Governing Banks: MFI Edition

Adaptation of the Global Corporate Governance Forum's Governing Banks Supplement

July 2013

PART 1: RISK GOVERNANCE

CENTER *for* FINANCIAL INCLUSION | ACCION

TABLE OF CONTENTS

FOREWORD

In response to the global financial crisis that began in 2007, the International Finance Corporation (IFC)'s Global Corporate Governance Forum (the "Forum") developed a supplement to the *Corporate Governance Board Leadership Training Resources* published in 2008 called *Governing Banks.* As part of that effort, the Forum explored the corporate governance and risk governance needs of banks' Boards of Directors through an extensive research and review program.

In 2012, the IFC provided the Center for Financial Inclusion at Accion (CFI) with permission to modify the *Governing Banks* supplement to be specified even further for the microfinance industry. The rapid growth of the microfinance sector in recent years has left many board members of microfinance institutions (MFIs) without an adequate understanding of the multitude of governance and risks management challenges they face. The Running with Risk project, managed by the CFI's Investing in Inclusive Finance Team, seeks to raise awareness about the importance of effective risk governance for institutional growth and sustainability.

The Center would like to thank Karla Brom for her herculean effort in modifying this toolkit for MFIs, and the Advisory Team for their time and insightful feedback. The Center would also like to recognize the contributions of Citi Foundation and Citi Microfinance for making this toolkit possible. We greatly appreciate their generous support of this toolkit and the larger Running with Risk project.

A core team of committed and dedicated individuals were responsible for the development and production of the original *Governing Banks* toolkit: Jon Lukomnik as lead consultant on the project; Catherine Lawton as lead author from Nestor Advisors, assisted by David Risser; and, Hassan El-Shabrawashi and Jose Cruz-Osorio as task managers from the Global Corporate Governance Forum. The adaptation of the toolkit for MFIs was done by Karla Brom, an independent consultant, with the valuable input and oversight of an Advisory Team: Lauren Burnhill of One Planet Ventures, David Risser of NestorAdvisors, Mike Lubrano of Cartica Capital, Keith Waitt of Consultancy Matters, and Deborah Drake of the CFI.

PREFACE

About the Center for Financial Inclusion and Running with Risk Project

The Center for Financial Inclusion at Accion (CFI) was launched in 2008 to help bring about the conditions to achieve full financial inclusion around the world. Constructing a financial inclusion sector that reaches everyone with quality services will require the combined efforts of many actors. CFI contributes to full inclusion by collaborating with sector participants to tackle challenges beyond the scope of any one actor, using a toolkit that moves from thought leadership to action.

Through its Investing in Inclusive Finance Program, the Center for Financial Inclusion explores the challenges and opportunities at the intersection of microfinance and investment. These include fostering dialogue to build healthy local capital markets, raising awareness about challenges faced by microfinance institutions, and motivating action to improve governance and risk management.

Through research and discussions with industry players around the world, the Running with Risk project aims to develop the resources, tools, and trainings needed to improve the risk management abilities of microfinance institution board members and the quality of their risk dialogue with management. By clearly outlining the board's role in risk management at MFIs, and developing risk management training materials and resources, the Running with Risk project creates a common framework and language around risk so both the MFI's management and board of directors understand their roles, and can more adequately anticipate and manage risks.

In the first output of this project, David Lascelles, senior fellow and joint founder of the Centre for Financial Innovation (CSFI), shared his risk insights in a lively, conversational, and often provocative manner in the paper *Microfinance – A Risky Business*. In this publication, Lascelles argued that risk management and oversight are essential all the time, not just during crisis.

In the second output of the Running with Risk project, 10 risk experts in the microfinance industry contributed their expertise to a risk questionnaire expert exchange, *Ten Risk Questions for Every MFI Board*. With this expert exchange, the Running with Risk project aims to contribute to a more productive boardroom dialogue about risk.

Now, for the third output of the Running with Risk project, the Center has developed this comprehensive risk and governance manual, *Governance Banks: MFI Edition*, along with training materials, for the microfinance industry to utilize in increasing awareness and knowledge around issues of risk mitigation and management. Ultimately, a stronger, more effective board presence related to risk mitigation will contribute to the health of MFIs around the world.

About *Governing Banks: MFI Edition*

Governing Banks: MFI edition builds on the work of the Forum Governing Banks team, and modifies the document to take into account the specifics of regulated microfinance institutions. This was done with the support of an Advisory Team with expertise in corporate governance, risk management, and microfinance.

The *Governing Banks: MFI Edition* Advisory Team

Lauren Burnhill
Managing Director, One Planet Ventures

Deborah Drake
Vice President, Investing in Inclusive Finance, the Center for Financial Inclusion at Accion (CFI)

Mike Lubrano
Senior Advisor, Board Training, Nestor Advisors Limited

David Risser
Senior Analyst, Nestor Advisors Limited

Keith Waitt
President and CEO, Consultancy Matters

INTRODUCTION

Setting the Scene

Governing Banks: MFI Edition creates a journey taken by a newly appointed director of an MFI bank to acquire the understanding, skills, and insights needed to meet the unique challenges faced by directors of MFI banks. The materials share with the reader:

- Best practice recommendations on risk governance, and
- An understanding of accounting for banking, the economics of banking, finance, and banking risk management, including how these principles may differ for MFI banks.

