors – the 6 “i’s”

1. Integrity
2. Intellectual Capacity
3. Interpersonal Skills
4. Independent thinking
5. Interest
6. Intent

Director selection

- The Board must establish (guided by the Nominations Committee) a set of criteria for director appointments
- The aim is to create and maintain a Board capable of overseeing, challenging, stretching and motivating management

The role of Directors

As defined by CBA, directors are expected to:

- Operate as part of an exceptional **team**
- Exhibit impeccable values
- Input strongly to risk management, strategy and policy
- Provide skills & experience required now and for the future
- Be excellently prepared and receive all necessary education
- Provide valuable insights and input to management
- Vigorously debate and challenge management

Agenda

- Concepts
- Structures
- Process
- People
- **Checklist**

Governance checklist

1. Beware dominant chairman or CEO
 2. Majority of truly independent directors
 3. Effective Board and committee structure
 4. Responsibilities, authorities & accountabilities defined
 5. Ethical standards prescribed
 6. Effective Board and committee process
 7. Agenda focussed on right priorities
 8. Quality of Board papers and executive input
-

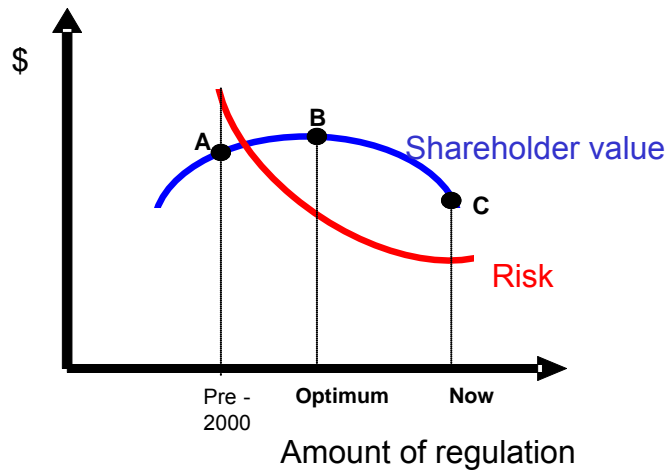
Governance Checklist continued

9. Conflict of interest provisions clear and effective
10. Securities trading by directors strictly controlled
11. Rigorous annual evaluation of Board performance
12. Individual directors of high calibre (acumen & integrity)
13. Effective mix of expertise, experience and perspective
14. Diligent attention to Board renewal

Supplementary material

1. The regulatory trade-off
2. Issues in developing markets
3. Responsibilities of the board
4. Australian banks' attention to governance
5. Australian banks governance overview
6. Australian banks board committees
7. Reference material
8. Supplementary readings

The Governance Trade-off



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Issues for Corporate Boards in Developing Markets

1. Concentration of Ownership
2. Appointment Process
3. Role Clarity
4. Information Quality
5. Local Culture
6. Legal Deficiencies

Source: The McKinsey Quarterly, 2006, Number 1

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Responsibilities of the Board

- Corporate governance
 - Oversight of the business and affairs of the company, including:
 - strategies and financial objectives
 - approving major initiatives and capital expenditure
 - risk management
 - management performance
 - Appointment of CEO
 - HR policies
 - Reports to shareholders
-

Australian Banks' Attention to Governance

	ANZ	CBA	NAB	WBC
Corporate Governance Statements – Number of pages	11	8	10	17

Websites

WWW.ANZBANK.COM
WWW.COMMBANK.COM.AU
WWW.NABGROUP.COM
WWW.WESTPAC.COM.AU

Australian Banks Governance Overview

	ANZ	CBA	NAB	WBC
Role Clarity	√	√	√	√
Non-Exec Chairman	√	√	√	√
Board Size	9	10	14	9
Non-Exec/Exec Directors	8/1	9/1	11/3	8/1
Independence Provisions	√	√	√	√
Performance Reviews	√	√	√	√
Codes of Conduct	√	√	√	√
Audit Committee	√	√	√	√
Nominations Committee	√	√	√	√
Remuneration Committee	√	√	√	√
Risk Committee	√	√	√	√
Other Committees	Technology	-	-	Social Responsibility

Australian Banks Board Committees

	ANZ	CBA	NAB	WBC
<u>Audit Committee</u>				
Board Chairman Member	√	X	X	√
Board Chairman Chair	X	X	X	X
CEO Member	X	X	X	X
<u>Nominations Committee</u>				
Board Chairman Member	√	√	√	√
Board Chairman Chair	X	√	√	√
CEO Member	X	X	X	X
<u>Remuneration Committee</u>				
Board Chairman Member	√	√	X	√
Board Chairman Chair	X	X	X	X
CEO Member	X	X	X	X
<u>Risk Committee</u>				
Board Chairman Member	√	√	X	√
Board Chairman Chair	X	X	X	X
CEO Member	X	√	√	X

Reference material

- OECD - Principles of Corporate Governance
- OECD - White Paper on Corporate Governance in Asia
- ASX Corporate Governance Council – Principles of Good Corporate Governance and Best Practice Recommendations
- Asian Development Bank Institute – Corporate Governance in Asia: Recent evidence from Indonesia, Korea, Thailand and Malaysia
- Harvard Business Review 9/02 – What Makes Great Boards Great
- Harvard Business Review 3/03 – The Board's Missing Link
- The McKinsey Quarterly 02/4 – Change Across the Board
- The McKinsey Quarterly 06/1 – Improving Board Performance in Emerging Markets
- The Economist 28/5/05 – The Biggest Contract

Supplementary Readings (books)

- Theories of Corporate Governance by Thomas Clarke
- Corporate Governance and Chairmanship: A Personal View by Sir Adrian Cadbury
- Back to the Drawing Board: Designing Corporate Boards for a Complex World by Colin Carter and Jay Lorsch
- The Recurrent Crisis in Corporate Governance by Paul MacAvoy and Ira Millstein



Enhancing Risk Management and Governance in the Region's Banking
System to Implement Basel II and to Meet Contemporary Risks and
Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 8.1

**Bank's Perceptions of Pillar 3
and its Operation**

Mr Bruce Lebransky
National Australia Bank

The Basel II Framework includes within its structure of Pillars an explicit focus on “market discipline” through market disclosure – known as Pillar 3.

Pillar 3 compliments the minimum capital requirements of Pillar 1 and the supervisory review processes of Pillar 2. Its aim is to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on a firm’s capital, risk exposures and risk assessment processes. The disclosures are to be made to the market for the benefit of the market.

FSA “Practical Information for Firms on Pillar 3”

The initial focus of Pillar 3 has been the provision of quantitative information of the risk types covered by the regulatory requirements of Pillar 1 plus descriptions of associated risk management and governance practices. This is supported by the Accord’s in principle statement that “banks’ disclosures should be consistent with how senior management and the board of directors assess and manage the risks of the bank” [paragraph 810.].

By encouraging market discipline the regulatory requirements for Pillar 3 are intended to assist in building and maintaining market confidence in individual institutions and the banking system more generally. Clearly a key assumption here is that the information disclosed by banks is viewed by market participants as sufficient in light of economic circumstances and is disclosed in a manner that is understood by market participants.

The Australian bank experience with Pillar 3 has been that significant market education has and is required about the Basel II Accord. This includes the drivers of its various risk components and capital adequacy outcomes as well as explanations of the structure of the Basel II Accord and the intended role of Pillar 3.

There appears to have been an initial over-emphasis by market participants on a single metric, the overall capital adequacy ratio, reflecting a widespread expectation of potential capital relief following implementation of the new Accord. This is despite the Australian regulator making clear that such relief, if any, would be modest and spread across several years. That this relief has not occurred and the fact that Australian banks have lifted their tier 1 capital ratios during 2008 has no doubt contributed to a willingness to participate in this Pillar 3 education.

Australian banks have also considered it necessary to explain that different regulatory requirements across national jurisdictions can result in significantly different capital adequacy ratio outcomes – particularly the reported tier 1 capital ratio. Recently the Australian Bankers’ Association (ABA) released a comparison of UK and Australian regulatory requirements that showed for some Australian banks there could be a difference in excess of 200 bps for reported tier 1 capital ratios.

The ABA noted that “different regulatory frameworks in Australia and other jurisdictions can make it difficult for investors and analysts to make like-for-like comparisons between Australian banks and banks operating offshore”.

These types of differences if left unexplained would have the potential to cause uncertainty and inappropriately impact market confidence about Australian banks, at a time of general market difficulty, and in so doing undermine the rationale of Pillar 3.

The current period of financial turmoil has also highlighted that Pillar 3 disclosures are mainly limited to Pillar 1 risk issues and credit risk in particular. This means that Pillar 3 does not seek to measure / explain the financial condition and performance of financial firms which is primarily the role of accounting standards.

The Financial Stability Forum Report released in April 2008 noted that “weaknesses in public disclosures by financial institutions have damaged market confidence during the turmoil”. The Report’s recommendation of enhanced disclosures, particularly with respect to securitisation exposures and off-balance sheet vehicles and activities, has occurred with Australian banks making these disclosures as part of their financial accounts reporting and not Pillar 3 disclosures.

It is a recommendation of the Financial Stability Forum that the Basel Committee release further guidance to strengthen disclosure requirements under Pillar 3 to cover many of these issues by end-2009.

It is too early to say whether at this time these points are acting to undermine the overall effectiveness of Pillar 3 and market acceptance of its being a tool of transparency and discipline as initially intended. The Financial Stability Forum report refers to the need to ensure that disclosures made are “most relevant to the market conditions at the time of disclosure”. The Report’s recommendation number III.2 makes clear that such decisions about the evolution and flexibility of Pillar 3 should involve investors, financial industry representatives and auditors and not only be left to the regulators to determine. Such a process of itself will further contribute to Pillar 3 being an educative tool that effectively contributes to market discipline and confidence.

MAFC / APEC / AFDC Shanghai Conference: Session 8.1: Basel II Pillar 3 Disclosures

8 – 12 December 2008
Bruce Le Bransky



Clydesdale Bank

Yorkshire Bank

Bank of New Zealand

nabCapital



Key points to be covered

- ▶ Why Pillar 3 – Market Discipline
- ▶ Key Principles of APS 330 – APRA's Pillar 3
- ▶ Need for Market Education
- ▶ Pillar 3: Some issues and gaps
- ▶ What NAB did for Pillar 3 – substantial preparation
- ▶ What NAB did for Pillar 3 – certification and assurance
- ▶ Certification and Assurance (cont.) – APS 310
- ▶ Appendix A: APRA's Pillar 3 Disclosure Tables

Why Pillar 3 - Market Discipline

- **Objective of Disclosure:** Provide Transparency and Enhance Confidence in Banks and Financial Markets.

Pillar 3 is part of the Basel II Framework.
Separate to disclosure disciplines of the Accounting Standards / Corporations Code.

- **How Achieved:** By setting minimum requirements of Pillar 1 disclosure:

Risk management practices / capital adequacy / credit risk.

- **Consequence:** Substantial increase in “new” qualitative and quantitative risk information.

3



Key Principles of APS 330 – APRA’s Pillar 3

Key Principles of Disclosure:

Timely and of high quality
Consistent with how Boards/ Management assess and manage risk
Consistent with complexity of business and risk management

Governance Principles:

Formal Disclosure Policy including as to content and control “process”
Process: appropriateness/accuracy/validation of disclosures

General Requirements:

Disclosure at a Group level of information.
Published on website within 40 business days
Host regulator requirements exist.

Verification Requirements:

CEO must attest to reliability.
External audit is not specifically required.

4



Need For Market Education

► Problems:

Consistency in definitions (transparency): Establish ABA working group to help clarify definitions for information to be provided to the market.

Information is new /unfamiliar (confidence). Interpretations/analysis open to error and so could negatively impact market confidence.

► Solution: General Market Education – Australian Bankers Association:

ABA briefing session with analysts and investors on Pillar 3 disclosures. APRA attended and provided a presentation on Pillar 3 and its role.

- Inform those who will analyse / report / comment about detail of the disclosures.
- Highlight those disclosures where a range of interpretations are possible and where the requirements on Australian banks differs from those offshore, consequences of these differences.
- Outline differences amongst Australian banks.
Eg partial implementation of the IRB approach within a Group.
- Panel of key executives from participating banks and APRA: answer questions and provide industry-wide view of issues.

5



Pillar 3 – Some Issues and Gaps

► Impact of Current Market Conditions:

- Market uncertainty about banks' risk profiles and sensitivity to changing market conditions.
- FSF is recommending greater engagement with market participants to ensure relevance of disclosures.

► Pillar 3 is a significant starting point but not a final outcome:

- For internationally active banks the Financial Stability Forum considered Pillar 3 disclosures insufficient. Recommended additional disclosures for off-balance sheet transactions & SPVs.
- NAB provided an addendum to its latest Annual Report to address the FSF recommendation.

► Who are the intended readers of the Pillar 3 reports?

Market discipline requires capability to make comparisons across institutions – ie a high level of financial literacy about Basel II and risk management practices.

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Pillar 3 – Some Issues and Gaps (cont)

- ▶ Australian banks' capital ratios and home-host differences.
To provide transparency about regulatory “comparability” the ABA and individual banks have been providing information on the differences with and capital adequacy outcomes under FSA rules.
[APRA requirements result in Tier 1 capital ratios being approx 200 bps lower than would be reported under FSA rules.]
- ▶ How will regulators seek to use Pillar 3 information in their published financial stability reviews?
- ▶ What are the potential revisions to Pillar 3 arising from the recommendations of the Financial Stability Forum that the Basel Committee issue further guidance in 2009 to strengthen Pillar 3.

7



What NAB Did for Pillar 3 – Substantial Preparation

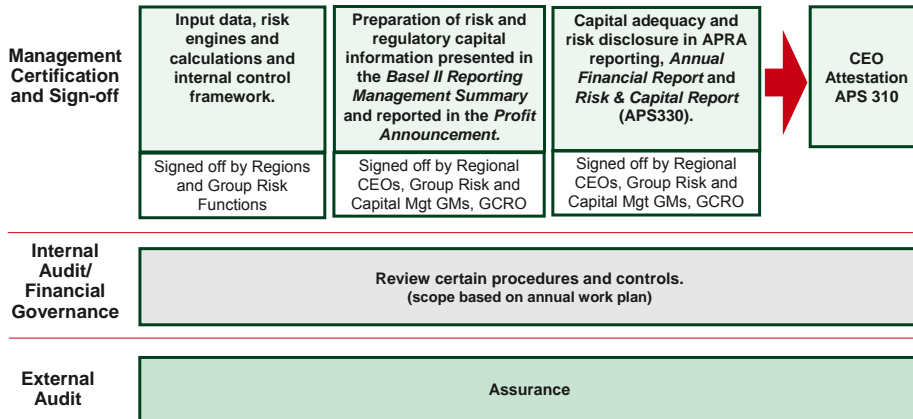
- ▶ Internal working groups established to address APS 330 obligations:
 - Changes to *Group Disclosure and External Communication Policy*
 - Participate in ABA Pillar 3 industry forum
 - Internal “dry-runs” conducted before final report prepared. Connects to the ABA working group issues.
 - PBRC review pro forma Pillar 3 disclosure report.
- ▶ A new “Risk and Capital Report” created for Pillar 3. Is now NAB’s primary risk disclosure report:
 - Accompanied by significant investor pack.
 - Australian Financial Report (AFR) now limited to providing results information in accord accounting standards / corporations law requirements.
- ▶ The assurance processes used for AFR expanded to cover the new APRA prudential (Basel II) returns and the APS 330 disclosures.
- ▶ APS 330 Disclosure on the ASX Notices website the same day as publication on NAB Group website.

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What NAB did for Pillar 3 - Certification and Assurance

Expansion of the Annual Certification Framework for sign-off of the AFR to cover Pillar 3 and APRA Basel II prudential report forms.



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Certification and Assurance (cont.) – APS 310

- ▶ CEO declaration (endorsed by the Board):
 - ▶ Identification of key risks has occurred
 - ▶ Systems are in place to monitor and manage those risks and operating effectively including the establishment of adequate and timely reporting.
 - ▶ Risk management descriptions provided to APRA are accurate and current
- ▶ Role of External Auditors

External auditors are to provide APRA with an opinion as to whether:

 - ▶ The ADI has observed all the prudential standard requirements which an APRA has set for the ADI
 - ▶ The statistical and financial data provided by the ADI to APRA are reliable.
 - ▶ The ADI has complied with statutory banking requirements

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Key points covered

- ▶ Why Pillar 3 – Market Discipline
- ▶ Key Principles of APS 330 – APRA's Pillar 3
- ▶ Need for Market Education
- ▶ Pillar 3: Some issues and gaps
- ▶ What NAB did for Pillar 3 – substantial preparation
- ▶ What NAB did for Pillar 3 – certification and assurance
- ▶ Certification and Assurance (cont.) – APS 310
- ▶ Appendix A: APRA's Pillar 3 Disclosure Tables

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Appendix A: APRA's Pillar 3 Disclosure Tables

Specific information must be disclosed in tables, containing quantitative and/or qualitative information. These requirements are documented in APRA's APS 330.

Attachment A: Extensive market disclosure

Quantitative information: released bi-annually

Qualitative information: released annually

1. Scope of Application
2. Capital:
 - ▶ Capital Structure
 - ▶ Capital Adequacy
3. Risk Exposure and Assessment:
 - ▶ Credit Risk
 - General Disclosures
 - Portfolios subject to Standardised App.
 - Portfolios subject to IRB Approach
 - Credit Risk Mitigation
 - Counterparty Credit Risk
 - Securitisation
 - ▶ Market Risk
 - Standardised Approach
 - Internal Models Approach
 - ▶ Operational Risk
 - ▶ Equities (Banking Book position)
 - ▶ Interest Rate in the Banking Book

Attachment B: Basic market disclosure

Quantitative information: released off-quarters

1. Scope of application
2. Capital:
 - ▶ Capital Structure
 - ▶ Capital Adequacy
3. Credit Risk Exposure:
 - ▶ Credit Risk – General Disclosures





Enhancing Risk Management and Governance in the Region's Banking
System to Implement Basel II and to Meet Contemporary Risks and
Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 9.1

China's Approaches to Reserve Management

Mr Wei Benhua
People's Bank of China

China's Approaches to Reserve Management

Mr Wei Benhua
People's Bank of China

Management of Foreign Exchange Reserves

- 1, The Definition of International Reserves
 - 2, The Functions of Foreign Exchange
 - 3, Global Foreign Exchange Reserves
 - 4, Management of Foreign Exchange Reserves
 - 5, The Proper Scales of Foreign Exchange
 - 6, The Formation of China's Foreign Exchange Reserves
 - 7, Sovereign Wealth Fund
 - 8, Gold
-

1, The Definition of International Reserve

IMF defined the term in 1993 in the version 5 of Handbook of International Balance of payments, that the international reserve of a nation is the foreign assets effectively controlled by the given nation, which could be divided as reserve assets and other official foreign exchange assets. As reserve assets, it is controlled by the monetary authority in order to adjust the imbalance through intervening foreign exchange market, or influence the exchange rate to indirectly adjust the imbalance scale of international balances of payments, as well as serving other purposes.