The original Governing Banks tool was designed for directors of commercial and retail banks, and drew on lessons learned from the global financial crisis to illustrate the importance of risk governance and how its failure contributed to the crisis. Those lessons learned have since resulted in changes to the regulatory framework for banks (most notably Basel III globally and Dodd-Frank in the United States) and are equally relevant for MFIs. The microfinance sector has experienced its own set of crises in the past several years, some linked to the global crisis and some that were more specific to countries (for example the crisis in Andhra Pradesh State, India) or regions (the impact of the Arab Spring in the Middle East), and all of which have highlighted the importance of robust risk governance in MFIs.

MFI board members should understand bank governance, regulation, accounting, and risk management, because the principles and economics of banking are the same or similar for MFIs. This toolkit has been adapted from the original publication to reflect some of the specifics of the microfinance sector – primarily that most MFIs do not have a trading book[1], are not enmeshed in the banking system through interbank borrowing and lending, and that almost all MFIs have a social mission/double bottom line. This toolkit will be most useful for regulated MFIs – either non-bank Financial Institutions (NBFIs) or MFI Banks.

Because MFIs are not fully enmeshed in the national and international banking systems, there is no concept of “too big to fail” in the MFI world (yet). However, because of their explicit social mission, MFI board members have to include social as well as financial performance when determining the right balance of risk and reward and setting the risk appetite of the organization. MFIs may also be more susceptible to political interference and regulatory risk because their client base is primarily the poor and vulnerable.

List of Characters

Alex	The newly appointed director of MFI Bank
Selma	Chair of the board, MFI Bank
Max	Chief executive officer, MFI Bank
Tomas	Company secretary/head of legal, MFI Bank
Vikram	Chair of the risk committee of the board, MFI Bank

[1] Trading book is defined in the glossary, and covered in Section 5 and Appendices 3 and 5

Nadia	Head of domestic economic research of the local central bank
Adam	Head of supervision of the local banking regulator
Aziz	Chief risk officer, MFI Bank

Some Background on MFI Bank and its Potential New Board Member, Alex

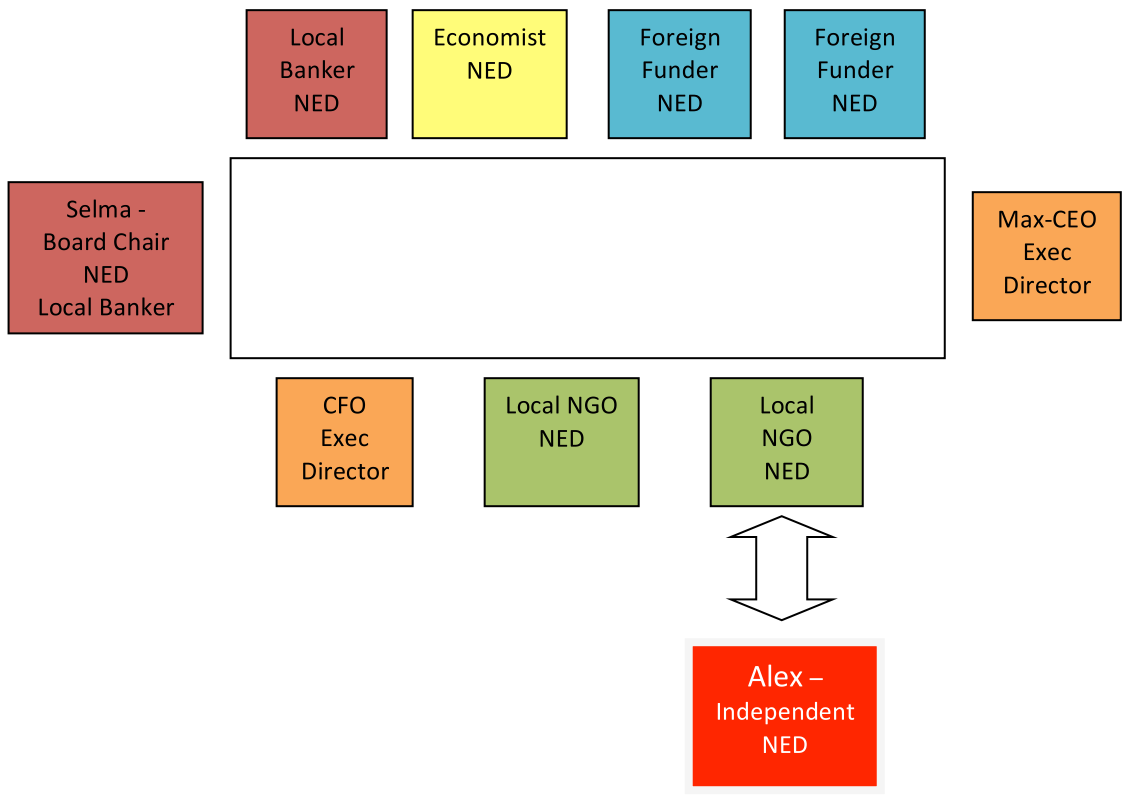
MFI Bank was founded 15 years ago as an NGO organized under company law, with the support of Women's Vision, an international non-profit focused on women's economic development. MFI Bank grew rapidly in its first 10 years and expanded its funding base to include Development Finance Institutions (DFIs), Microfinance Investment Vehicles (MIVs), and commercial banks. Five years ago it began the laborious process of transformation into an MFI bank licensed to offer a broader range of financial services including deposits and insurance. MFI Bank is now regulated by the microfinance supervisory authority of the Central Bank. As part of the transformation process it was required to institute a risk management framework including a risk manager, risk policies, and a board-level Risk Management Committee and senior management level Asset Liability Committee (ALCO). MFI Bank has recently been commended by CGAP and the IFC for its best-in-class approach to corporate governance. MFI Bank's NGO owns all of the shares of the new banking entity, and foreigners are not yet permitted to buy shares.