International reserves : 1, Foreign Exchange Reserves
2, Gold
3, Special Drawing Rights
4, Other Assets

2, The Functions of Foreign Reserves

The definition by IMF in 2004:

- 1, to support currency policy and foreign exchange management policy
- 2, to support the need of a government's payment to external debts and its use of foreign reserve
- 3, provide confidence for the domestic currency
- 4, provide market confidence for a nation's payment to external debts
- 5, reduce the external vulnerability of a nation's economy through absorbing the impacts of currency crisis
- 6, to deal with disasters and emergencies

Global Foreign Reserves

Foreign Exchange at the end of June, 2008 in Hundred Million USD

	Balance	Percentage	Compared to last year
Global	71 128	100%	13 263
America	6 200	8.7%	1 262
Asia-Pacific	43 670	61.4%	7 536
Europe & Mid-Asia	14 426	20.3%	2 816
Middle East and Africa	6 833	9.6%	1 653

The Big Ten Reserve Nations and Regions

(in hundred million USD, end of June, 2008)

China	18 088
Japan	9 801
Russia	5 554
India	3 035
Taiwan	2 922
South Korea	2 581
Brazil	1 999
Singapore	1 767
Hong Kong	1 576
Algeria	1 337

China's Foreign Reserve in Chronic Order

(in hundred million USD)

1978	1.67
1988	33.72
1998	1449.59
2000	1655.74
2001	2121.65
2002	2864.07
2003	4032.51
2004	6099.32
2005	8188.72
2006	10663.44
2007	15282.49
September 2008	19055.85

4, The Management of Foreign Reserve

- Principles that need to follow:
 - liquidity, security, profitability
- Managed by MOF:
 - Japan
- Managed by Central Bank:
 - China, France, Singapore
- Sovereign Wealth Fund:
 - GIC
 - CIC China Investment Corporation
 - KIC Korean Investment Corporation

Models of Management

- 1, Self Management
- 2, Entrusted to external fund managers
- 3, Combination of the Two

Currency Structures of Foreign Reserves

- Determining Factors:
 - Currencies of foreign trade
 - Currencies for external debts payment
 - The trends of different currency exchange rate movements
 - Diversifying risks

Investment Portfolio Benchmark

- Libor
- Government Bonds:
 - Developed nations & Developing nations
- Institutional Bonds
- Corporate Bonds
- Stock Market
- Commodities
- Other Investment: PE & HF

Risk Management

- The aim of risk management
- The definition of risk management
 - Credit Risk
 - Market Risk
 - Liquidity Risk
 - Settlement Risk
 - Operational Risk
 - Sovereignty Risk
 - Political Risk
 - Legal Risk

The Aims of Risk Management

Under the general objective of managing the reserve with the principal of security, liquidity and profitability, correctly define and evaluate the risks and levels that reserve management is about to face and undertake, and through effective organizations and measures to manage risks, and to enhance the value of reserve assets under controllable risks.

Credit Risk includes:

Investment Objects

- ❑ this is referred to the loss of interests and principals to the reserve investment due to the collapse or default of issuer, and the loss of capital realization due to the deterioration of bond issuer's credit levels. In the case of a nation, this is referred to Sovereign risk

Risk of Transaction Counterparts

- ❑ this is referred to the loss due to the bankruptcy or nonfulfillment of contracts of the counterparts

Risk that involves corresponding institutions

- ❑ this is referred to the loss caused by the bankruptcy or nonfulfillment of contract by corresponding banks, entrusted management institution, and bond custodian banks

Market Risk:

- this is referred to the market price change caused by interest rate and exchange rate market. Now it mainly includes: core assets income is lower than the investment benchmark income, and risk of losses in tradable assets

Liquidity Risk:

- this is referred to the unprompted realization of reserve assets or risk of realization of value lower than the normal value

Settlement Risk:

- this is referred to the risk that money cannot be received by the agreed time or cannot be received according to agreed terms

Operational Risk:

- this is referred to the losses caused by man-made mistakes, system failure, and mistakes of internal control

Sovereign Risk:

- this is referred to the risk of losses caused by policy changes of the country, includes:
 - 1, the losses caused by bond issuing nation's declining will or ability to pay
 - 2, the losses caused by nonfulfillment of the transaction due to the policy changes of the country where you make investments. Consequently your counterparts and other institutions involved could not observe the contracted as they committed

Political Risk:

- the risk of reserve assets being frozen, confiscated, or controlled by a hostile nation

Juristic Risk:

- the losses caused by improper implementation, or the ineffective enforcement of law terms

To Diversify Investment— Decrease Risks and Increase Income

- Invest in various Currencies
- Invest in various financial products—to enter new investment areas:

- Stock
- Commodities
- PE
- HF

- To enter emerging economies:

- Global Bond in hard currencies
- Domestic Bond in local currency
- Stock market

5, The Proper Scale of Foreign Reserve

- Traditional Standards:
The foreign reserves needed for 3-month imports
Payment for interests and principal (including 1-year short term debt capital)
- The lessons of Asia Financial Crisis: The fixed exchange rate of currency cannot be maintained, Central Banks is not able to continue to intervene, exchange rate depreciate quickly at a large scale, foreign investors pull-back their investments, outburst of crisis.

The Current Situation in China

- Foreign reserves needed for 3-month import
- Import (from January to October 2008, import is about one trillion USD)
- FDI (Use foreign investment up to USD 81 billion from January to October, 2008)
- Foreign Debts (Outstanding amount at the end of June 2008 is USD 427.4 billion)
- QFII & QDII
- To maintain the stability of financial system: reform of Agricultural Bank USD 19 billion
- FDI profits
- Reform of exchange rate system
- Cooperation in international financial area (join IDB)
- Regional financial Cooperation
- Sustainable economic development need buying resources and energies
- For emergency use (politics, military, individual purchase of foreign currency up to USD 50,000)

FDI

(in hundred million USD)

YEAR	Use of Foreign Investment
1979-1982	18
1990	35
2000	407
2005	724
2006	727
2007	835
October 2008	811

The Formation of China's Foreign Exchange Reserves

- 1994 Integration of exchange rates, Compulsive Exchange Surrender System
 - Based on Market needs, sole and managed floating system
- 1996 RMB is convertible under current account
 - Capital account become gradually and partially opened
 - Floating band of exchange rate at 0.3%
- 1997 During the Asia Financial Crisis, RMB didn't adopt a policy to depreciate
- 21 July, 2005 Reformed the RMB exchange rate regime, established a floating exchange rate system based on market needs, with reference to a basket currency to adjust. RMB appreciate for 2%, from 8.28 to 8.11. Principles for reform: Initiative, controllable, and gradual
- 2006- Initiating the reform of foreign exchange compulsive surrender system to a surrender system based at your own will
- 21 May, 2007 The floating band of RMB enhance to 0.5%

The Impact for RMB Appreciation

Positive Impact	Negative Impact
Good for imports Firms that rely on raw material import can reduce costs Domestic firms have better ability to invest outwards Good for people to go aboard Reduced pressure on interest and principle payment of external debts Better GDP position internationally Better purchase power for citizens	More basic money injected in to the economy, greater pressure for inflation Decreased attraction for FDI Pressure for China's exports Appreciation will add more burdens on Chinese firms' profits, thus adding pressure for employment.

Exchange Rate for RMB

year	1949	1950/3	1951/3	1951/7	Average exchange rate after 1952	1953-54	1955-71	1972
rate	80	4200	22380	3.5	2.26	2.61	2.46	2.24
year	1973	1974	1975	1976	1977	1978	1979	1980
rate	1.99	1.96	1.86	1.94	1.86	1.68	1.55	1.5
year	1981	1982	1983	1984	1985	1986	1987-88	1989
rate	1.71	1.89	1.96	2.33	2.94	3.45	3.72	3.76
year	1990	1991	1992	1993	1994	1995	1996	1997
rate	4.78	5.32	5.51	5.76	8.62	8.35	8.31	8.29
year	1998 /4	2005	2006	2007	2008 January to October			
rate	8.28	8.19	7.97	7.60	6.9682			

Sovereign Wealth Fund

Definition

- The investment fund of foreign reserve and fiscal surplus owned by government for management and operation

SWF

- More than 40 nations now own 50-plus SWF, 8 of which have the scales more than 100 billion USD. The Abu Dhabi Investment Bureau of the United Arab Emirates is the biggest, managing 900 billion USD. 75% of SWF is owned by oil and gas exporting nations. According to IMF estimation, the overall amount of SWF is 3 trillion USD, which is equivalent to half of the world's foreign reserves, and twice the scale of the hedge funds in the world.