Since the transformation was completed three years ago, several of the original board members decided to step down or remain with the NGO. The chief executive officer, chief financial officer and seven non-executive directors (including Selma) constitute its current board. The non-executive directors (NED) include two former bankers from local banking institutions, two representatives of foreign lenders, an economist and two directors of local NGOs involved in economic development – all of the current local directors are Max's friends or former classmates . Alex will be replacing one of the NGO directors and will therefore be the first independent[2] non-executive director, and one of three directors who do not have a background in the banking industry. MFI Bank actively looked for a director with a business background to provide more insight and perspective on how to run a business – to determine what the challenges are to businesspeople given the political and economic situation in the country, and what are the best financial products for growing businesses.

Selma and Max also hope that Alex will eventually help them to identify other potential independent directors to replace the two foreign funder representatives, since it is increasingly clear that they have conflicts of interest in some of the issues that come before the board; they seem to be acting on behalf of their funding institutions rather than on behalf of MFI Bank. They are also only able to attend two board meetings a year in person and, despite their best intentions, they often struggle to stay focused during meetings after long international flights. MFI Bank engaged a governance consultant last year and one of her recommendations was that MFI Bank needed at least two to three independent directors. She specified that those directors should be local, or easily able to meet with MFI Bank's management in between board meetings and take part in board committee meetings in person rather than by phone.

[2] An independent director is a non-executive director who is independent in character and judgment, and there are no relationships or circumstances which could affect, or appear to affect, the director's judgment. Most importantly, an independent director is able to represent the interests of the institution.

Figure 1: MFI Bank's Current Board Composition



PART I: RISK GOVERNANCE

After receiving the invitation to become a non-executive independent director of MFI Bank, Alex weighed the responsibility of acceptance. As a successful business owner and entrepreneur (he is the head of a large family-owned construction business), he has a good understanding of the local market and business environment. He considered the invitation an honor, one that reflected on his personal reputation and his interest in helping the poor.

"I imagine someone who has worked in a leadership position within banking would be a better candidate than me," Alex suggested.

"No," Selma replied. "We considered the issue carefully. We already have a number of board members with solid banking experience and we do consider that a requirement. But we also recognize the need to have the experience and insight of those who have excelled outside of banking. What you would bring to the Board is a different set of experiences which will help us lead the bank into the future."

"Which experience in particular interests you?" asked Alex.

"Several," said Selma. "First, your family-owned construction business: By inviting outsiders to sit on the board of directors, you transformed its governance and culture into one more like that of a publicly held company. You have borrowed money from foreign banks, which suggests you have a good understanding of the challenges of negotiating with foreign funders, and with managing risks such as currency risks. And your reputation as a leading local business person means you have a good understanding of what it takes to do business in our country – how to interact with regulators through industry associations, how relatively fragile the economy is, and how much of it is still based in rural areas.

"Second," she continued, "having built your family business from a small local enterprise to a national company, you have experienced what is involved in running a business that is growing quickly while still providing a high level of customer service. Construction is also tied to the business cycle, just like financial services – you have experience running your company in good times and bad times.

"Perhaps as important is your reputation. You are viewed as a very capable and highly respected businessman. Your charitable work and your reputation as an ethical businessman fit well with the culture we have developed at MFI Bank. Additionally, you are seen as someone who voices his opinion and takes on challenges."

Figure 2: The Essential Qualities of Effective Board Directors

"Curiosity, courage, and persistence are among the essential qualities of a board member."

A former executive and director of a European bank

Source: Interviews conducted by Nestor Advisors (2009).

"Thank you Selma but do allow me to be equally frank. Not being a banker means that I may not understand some of the board presentations. My understanding is that the entire board has a responsibility to be aware of the MFI's risk exposure and ensure that management is taking the proper measures to manage that exposure. The board is also responsible for setting strategy, an exercise that cannot be done without an appreciation of the bank's businesses and the risks involved."

"You are absolutely correct. Your insightful comments confirm my belief that you would be an excellent board director. And, I agree that you will need to acquire the banking knowledge necessary to effectively make decisions and assist the board in guiding the MFI Bank."

Figure 3: How Can Directors Add Value When Overseeing a Bank?

"Directors add value to a bank board when they:

– Have a good level of financial expertise
– Are aware of risk fundamentals and techniques
– Are able to manage dynamics with executives
– Demonstrate emotional intelligence, addressing issues constructively."

A Middle East/North Africa bank company secretary

Source: Interviews conducted by Nestor Advisors (2009).

"How will the MFI support me in doing so, and what are the areas of competence that you expect from each director?"

"We will assist you in several ways. To begin with we will have you participate in a director induction program. This is one of our ongoing director training sessions, led by executives and experts from outside of the MFI. You will have access to all our executives, who are a tremendous resource. Some directors have found it useful to meet with the Chief Risk Officer (CRO) and/or Chief Financial Officer (CFO) outside of board meetings to discuss how each manages their responsibilities. Additionally, I will be pleased to meet with you whenever you wish to devise ways of addressing any areas where you may wish to have further education.

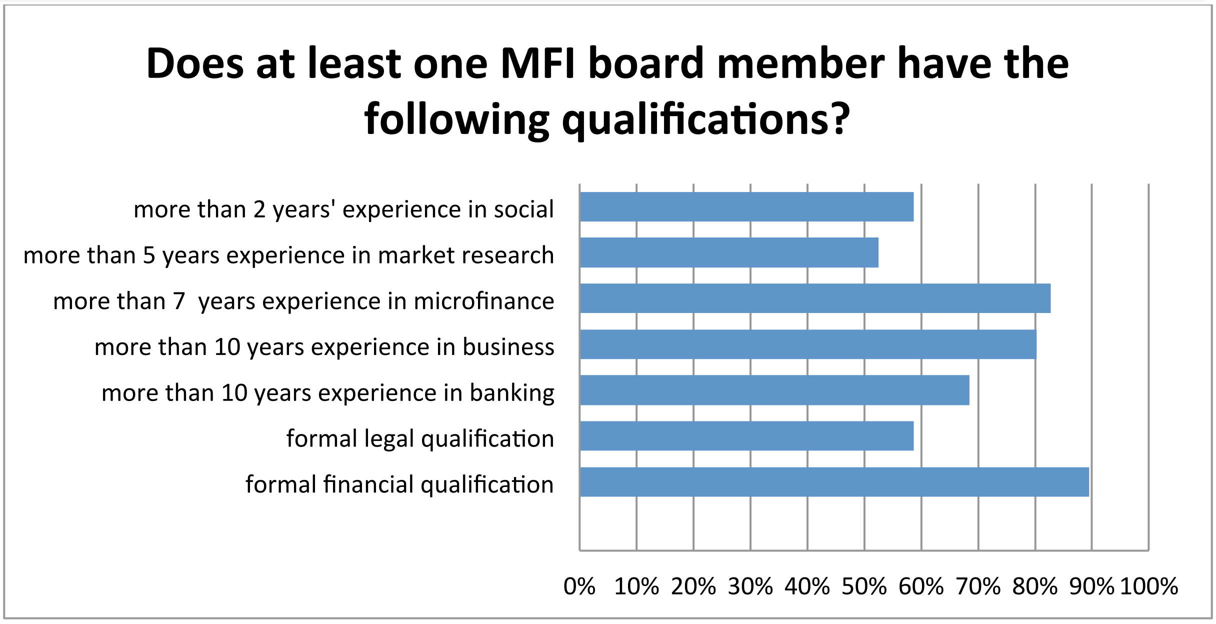
"As for your second question, you should have a thorough understanding of your responsibilities as they relate to risk governance and the strategies for being an effective board member." (These are discussed in Chapter 1.)

"Additionally, you should understand the role of banks in the economy, the economics of community development and MFI banks like ours, and the risks involved." (These are discussed in Chapters 2 and 3.)

"Third, as banks play a critical part in the economy and in society, they are highly regulated. Because they serve the poor and disenfranchised, MFIs have a unique role in the economy and society, which means that regulators and the public focus on different issues in their oversight of us so you should understand the major components of banking and MFI oversight by the authorities and how that impacts your responsibilities as a director. ” (These are discussed in Chapter 4.)

“Fourth, you should have a clear understanding of how the different types of risk we face in the ordinary course of our business are managed by the bank. (These are discussed in Chapter 5.) For this, I would suggest that a good first step would be to speak directly with our chief risk officer. In so doing, you will begin to get to know him – which in itself is a terribly important part of a director’s responsibilities – and see how he approaches his role and how his division interacts with other areas of the bank. When we look at other MFIs globally, we see that they strive to have at least one board member that has one of the skills that we discussed above. That way hopefully all areas of expertise are represented on the board, even if each board director doesn’t have all of the areas of expertise.

Figure 4: MFI Board Member Qualifications



Source: Derived from MIX, “Measuring Governance in Microfinance,” MIX Microbanking Bulletin*, April 2012*.

Later that evening, when looking at MFI Bank’s last annual report, Alex’s eyes scanned over words like “ALCO,” “Social Performance Management,” “operating efficiency,” “liquidity risk,” and “PAR.” He felt he was in unfamiliar territory. As an educated and accomplished businessman, he understood well how to build and operate a construction business, but learning the business of microfinance and banking would be a new challenge. And one, he thought, that he would not take lightly.

Over the last few years, he had followed the news about the sizeable bank failures in the United States and Europe, and the impact of those failures on local banks, the national economy, and his own savings. In most countries, MFIs didn’t seem to fail at the same rate or for the same reasons as these large banks, but he had heard about MFIs in other countries which had come under sharp scrutiny because of their business practices, or MFIs that had struggled with high non repayment rates because of over-indebtedness of their clients. Should he accept the invitation to become a MFI Bank director, he would oversee not only the MFI’s well-being but also that of the working poor individuals that are its clients.