SWF Classification According to Functions

- Fund of Functioning on stability of the reserve value
 - This kind of fund is applied to avoid the economic and financial imbalance caused by price fluctuation of commodities (especially oil)
- Savings Fund
 - This kind of fund can transfer irrecyclable resources in to multiple assets combination, thus realizing the national wealth consisting of assets of different nature. So the over-dependence of economy on natural resources can be dissipated.
- Reserve Investment Corporation
 - The main aim of this fund is to maintain and add value. The assets are still counted as the official foreign reserve.
- Development Fund
 - The aim of this fund is to serve the implementations of social economic development or industrial policies, and to enhance the potential productivity of the country.
- Pension Welfare Fund
 - This kind of fund is to tackle contingencies or emergencies in which government pension funds are short of supply.

■ The Investment Model of SWF:

- Kuwait: real estate 34%, stock 38%, FDI 17%
- Norway: stock 60%, fixed income products 40%

■ SWF Operation and Management:

- Self-management: Norway, Abu Dhabi, Singapore
- Entrustment: South Korea entrusts $\frac{3}{4}$ of its 20 billion USD to professional institution

The Concerns of International Community

- National security being threatened
- Western market economy being distorted
- Core competition capacity being undermined
- Stability of financial market being attacked
- Deteriorating imbalance of global economy

Measures Taken by International Community

- Implement investment protection measures (in the case of Germany)
- Increase transparency, make SWF operational rules and practices.
- Add pressure on SWF nations to open markets

Assets of SWF

	Name of the Fund	Assets (in hundred million \$)
Oil and Natural Gas Exporting Nations		
United Arab Emirates	Abu Dhabi Investment Bureau	8750
Norway	Government Pension Fund Global	3800
Saudi Arabia	Not specified	2890
Kuwait	Government Reserve Fund	2130
Russia	Reserve Fund, National Welfare Fund	1250/ 320
Libya	Libya Investment Corporation	500
Qatar	National Reserve Fund, Stable Fund	500
Algeria	Reserve Fund, Reserve Management Fund	430
USA (Alaska)	Alaska Permanent Reserve Fund	400
Brunei	Brunei Investment Agency	300
Kazakhstan	National Fund	210

	Name of the Fund	Assets (in hundred million \$)
Malaysia	Khazanah Nasional BHD	190
Canada	Alberta Heritage Fund	160
Nigeria	Surplus Oil Account	110
Iran	Oil Stability Fund	90
Azerbaijan	National Oil Fund	25
Oman	SGRF	20
East Timor	East Timor Oil Fund	14
Venezuela	FIEM	8
Trinidad and Tobago	Reserve Stability Fund	5
Asia Exporting Nations or regions		
Singapore	GIC	3300
China	CIC	2000
Singapore	Temasek Holding	1080

	Name of the Fund	Assets (in hundred million \$)
South Korea	Korea Investment Corporation	300
Taiwan Province of China	National Stability Fund	150
Other nations		
Australia	AGFF	540
Chile	Economic and Social Stability Fund	149 15
Botswana	Pula Fund	47
Kiribati	RERF	4
Total Scale		29, 680
Source: IMF Estimated by the statistics up to February 2008		

Gold

■ The importance of gold

- Commodity Nature
- Currency Nature (Means of payment, Bretton Woods System gold standard)

■ Scarcity of gold

- Ever since Human discovered gold 4000 years ago, up to 171, 00 0 ton of gold has been produced. Among them, 161, 000 ton is in the hands of the people. The rest of 10,000 ton of gold is kept in sunken ships under sea or cached somewhere, but it would never disappear. If we calculate the value of the gold on a basis of 900 USD per ounce, 171, 000 ton of gold amounts to 5.4 trillion USD.

Production and Consumption of Gold

Unit : In tons

Year	2000	2001	2002	2003	2004	2005	2006	2007
Supply (Mineral production)	2618	2645	2618	2621	2493	2548	2486	2476
Demands (Jewelries and Manufacturing)	3761	3482	3141	2997	3168	3287	2932	3072

The Biggest 10 Gold Production Nations for 2007

Unit: In tons

- China 280.5
- South Africa 270.0
- Australia 246.3
- USA 239.5
- Peru 169.6
- Russia 169.2
- Indonesia 146.7
- Canada 101.2
- Uzbekistan 75.3
- Ghana 75.1

The Biggest 10 Consumption Nations of Gold Jewelries for 2007

Unit : In tons

- India 555.1
- China 302.2
- USA 260.9
- Turkey 188.1
- Saudi Arabia 117.9
- The United Arab Emirates 99.8
- Russia 82.0
- Egypt 67.3
- Italy 58.8
- Indonesia 55.2

The Biggest 10 Consumption Nations of Gold for Electronic Uses for 2007

In tons

- Japan 128.4
- USA 50.2
- South Korea 35.6
- Singapore 18.3
- Taiwan Province of China 18.1
- Germany 15.1
- China 12.7
- Russia 12.6
- Switzerland 9.1
- India 2.5

Gold Price and Costs

Gold Price (yearly average: USD/ounce)			
Year	2005	2006	2007
Price	444	604	695
Cost for Gold Production (yearly average: USD/ounce)			
Year	2005	2006	2007
Cost	269	317	395

The 10 Biggest Gold Reserve Nations

	Quantity (in ton)	Gold as percentage to total foreign reserve
USA	8, 133	78%
Germany	3, 417	68%
IMF	3, 217	
France	2, 562	59%
Italy	2, 452	68%
Switzerland	1, 101	40%
Japan	765	2.1%
Netherlands	621	61%
China	600	1%
Central Bank of EU	564	25%

Gold Resource in China

- The gold resource in China is between 15,000-20,000 tons
- Exploitable gold reserve 4634 tons
 - Rock Gold: 2,786 tons
 - Sand Gold: 593 tons
 - Accompanied Gold: 1,255 tons
- In recent years, a big gold mine is discovered in Yangshan, Jiangsu province. The total amount is 308 tons, which changed the history that China did not have any independent gold mine up to 200 tons.

Gold Standard and the Collapse of Bretton Woods System

- 1833-1923 gold price roughly kept at 20.65 USD/ounce
- 1923-1968 gold price roughly kept at 35 USD/ounce
- August 1971 President Nixon announced that the operation for exchanging USD to gold at \$35/ounce is terminated, which meant that the Bretton Woods System collapsed. Gold price increased to 38 USD/ounce
- February 1973 gold price increased to 42.22 USD/ounce
- January 1976 the Jamaica Agreement declares that countries no longer peg their currencies to gold. The process for non-currency gold hereby began.
- 18th January 1980 gold price reached to 850 USD/ounce
- In the beginning of 2001 gold price reduced to 255.95USD/ounce

Reasons for Gold Price Increases

- Depreciation of USD
- Uncertainty of World Economy
- Instability of Geopolitics
- High price of Petroleum and other commodities
- Demand-Supply relations
- Pressures of Inflation

The Gold Market in China

- April 2001 Abolishing State monopoly for purchase and distribution of gold
- October 2002, Shanghai Gold Exchange was established, which meant the establishment of Chinese gold market
- January 2008 Shanghai Commodity Future Exchange opened business for gold futures trading

Shanghai Gold Exchange		
	Volume of Business	Trading Volume
2007	1, 828 tons	316.4 billion RMB
2008 Jan.-June.	1, 960 tons	408.8 billion RMB
Shanghai Commodity Future Exchange		
	Volume of Business (Monthly Average)	Trading Volume
2008 Jan.-June.	260 tons	721.5 billion RMB

Chinese Gold Market

■ The Visible Market:

- Shanghai Gold Exchange (gold spot trading)
- Shanghai Commodity Future Exchange (futures trading)

■ OTC Market:

- Gold bar Trading by commercial banks
- Gold account trading at commercial banks (paper gold)
- Gold rent in commercial banks
- Margin trade for gold
- Non-standard gold trade between gold-producing and gold consuming enterprises

The Problems and Challenges that China's Gold Market Faces

- The blurring authority for gold supervision
Although PBOC is authorized to be the gold supervisor.
- Absence of regulatory laws for the gold market (the cases of Shanghai Liantai, and Gaode)
- The standard of gold investment products is not well established in OTC market.
- Too many brokerage companies engaged in gold investment or consulting.

Policy Objectives for China's Gold Market Development

- Transformation of gold market from commodity trading to financial trading
- Transformation from merchandise trading to derivatives trading
- Transformation from domestic market to international market



Thank You!