Alex reflected, “I can, without question, help guide MFI Bank towards better serving its clients and growing into a national MFI, but how will I effectively guide MFI Bank’s executives if I do not understand their language? How will I know if the information I will see is sufficient to make good decisions? How will I know that I am even being asked to make the right decisions if I do not have a full understanding of what it is that can bring a bank or MFI to its knees?"

With this, he challenged himself to gain the expertise, skills, and insights that would enable him to properly oversee the business of an MFI bank. He agreed to join MFI Bank's board, and soon thereafter he began the director induction process.

1. The Governance of Risk Management

Selma began the director induction program; a series of meetings organized by the board to assist Alex and another new director prepare for their new role with the bank. After giving a presentation on the MFI's history and culture, Selma introduced Max, MFI Bank's chief executive officer. He presented an overview of the MFI's business and its competitive profile and strategy. Selma then described the directors' role, responsibilities, and the expected time commitment.

1.1. Role of non-executive directors

"Your role as a non-executive MFI director," Selma said, "will be similar to that of other directorships in other types of companies, except that microfinance banking is somewhat different even from traditional banking. We are regulated by specialized MFI bank regulators and we cannot engage in all of the same activities of traditional banks, but we want to perform according to best banking practices. We also have a double bottom line/social mission unlike traditional banks. Banking is unique in that it operates not only in a highly regulated and competitive environment but also one that can be difficult for non-bankers to understand.

As such, there is tremendous emphasis placed on having MFI Bank's directors develop a thorough understanding of both traditional banking business *and* social performance management, continually increasing their skills so as to stay current with new innovations in MFI products and practices.

"It is for this reason that we tend to select persons with relevant experience in banking to join the board," Selma said giving a nod to Figure 4 (page 11). "However, in the interests of good corporate governance, we also try seek out directors from outside the industry who understand the risks that we face and can ensure that we are following sound risk management practices to protect our institution."

Figure 5: On Directors' Financial Industry Expertise

"Our board participates and ask questions. This is explained by its composition. We have the luxury of counting many directors with a strong banking background. Thanks to this high quality of members, we are close to best practices."

A non-executive director of a bank in Eastern Europe

Source: Interviews conducted by Nestor Advisors (2009)

“So I guess my first question should be what is risk?” asked Alex

“Risk is a word that denotes a potential negative impact to something of value now or in the future” began Selma. “Risk is measured in terms of probability and impact. In other words, the probability of an event occurring, and the impact of that event on the financial or business status of the organization. In the financial world, risk relates to unexpected losses rather than expected losses.”

“ So what does risk management in banks cover?” asked Alex.

“Risk management is really the classic business decision making of balancing risk and reward. For financial institutions it represents a very clear responsibility to identify, measure, monitor and control all risks that we face in the running of the bank.”

“Sounds like a lot to learn” Alex sighed.

“Regardless of background,” Selma continued, “we challenge ourselves to continually educate ourselves given the highly innovative characteristic of banking and of microfinance banks. All directors should have an understanding of the key banking risks – strategic, reputation, liquidity, solvency, market, credit, and operational risk. In the microfinance sector, we also need to understand social performance risk, which is not something that banks face.

Additionally, questions every director should be able to answer include: Why are banks regulated; how does that impact the role of the director; is your MFI regulated under general banking legislation or by specific microfinance law and, how does your MFI manage risks?

“What is “social performance risk?” asked Alex “And why is it so important?”

“MFI Bank is a double-bottom line organization” Selma replied “We have a mission, if you will, to generate positive social returns for our shareholders, as well as adequate financial returns.” Alex nodded and Selma continued, “MFI banks, because of the vast untapped markets they serve, sometimes attract purely financial investors. These shareholders may push the MFI bank to make high financial returns – by taking more risk, charging higher prices or ignoring social performance goals. When financial investors control an MFI bank board, their emphasis on financial profits can result in a loss in social performance.

“That sounds like a bad thing” Alex commented.

“Indeed,” Selma replied. “As for socially responsible investors, our goal is to generate a financial return while increasing the socio-economic well-being of our poor and disenfranchised clients. Social performance losses are the last thing we want to see!”

“I can appreciate that,” responded Alex ,”But no one wants to give up profits. How do we know what kind of trade-off we might be making between financial income and social impact?”

“Ah, that’s where it gets interesting,” Selma smiled as she spoke, “You’ll want to ask Tomas, our board secretary, about social performance management and Aziz, our CRO, about social performance metrics in the microfinance industry. It’s easy to count how many female borrowers we’re reaching, but it’s not as straightforward to understand how a microloan can trigger an increase in profits that result in the owner’s child being sent to school and a new employee hired, much less quantify the value of that chain of events.”

"I know I need to learn more about the banking industry," Alex noted, "but I didn't realize that I also needed to know about microeconomics, sociology, anthropology and all the other topics that must be involved in social performance management."

"Don't worry," Selma said reassuringly, "Microfinance practitioners and investors around the world are working to develop methodologies, tools, and standards for social performance management. MFI Bank is actively engaged in that dialogue and I think you'll find what Aziz is doing to be quite fascinating."

"Now, back to the role of bank directors," Selma continued, "like directors of all companies, you are asked to test assumptions and analyze the proposals put before you. **In an MFI banking setting, you might think that non-executive directors without a background in finance (or the particular type of finance being discussed) would defer to the perceived 'experts' on the board and/or the executives. This would not be an acceptable manner of executing one's duties**.

"To be effective, you must be willing to keep pushing and questioning – even while respecting others' expertise – until you are confident that you thoroughly understand the issues involved in any decision. Challenging the obvious or the consensus often helps us to make sound decisions. You are expected to challenge in a manner that is open and rigorous, but does not lead to unnecessary conflict. It is indeed an art.

"The simplest questions can be the hardest questions," Selma added. "One of my favorites is 'Explain why this makes sense'."

1.2. Role of the chair of a bank board

"Now that I have presented what is expected from you, I should introduce my role as the non-executive chair of MFI Bank's board. Our board's effectiveness is among my responsibilities. High on the list of my objectives is creating an atmosphere of constructive and collaborative debate. Sometimes that debate can even be contentious, but I allow that, as long as the debate is productive. Testing ideas produces better results."

MFI Bank's Chief Executive Officer Max added, "If you look at the top European banks, those that had board chairs with financial industry expertise performed better during the 2007-2009 financial crisis. They were better able to lead the board in part because they were better equipped to have confident and sophisticated dialogue with management. Selma, who brings to MFI Bank her 30 years of banking experience from an international bank not operating in her (and our) home country, is an asset to our firm."

Figure 6: An Effective Bank Board Chair

The board chair's role

- ✓ Ensures board's effectiveness, setting its agenda and chairing its meetings
- ✓ Ensures the provision of accurate, timely and clear **information to directors**
- ✓ Ensures that all board members **understand** the information provided and discussed
- ✓ Ensures effective **implementation** of board decisions
- ✓ Ensures effective **communications** with shareholders
- ✓ Facilitates **coordination** between board committees, especially between the audit, risk, and remuneration committees
- ✓ Arranges the regular **evaluation** of the performance of the board, its committees, and the individual directors including the Chief Executive
- ✓ Ensures the Chief Risk Officer and the Chief Audit executive have a direct **access** to the board
- ✓ Facilitates the **effective contribution** of directors and ensuring constructive relations between executive and non-executive directors
- ✓ Ensures that a comprehensive **induction** program is provided for new directors
- ✓ Addresses the **development** needs of individual directors and the board as a whole
- ✓ Encourages active **participation** by all board members

1.3. Risk management within a banking enterprise

"As a MFI bank," Selma described, "we cannot exist without taking risks. The key is taking the right risks. We must decide which risks to take and how to minimize losses generated by those risks. Our task is to provide the leadership and strategic oversight that supports the bank in undertaking the right business mix to promote the sustainable growth of MFI Bank in alignment with our social mission.

"And," Selma continued, "I cannot emphasize enough that just as risk-taking is core to the bank's business, we, the board of directors of MFI Bank, are ultimately responsible for the risks assumed by the bank.

"We must therefore ensure that risk management is not separate from, but an integral part of the MFI's activities. All decisions regarding, for example, which business opportunities to pursue, which clients to accept, which products to promote, and, what firm-wide behaviors are acceptable all tie back to our board view on the appropriate level of risk to be assumed by the bank."

1.4. Risk culture

"All institutions develop a unique culture or way of doing business," Selma added. "In that regard MFI bank is no different from any other bank. The question is how does that culture promote the business and social objectives that we set for the MFI? Just as we take time to develop a strategy for the bank, so, too, we need to encourage the development of a culture that encourages and facilitates actions that can enable management to implement the bank's strategy.

"We, therefore, work to cultivate a consistent 'risk culture' throughout the MFI. In our view, a strong culture is one that promotes *prudent* risk-taking."

Figure 7: On Culture

"What matters most is not technique risk measurement. It's culture."

A chief risk officer of a bank in Central Asia

Source: Interviews conducted by Nestor Advisors (2009).

"How do we create the right culture?" Selma queried. "We do so by making clear that risk management is a priority for the board and the entire firm; it is not just the concern of a particular department. For our part, the board regularly reviews the bank's risk profile and, at least annually, assesses the efficacy of the risk-management function and risk policies. Not just the chief risk officer, but also his direct reports are known to each member of our risk committee, just as the Chief Financial Officer and his direct reports are known to each member of our audit committee. This demonstrates to management that the *board* is committed to setting the tone that risk considerations are of strategic importance.

"Additionally, we ensure that all employees have a clear understanding of their responsibilities with regard to the management of risks assumed by MFI Bank and are held accountable for their performance with respect to those responsibilities."

1.5. Risk governance

"Creating a strong culture," Selma continued, "is part of executing our 'risk governance' responsibilities. Risk governance is the combination of corporate governance and sound risk management. These responsibilities characterize how we lead, oversee, monitor, and control the risks the MFI is taking.

"Risk governance is far more than just making sure the MFI complies with regulation, as some bankers foolishly think," Selma said with disdain. Referring to Figure 8 she continued, "It includes setting the firm's risk appetite when determining the MFI's strategy, annual plans, and budgets. It includes reviewing and ensuring the effectiveness of internal controls, such as assigning and overseeing adherence to clear lines of accountability. It includes ensuring the presence of a strong, independent, and authoritative risk management function, with which the board has regular contact. It includes our *active* role in ensuring that the firm has the appropriate resources, organization, staffing, and policies to manage risk effectively. These activities are currently referred to as the 3 Lines of Defence for Banking – front office, risk management, and audit."