Session 10.1

Workshop Comprising Small Groups

Respond To The Following Question:

You are a regulator supervising domestic banks, some with operations in other jurisdictions, and internationally operating banks in your jurisdiction, and you are concerned at the spread of risk arising from market turbulence. Analyse what you think are:

- i) the most effective governance structures in your agency to handle risk impacting on your responsibilities (TEAM 1)**
- ii) what are the key measures you need to have in place with the various groups of banks you supervise (TEAM 2)**
- iii) what do you consider are the critical aspects of your agency's relationship with foreign supervisors and with other groups (TEAM 3)**
- iv) what do you consider are the current major problems a supervisory agency would confront in supervising banks – domestic and foreign – to ameliorate risk arising from market turbulence (TEAM 4)**

Recommended references:

- Basel II - Home host information sharing for effective Basel II implementation – June 2006
- Report of the Financial Stability Forum on enhancing market and institutional resilience – 7 April 2008 – Chapter V; sections 2 and 3.
- Report of the Financial Stability Forum on enhancing market and Institutional resilience – Follow-up on implementation - 10 October 2008 – Chapter 4; sections 4.2 and 4.3.

Logistics:

- teams may meet at anytime to discuss approach to issues in workshop
- teams to meet with facilitator for 10 minutes immediately after introduction to Session 10.1 to
 - i) discuss approach to their presentation at the facilitated discussion
 - ii) agree form of presentation
 - iii) agree presenter/s for team
- presentation for each team should be no more than 8 minutes.

TEAM 1

Facilitator – Paul McCarthy

Nguyen Huu Nghia	- Vietnam
Hamim Syahrur Ahmad Mokhtar	- Malaysia
Fabrizio Lopez Gallo Dey	- Mexico
Mirza Yuniar Isnaeni Mara	- Indonesia
Irina Yakimova	- Russia
Jose Recon S. Tano	- Philippines
Yang Jun	- China

The most effective governance structures in your agency to handle risk impacting on your responsibilities

Governance framework needs:

- Mission
- Strategy
- Coordination between regulators and supervisors within the country and between the countries

Home-Host Relationships –

- Close home/host relationship. So people know what subsidiaries are doing
- Share information with home country.
- Complete information about whatever outside the country could affect the internal situations (systemic problems)
- Trust is important

Financial Instability Committee and Task Force should not change - but a high level unit should make sure that home/host relationships work well.

Guiding principles of exchanges of information

- Balanced relationship between the two agencies
- Risk focused
- Access to information in both directions
- Should be aware of what other supervisory agencies are thinking – if they are taking certain actions, should be aware of what the impact might be on banks
- Avoid redundancies between home and host supervisors (this is difficult to do)

Questions:

If you think about the Basel Accord and the way it classifies risk – would you feel that one way of structuring the regulatory agency would be to have teams that specialize in dealing with those particular risks? Also, a separate area that would analyse statistical returns

- o I would say no. Should look at the financial intermediary as a whole because even though we might try to separate risk based on its characteristics, you need

to know the interactions between the risks – such as market/banking book. If you separate these operations, you may get a different picture than what the bank is really doing, which could be different.

- We have a special task force that is composed of different individuals that have knowledge of different areas of risk, to gain a fuller understanding of the overall picture

If you had a banking regulatory separate from the central bank, would the structure look the same as the one you have put together?

- It is our view that it is important for the regulatory agency to be the same as the central bank. We do not believe that the regulator should be separate from the Central Bank. We have considered the pros and cons. It is difficult to implement when you have two different structures, based on our experience, there are problems with coordination and timely responses.
- A banking regulator, if in the Central Bank or separately, has to be able to take action decisively and quickly. But if you're a banking regulator and you see a crisis, I don't know if the first reaction is to have a memorandum with different regulators
- This structure, regardless of whether regulator is separate or in one agency, is flexible enough for them to work together. Task force is composed of different regulators and supervisors. Accountability and responsibility would be high.
- In Indonesia, a regulation was made that formed the financial stability committee composed of MOF and banking supervisor, this forum could be effective for coordination and the Chairman is the Central Bank's governor (in this case is the same as the banking regulator)
- You have looked at what the Financial Stability Forum is suggestion and taken their perspectives when determining your response and it is good to see that you respect their opinions in this time.
- In APRA, the way things are structured, specialist risk areas cover the various categories of risk covered under the Accord and those teams go on-site and you review the risks under that heading. Separate for credit, operational and interest rate risk, etc. In response to the recent turbulence, there has been a formation to handle liquidity risk. This allows you to do cross-bank analysis. You also have groups dealing with individual banks that look at statistical information. There are also channels for handling perceived or actual problems in a particular institution.
 - There are regulator meetings between APRA and regulators in other jurisdictions to formulate a group perspective

As I oversaw the group's issues as they relate to governance structures and market turbulence (we're assuming this is not institution specific but could be systemic). Despite of how regulators are organized there needs to be some governance structures to coordinate central bank and prudential regulators. You need a process to liaise with other countries bank supervisors. This led the Group to deal with the question as they did and did a good job in articulating a framework.

TEAM 2

Facilitator – Bruce LeBransky

Bui Thi Phuong Hoa	- Vietnam
Sarimah Mohamed	- Malaysia
Elizabeth N. Sanchez	- Philippines
Didik Madiyono	- Indonesia
Ye Xiaolu	- China
Prasat Somchitnug	- Thailand

What are the key measures you need to have in place with the various groups of banks you supervise?

Key measures in supervision of cross-border banks. As a home supervisor, banks with interactions overseas impacts local banks.

As a regulator you need to understand overseas procedures – activities / mission / vision / contribution to the group as a whole as terms of asset size

What is the country/regulatory risk in that particular operation?

Need to look at risk profile of overseas operation.

- Look at risk management process/compliance with laws and regulations
- Head office needs to give oversight of overall liquidity management/stress testing/contingency finding
- Most important thing in a crisis – what is the impact of subsidiaries and branches due to adverse economic conditions. If branch has overseas branches in NY after sub-prime crisis. What is the impact on overall risk?
- Currency issues. When there is devaluation, profit that they would get would be much lower.
- Impact on capital/profitability
- Division of responsibility between home and host supervisors. Intensify communication with host supervisors. Do supervisory visits more frequently to understand the condition of overseas operation
- For information sharing with host supervisor, should exchange findings
- Important to prioritise issues

Questions:

For monitoring procedures, what is the best way to ensure sustainability?

- o To ensure sustainability you need to assess the business. And for home and host, discuss further the issues
- o What is your capacity to handle foreign entities in your country?
- o Frequently collaboration with regulators from other countries.

Process you've described is comprehensive, is this taking place in all of the economies present here. Do you have relationships as described with home supervisors? In your capacity to deal with the large foreign owed banks, are you getting enough dialogue information so that you as supervisors in your home economy feel comfortable?

- In Malaysia we are doing this and continuing to do this. We have overseas presence in several other countries. We are trying to further enhance our framework to make it effective.

Do you feel of equal strength as a home regulator, dealing with host regulators whose banks are significant in your economy and may come from a well developed market, do you discuss on equal terms, do you have the capacity to do that?

- In Malaysia, we visit FSA because of there are foreign banks present. We went to a visit to Federal Reserve due to Citibank in Malaysia. We do have a supervisory visit to them to discuss issues of concern.

One of the issues that arises is the question of contagion risk – when one jurisdiction gets into trouble, what policies you have in place to avoid one country's problems affecting the rest of the group.

- Two broad policy approaches to this that APRA has approached is a clear regulatory restriction on intra-group lending. No overseas subsidiary can be funded over a certain level of capital.

TEAM 3

Facilitator – Wei Benhua

Norhidaya Johari	- Malaysia
Yulia Trubinova	- Russia
Pornwasa Sirinupongs	- Thailand
Sofia Yelitsa Calderon Quispe	- Peru
Xu Mingdong	- China
K.M. Abdul Wadood	- Bangladesh
Oum Sivanno	- Camdodia

Relationship with foreign supervisors and with other groups

For domestic and foreign bank regulators. Have an MOU between banking supervisors, which is in line with the Basel Committee Working Group on Cross-Border Banking

MOU should show division of responsibilities.

- Demonstrate inspection responsibilities/capital requirement.
- Sharing of information (application result and if denial, why)

Foreign bank should demonstrate how it complies with local requirements.

Joint forum on financial conglomerates – a forum for bank regulators and securities and insurance supervisors to strengthen supervision of financial conglomerates

Can have a task force of the joint forum to enhance the understanding in the way such groups are managed and organization

Cooperation with AML and CFT units. In Thailand, we have separate agencies to deal with this.

Question:

If you're a regulator, why do you have to join the MOU?

Different countries have different price. The MOU assures each other that the regulatory system is acceptable to your country and that the information exchange between the two regulators will be as predictable as possible and that you can trust the information

- After the Asian crisis, home and host supervisors have a view.

The team suggests you have a committee of supervisors with regulators from different country, we don't have that.

TEAM 4

Facilitator – Ken Waller

Usaluk Jesdathavornwong	- Thailand
Andres Abel Zacarias Camac	- Peru
Qu Haichang	- China
Chhin Dina	- Cambodia
Li Xiaohua	- China
Somyot Meepetchdee	- Thailand

What do you consider are the current major problems a supervisory agency would confront in supervising banks – domestic and foreign – to ameliorate risk arising from market turbulence?

Different regulatory standards.

Different account practices and products. In Cambodia, there are different banks. The authorities in Cambodia have different ways to assess local and foreign banks. For underdeveloped market systems, this could represent an increased cost in the way they supervise different kinds of frameworks. In Cambodia, the operations for banks have different parameters.