Selma paused, then added, "Effective risk governance also includes, if not demands, the awareness of each director of the breadth of risks faced by the MFI. And do note: This is a responsibility of *each* director, not just those with backgrounds in banking and finance."

Figure 8: Components of Effective Risk Governance

Source: Nestor Advisors (2010).

1.6. Strategic and annual planning: Setting risk appetite

MFI Bank's Chief Executive Officer, Max, led the discussion on planning.

"One principle that I use to guide our strategic planning work and one against which I would ask you to test our proposals," Max confidently requested, "is that the strategy is appropriate for the nature, scale, and complexity of our MFI activities. This may sound obvious, but there are many MFIs that over-reach and lose sight of their risk profile. In addition, because our target market consists of the most vulnerable segments of the population, maintaining an awareness of their needs and circumstances is critical in meeting our social mission and social performance goals. By making sure our strategy is appropriate, we guard against mission drift – "drifting" too far from our stated social performance objectives.

"At MFI Bank," Max continued, "our strategic planning includes an expected return profile, analysis of existing or anticipated business activities, social performance targets, and the expectations of our stakeholders (foremost among whom are our depositors, counterparties, the regulator and our shareholders) regarding our risk profile. Like non-banks and particularly other cyclical companies, we take into consideration the economic environment and our capabilities, positioning and competitive strengths. We also evaluate the size of the safety margin we desire.

"That safety margin," Max described, "can be viewed as actual financial flexibility (for example the amount of capital or a level of liquid assets) that allows us to cushion the shock of any negative outcomes resulting from necessary risk taking.

"Developing the appropriate safety margin," Max continued, "is intrinsic to the strategic and annual planning process. It is the output of our risk governance activities, and especially the board's definition of MFI Bank's risk appetite, including risk tolerance and specific risk limits.

"Risk appetite is our view of how strategic risk-taking can help achieve business objectives while adhering to our social mission and respecting the constraints to which the organization is subject. It addresses all forms of risk, including risks of a contingent, non-contractual or off-balance-sheet nature, as well as reputational risks, whether or not those risks are measurable. We take this approach to ensure that risks are adequately captured and that we are as fully aware as is possible of potential risks.

Figure 9: Being Risk Aware

"Some people ask if we are risk-seeking or risk-avoiding. I profess that we seek to be risk aware. The one set of risks for which you are likely not to be compensated are those risks you do not know that you are taking. Similarly, the risks that you do not know that you are taking are ones that are very difficult to manage or mitigate."

A non-executive director of a North American bank

Source: Interviews conducted by Nestor Advisors (2009).

"In defining our risk profile," Max continued, "the board will indicate what the appropriate risk/reward balance is for the bank, as well as how to achieve our social mission sustainably.

"You will also approve concentration limits that will apply to our loan portfolio as well as to our liabilities. We will look at and define exposure by customer, asset class, product, geography, and sector. Within the loan portfolio, the board will consider setting limits with respect to non-performing loans.

"From a liquidity risk perspective," Max continued, "the board will also set limits with respect to cash flow/refinancing gaps, appropriate levels of liquid reserves in different scenarios, concentration limits on liability structure, and limits on leverage.

Noticing that Alex was less familiar with the terminology being used, Max noted that they would later review such concepts as the funding costs, concentration risk, stress testing, and other basic concepts of banking.

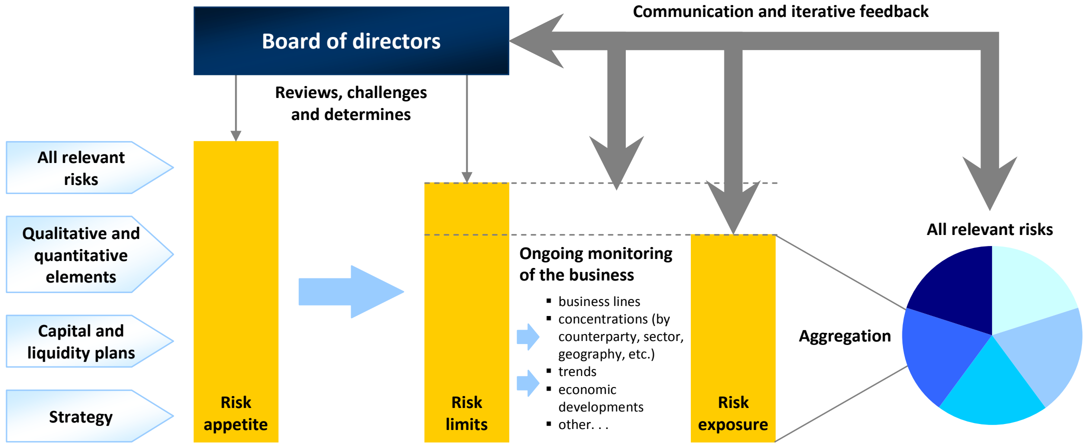
"As shown in Figure 8 (page 17)," Max continued, "the board reviews, challenges, and determines the firm's risk appetite. A part of that will be articulated as **risk limits** which are caps on the kind of exposures or implied risks that a bank may take. Once directed by the board, our management team translates limits from the firm-wide level to business lines (savings and loans) and divisions, regions, and branches as appropriate. All employees are then incentivized to keep our risk exposure below defined limits. For example, there are penalties for creating risks in excess of stated limits.