Systemic risk – degree of correlation of assets. There is a challenge for supervisory agents – how to measure correlation of assets in different countries. Since banks can invest in local and foreign assets, they need to be completely aware and measure the degree of correlation because of systemic risk happens it can affect the stability of a country.

Communication Problems.

Questions:

Do you have the skills and quality of information you need to be able to see the issues that may arise.

- Peru needs clear ways to qualify and measure the things that come from the financial crisis. The supervisor in Peru is the Superintendencia. This authority has a close relationship with the Ministry of Economy and Central Bank and the authority of this agency
- For emerging countries, the challenges are external so it's difficult to measure the impact in this jurisdiction. A lot of uncertainty than in the Asian financial crisis and we were able to have a direct supervisory response to this. In this crisis, there is a huge amount of uncertainty to what will happen over the next few months and we'd have a better response if we had a better understanding. The department of economics research in the Philippines, the crisis is not limited to the financial sector itself and as it trickles down to the economy you can have a more proactive supervisory response.
- Ken Waller- Financial turbulence can come domestically or externally – from regulatory failure or from a bank not having the liquidity to meet its requirements. The question is as a supervisor/regulator, what are the skills you need to do the things you need to do. You might find this expertise outside your own agencies. You need to gather input from reliable places that may not be in the financial system or in your agency, but your relationship with a range of bodies (research, academic) and having those at your disposal when doing your job is very important to have.

How do we pass on this experience in financial turbulence to the next generation?

- Mistakes that Mexico made pre-1994 are the same mistakes that US banks were making. So international experience is important. The opportunity to relate to colleagues from other parts of the world is valuable. These things are harder to offer to people in the private sector.



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Session 10.1

Team 1

Hamim Syahrums Ahmad Mokhtar - Malaysia
Fabrizio Lopez Gallo Dey - Mexico
Mirza Yuniar Isnaeni Mara - Indonesia
Irina Yakimova - Russia
Jose Recon S. Tano - Philippines

Workshop on most effective governance structures in your agency to handle risk impacting your on your responsibilities

TEAM FANTASTIC 1

Fabrizio Lopez Gallo Dey	- Mexico
Hamim Syahrum Ahmad Mokhtar	- Malaysia
Mirza Yuniar Isnaeni Mara	- Indonesia
Irina Yakimova	- Russia
Jose Recon S. Tano	- Philippines

"You are regulator supervising domestic banks, some with operations in other jurisdictions, and internationally operating banks in your jurisdictions, and you are concerned at the spread of risk arising from market turbulence"



1

Outline of Governance Structure

- Coordination between regulators and/or supervisors **within the country**
- Coordination between regulators and/or supervisors **between the countries**
 - ✓ As Home-country supervisors and/or regulators
 - ✓ As Host-country supervisors and/or regulators



* ROR II - Rate of Return Framework II

2

Framework that provide coordination between regulators and/or supervisors within the country & set-up of Financial Stability Committee...



OVERRIDING PRINCIPLES

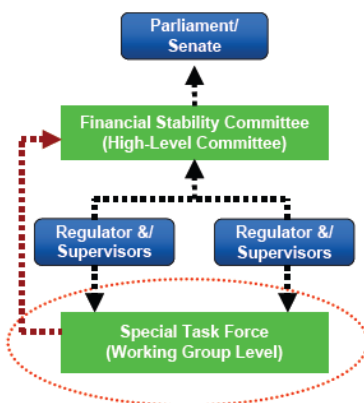
- Effective communication & close collaboration between regulators
- Accountability linked to authorities
- Fast action - Speed & swift response is vital as 'delay destroys value'

GOVERNANCE STRUCTURE I

- Legal Framework
- **MOU** between regulators &/ supervisors
 - ✓ Arrangement on **information sharing**
 - ✓ **Responsibility** defined
- Set-up **Financial Stability Committee** as platform for discussion & decision making
 - ✓ Agenda focused on right priorities
 - ✓ Frequency of the meetings
 - ✓ Report to Parliament/ Senate
 - ✓ Code of conduct & ethical standard

3

The need for special task force (technical level) to ensure close collaboration and quality of proposals & recommendation...



GOVERNANCE STRUCTURE II

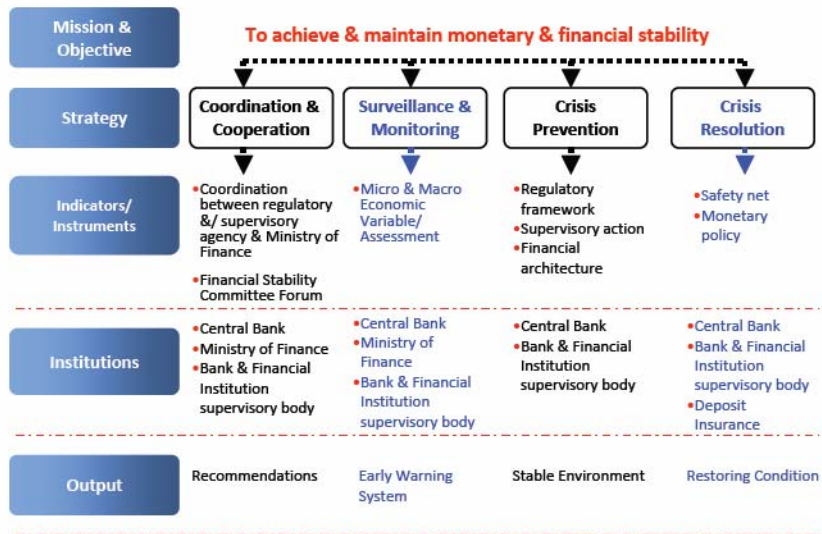
- Special task force as working group level
 - ✓ **Liaison function** to ensure i. good relationship between regulators &/ supervisors; ii. No regulatory arbitrage
 - ✓ Team members comprise of **expert** from different regulators & supervisors
 - ✓ To come-up with **high quality recommendations & report** to Financial Stability Committee

SUMMARY

- Many emerging market have separate regulatory agencies to supervise banking, insurance, capital market & deposit insurance
- Require good co-operation, coordination & communication
- Form high level financial stability committee consist of regulators & ministry of finance head
- Form technical working group on technical & detail matters

4

Overall Governance Framework...



5

Outline of Governance Structure

- Coordination between regulators and/or supervisors **within** the country

- Coordination between regulators and/or supervisors **between** the countries

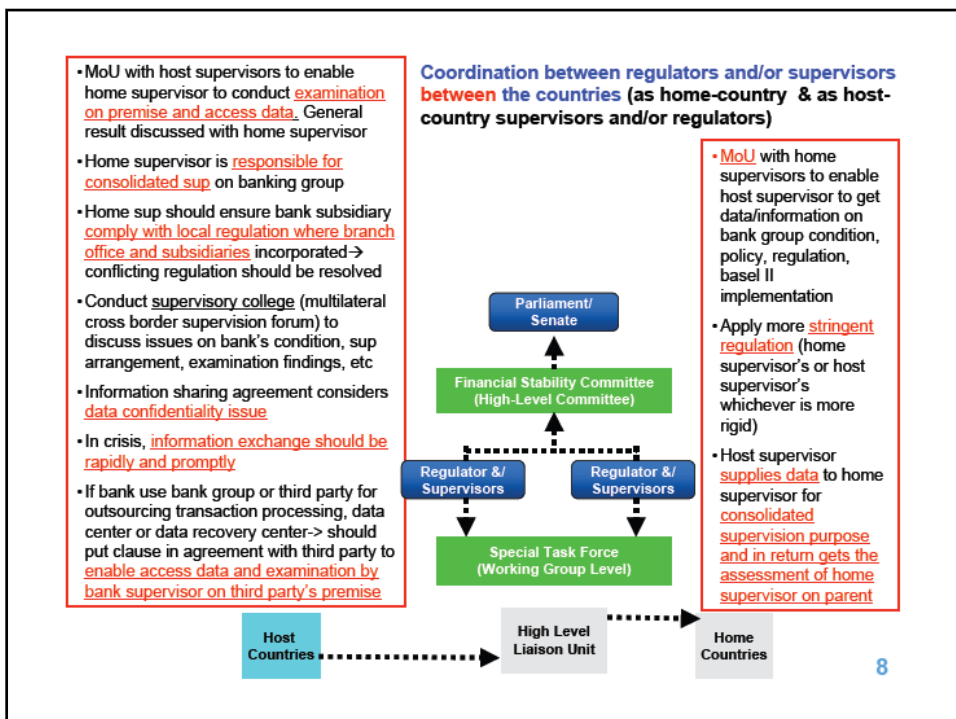
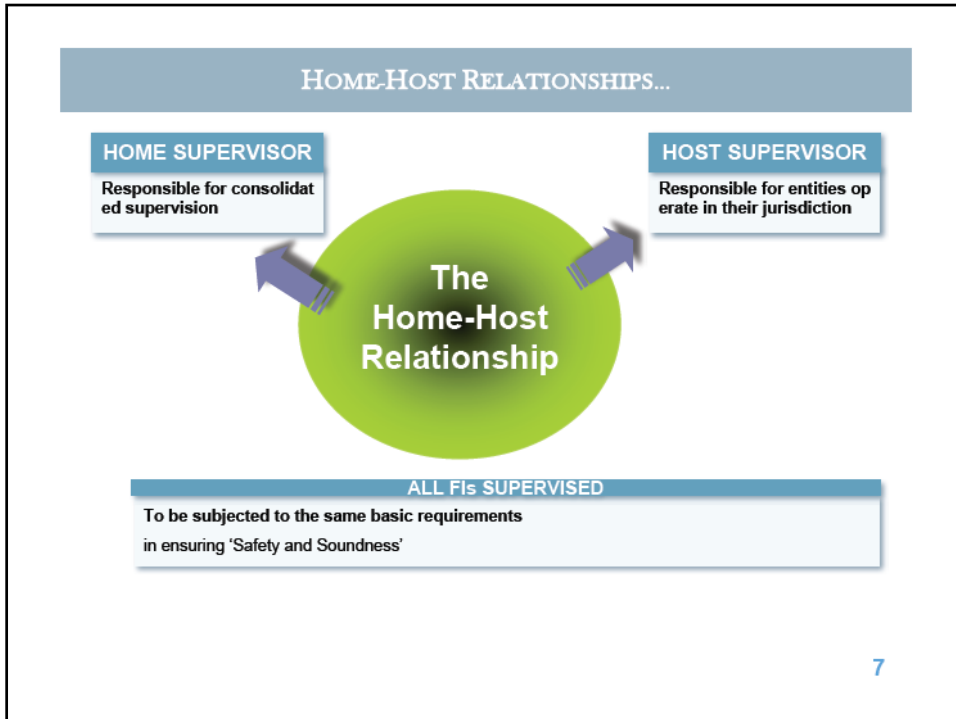
✓ As Home-country supervisors and/or regulators

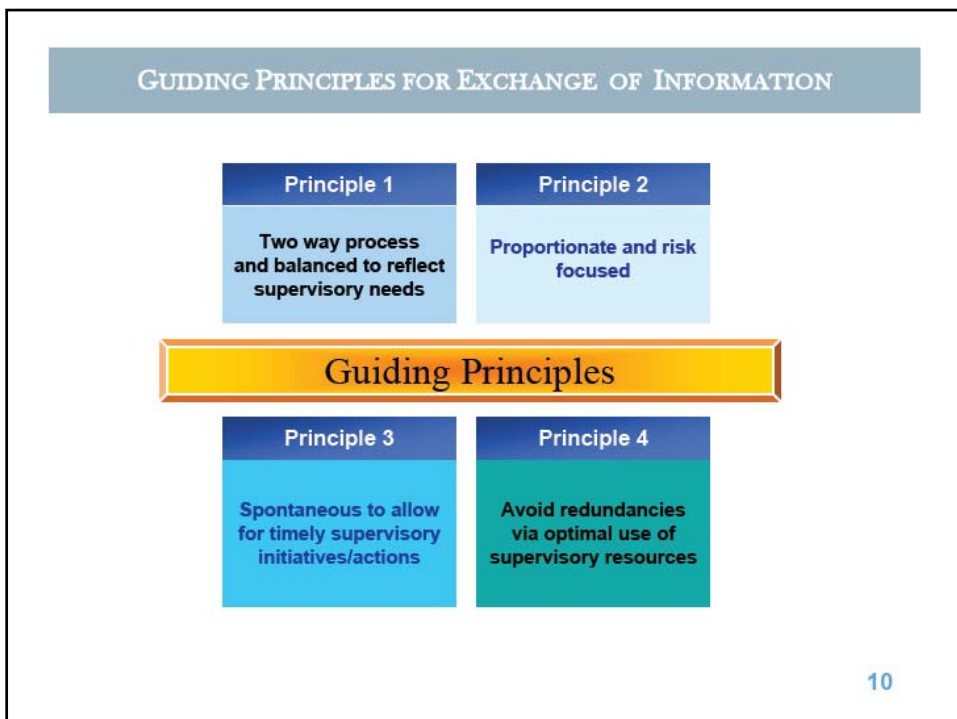
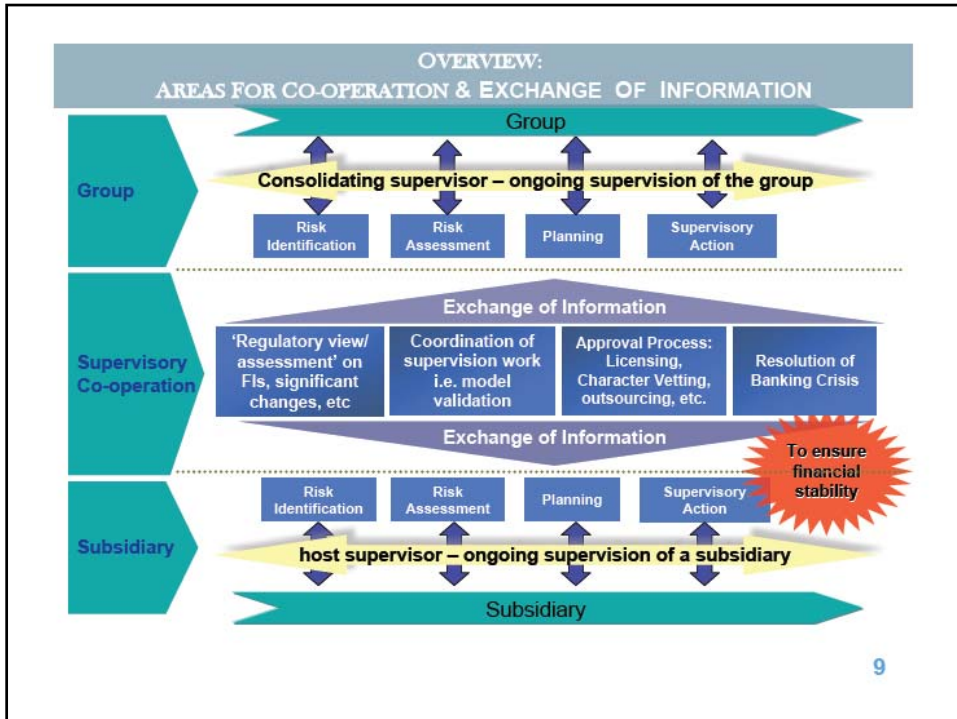
✓ As Host-country supervisors and/or regulators



* ROR II - Rate of Return Framework II

6







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Team 2

Bui Thi Phuong Hoa - Vietnam
Sarimah Mohamed - Malaysia
Elizabeth N. Sanchez - Philippines
Didik Madiyono - Indonesia
Ye Xiaolu - China
Prasat Somchitnug - Thailand

Supervision of cross border banks

Key Measures in supervision of group of banks

Home-host responsibilities:

- home country authorities to supervise banks' worldwide consolidated activities
- host country responsibility to supervise foreign bank establishments in their territories as individual institutions.

Objective:

- To promote financial stability
- To foster a sound & progressive banking by ensuring safety & soundness of financial institution

Key Measures in Supervision of Cross Border Banks

Home Supervisor: part of consolidated supervision

Emerging issues

- Impact to subsidiaries/branches due to adverse economic condition (eg: supprime crisis, recession, devaluation of currencies)
 - Impact on capital, profitability
 - Any capital injection required
 - Liquidity contingency plan

Head office oversight

- Governance/ Internal reporting
- Global Liquidity Risk Management (Group ALCO) – Monitor, stress test, contingency funding plan.
- Global Risk Management (Reporting structure&monitoring), Policy&Procedure, Limit, Internal Control

Know the Overseas Business

- Overview of overseas business operations
 - strategy, vision, governance structure
 - significant activities
- Contribution (size & profit to the group)
- Country & Regulatory Risk

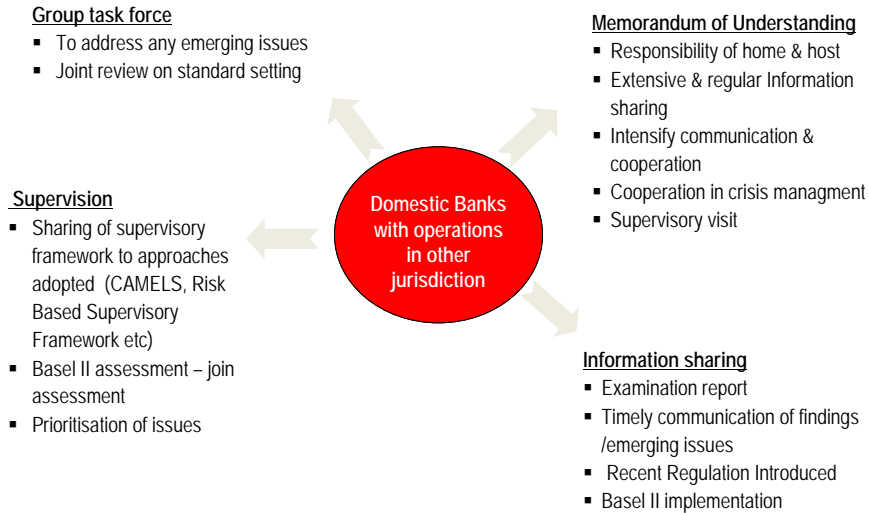
Evaluation:

- Risk Profile – firm wide risk management
 - Credit Risk
 - Market Risk
 - Operational Risk
- Financial Condition
- Risk Management Process
- Compliance with laws & regulations
- Anti Money Laundering

Domestic Banks with operations in other jurisdiction

Key Measures in Supervision of Cross Border Banks

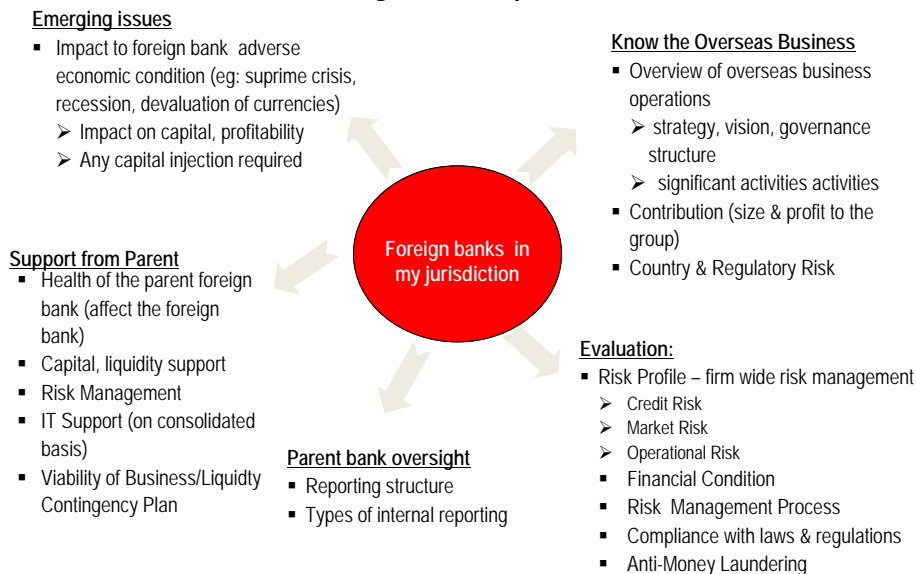
Relationship with Host Supervisor



3

Key Measures in Supervision of Cross Border Banks

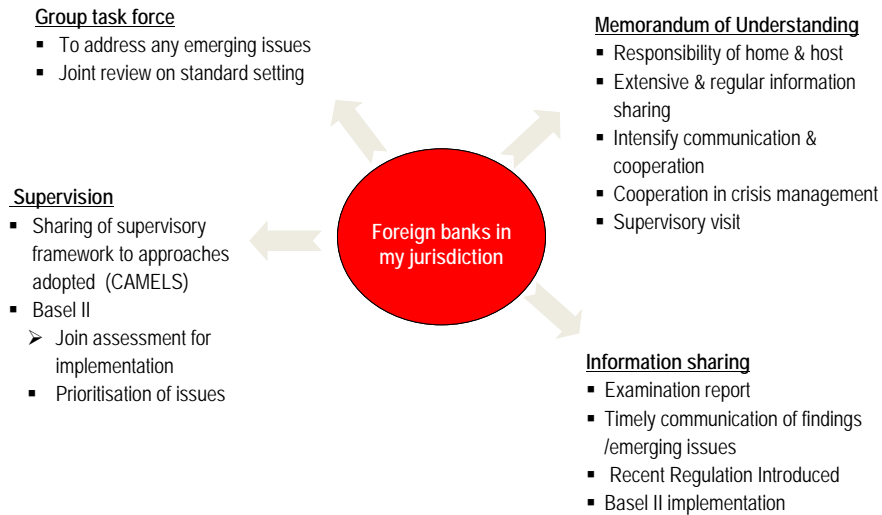
Acting as Host Supervisor



4

Key Measures in Supervision of Cross Border Banks

Relationship with Home Supervisor



5

THANK YOU

Bui Thi Phuong Hoa
Sarimah Mohamed
Elizabeth N. Sanchez
Didik Madiyono
Ye Xiaolu
Prasat Somchitnug



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Team 3

Norhidaya Johari - Malaysia
Yulia Trubanova - Russia
Pornwasa Sirinupongs - Thailand
Sofia Yelitsa Calderon Quispe - Peru
Xu Mingdong - China
K.M. Abdul Wadood - Bangladesh
Oum Sivanno - Camdodia



You are a regulator supervising domestic banks, some with operations in other jurisdictions, and internationally operating banks in your jurisdiction, and you are concerned at the spread of risk arising from market turbulence.

“What do you consider are the critical aspects of your agency's relationship with foreign supervisors and with other groups”.



Critical Aspects of Relationship Between

1. Domestic – Foreign Bank Regulators
2. Bank Regulator – Other Agencies





亚太财经与发展中心
Asia-Pacific Finance and Development Center

1. Domestic – Foreign Bank Regulators

MOU between Banking Supervisors

(in line with Basel Committee Working Group on Cross-Border Banking)

Division of Responsibilities

Clearly identify the authority and responsibility of both Parties eg. inspection, liquidity management, capital requirement, deposit insurance, etc.

Sharing of Information

- application result,
- bank's compliance with domestic regulations,
- nature of regulatory system,
- ring-fencing arrangement
- other relevant information for example; outcome of the stress-test, OTC transactions





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1. Domestic – Foreign Bank Regulators

MOU between Banking Supervisors

(in line with Basel Committee Working Group on Cross-Border Banking)

Coordinating Committee: combination of home-host supervisory authorities

On-site Inspection

- identify plans and purposes to examine
- the host supervisor should allow the home supervisor or its delegated agent to conduct on-site inspections
- examinations may be carried out by the home supervisor alone or accompanied by the host supervisor
- An exchange of views between the examination team and the host supervisor

On-site Visits

Consolidated Supervision

Protection of Information

mutual trust between supervisory authorities – confidentiality during exchanges of information

On-going Coordination

Exchange of staff

Assigned contact persons for host and home countries



1. Domestic – Foreign Bank Regulators

Financial Crisis

- Cross-border crisis management committee
- Extra information sharing
 - + liquidity contingency plans
 - + emerging risks exposure
- Enhance the speed and setting priorities of coordinations



2. Bank Regulators – Other Agencies

Joint Forum on Financial Conglomerates
to enhance cooperation with securities and insurance supervisors so as to strengthen the supervision of financial conglomerates

Task Force of the Joint Forum
to enhance the understanding of the ways in which such groups are managed and organized.

Cooperation with AML/CFT units



THANK YOU

**NORHIDAYAH JOHARI
YULIA TRUBINOVA
WASA SIRINUPONGS
SOFIA CALDERON
XU MINGDONG
K.M. ABDUL WADOOD
OUM SIVANNO**



11 December, 2008



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SESSION 10.1 WORKSHOP

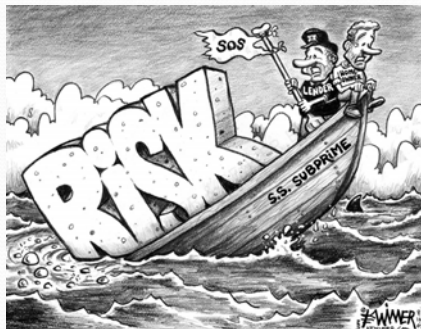
TEAM 4

Usaluk Jesdathavornwong
Andres Zacarias
Qu Haichang
Chhin Dina
Li Xiaohua
Somyot Meepetchdee

Thailand
Peru
China
Cambodia
China
Thailand

The Question ..

What do we consider are the current major problems a
supervisory agency would confront in supervising banks –
domestic and foreign –
to ameliorate risk arising from market turbulence?



Team's answers

- Different regulatory standards
- Different accounting practices and products
- Systemic risk: The degree of correlation
- Communication problems
- Deposits guarantees

Different regulatory standards

- Different regulatory standards
- Different accounting practices and products
- Systemic risk: The degree of correlation
- Communication problems
- Deposits guarantees

Different accounting practices and products

Different regulatory standards

Different accounting practices and products

Systemic risk: The degree of correlation

Communication problems

Deposits guarantees

Systemic risk: The degree of correlation

Different regulatory standards

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Different regulatory standards

Different accounting practices and products

Systemic risk: The degree of correlation

Communication problems

Deposits guarantees

Deposits guarantees

Different regulatory standards

Different accounting practices and products

Systemic risk: The degree of correlation

Communication problems

Deposits guarantees

Thank you!



APPENDIX

As the presence of foreign-owned banks grows, the complexity of the tasks facing supervisory authorities increases. The challenges for emerging market supervisors include:

- (i) choosing of licensing policy and fitness and propriety test for management and owners of a complex holding company or investment funds;
- (ii) effectively monitoring the local establishment of large international banks or complex financial institutions;
- (iii) upgrading their supervisory capacity to oversee complicated financial products of foreign banks;
- (iv) dealing with the issue of the parent bank support in case of difficulties of a branch or subsidiary in normal as well as systemic crisis situations;
- (v) handling consolidated supervision in the event the market is heavily dependent on foreign banks;
- (vi) effectively exchanging information with the home supervisors in the case of bank holding companies or other complex financial institutions;
- (vii) dealing with increasing concentration in the banking system by foreign banks;
- (viii) improving the governance structure of complex international banking groups while, among other things enhancing the integrity standards in the financial markets.

These challenges should be resolved through more enhanced cooperation between home-and host-country supervisory authorities, as well as development of additional international best practices.

Thank you