"You should be aware, however," Max highlighted, "that there are no 'limits' *per se* for some risks – for example, jeopardizing our reputation, which the industry refers to as **reputational risk**. That does not mean however that those risks are not real. To the contrary, a reputational risk incident, for example, may cause a run on the bank.

"In addition, as a part of setting risk appetite, the board will set a target for the overall leverage of the firm. For example, should total assets be five times, seven times or 10 times equity? We will return to this question later when we talk about banking risks and rewards, and banks' and MFIs' role in the economy

"Figure 10 also shows that there are feedback and monitoring mechanisms. This involves the board's monitoring and oversight role, which Selma described earlier and which we will discuss at further length today."

Figure 10: Setting and Monitoring Risk Appetite



Source: Nestor Advisors (2010).

"In addition to our annual planning work," Max continued, "we evaluate specific strategic initiatives from time to time. These may include merger and acquisition opportunities, or entry into a new product, financial market, or geographic market. In evaluating each of these, we assess how the proposed initiative may impact MFI Bank's risk profile so as to ensure that we retain a risk profile that is appropriate for the firm and consistent with strategic objectives, social performance objectives, and mission."

"If I may interrupt," Selma inserted. "Our view on *this* board is that if we do not understand a proposed product or other initiative – or its risk implications – we delay the initiative until we fully understand it and the potential risks, or, if it is readily apparent that the risks are too great, we abandon it. We may hire external consultants to advise us too. We try to never approve things we do not understand."

Figure 11: Acknowledging Ignorance Can Be a Virtue

"Always question when a product or an investment is not understood. Don't be afraid to admit you don't understand. Claiming ignorance is a virtue, not a sin."

A non-executive director of a bank in Eastern Europe

Source: Interviews conducted by Nestor Advisors (2009).

"In this," Max added, "you have the full support of your executive management team.

"Similarly," he continued, "before proposing any expansion into markets we — both the executives and the board — will take into consideration legal and regulatory requirements and our capability to both effectively comply with all the legal and regulatory requirements and manage the risk of the new business. We also insure that the new business and products align with our social mission.

Figure 12: On Director Motivations

"One should not engage in (types of) transactions because others do so. Prestige or market share are often wrong motives for engaging in transactions."

A former executive and director of a European bank

Source: Interviews conducted by Nestor Advisors (2009).

"Before we close our discussion on strategic planning," Max stated, "I would like to make a final point. You will recall that I began our discussion of planning and risk appetite definition by saying this is something that the board discusses when working on the strategic *and* annual plan, *as well as* when there are significant changes in the business climate. This ensures that at least annually, we review and reaffirm or revise the firm's risk appetite.

"Risk," he added, "is dynamic. Even if we do not change a thing, the market, the competition, the laws, the regulatory environment, the economy – they all change all the time. And they affect us."

"Allow me to underscore," Selma added, "the importance of our work to determine the firm's risk appetite as well as monitor the firm's current and projected risk profiles. Both parts are important: The risk appetite is our mandate to the chief executive officer. It guides the risk-taking activities of all employees. It defines the boundaries within which the firm's business objectives should be pursued and guides our own oversight, monitoring, and decision-making with respect to the business. Risk monitoring gives us assurance that management is doing the right thing. It also forms part of our impression of our management team's capabilities. Parallel to this, the board also reviews policies and procedures to insure that our business practices align with our social mission – for example policies related to transparent pricing and to collections procedures. Consumer protection is an important element of risk management given the inter-relationship between social performance, financial return, and reputation risk.

Selma continued, "Our chief executive officer and team are skilled and prudent. That, in turn, gives us confidence and affects how much risk we are willing to accept in our strategic planning and in our risk appetite mandate back to the management team."

1.7. Risk monitoring by the board

"Timely and accurate information," Selma transitioned, "is what enables us directors to execute our responsibilities in a meaningful way." She then introduced Tomas, the head of legal and company secretary of MFI Bank. "Part of Tomas's role is to assist non-executive directors with accessing the information we need to fulfil our duties. Another is to ensure that we allocate our time in such a manner that we address the issues that need to be addressed."

"As Selma has described," Tomas began, "the board has a continuing responsibility to understand the MFI's risk profile at any given point in time, as well as to monitor the firm's ongoing performance against its established risk appetite, and social performance targets against its social mission. This responsibility cannot be accomplished without access to accurate and relevant information and adequate time to discuss the issues. In preparing the board agenda for our chair's approval, I make sure that we provide adequate opportunities to brief the board and for board discussion and questioning. "

Figure 13: Timeliness of Information

"One of our biggest challenges is to get financial information within a reasonable timeframe."

An executive director of a bank in Europe and Central Asia

"We (the board) need correct and timely information and some analysis to guide us towards what decisions need to be made using the information. I am worried that ratios are incorrect because the MIS is not in place to calculate them."

A board member of an MFI in China

Source: Interviews conducted by Nestor Advisors (2009) and Karla Brom (2012).

"However," Tomas continued, "accessing the right information at the right time can be slightly more challenging in banking than in some other businesses. We attempt to keep the board informed by using several channels.

"First," Tomas described, "the entire board, and in particular the board's risk committee, has direct access to the chief risk officer, an appointment that cannot be made or relieved without the board's prior approval. Our policy is that the chief executive officer or chief risk officer must, as soon as practicable, bring to the attention of the board's risk committee any significant change in the MFI's risk profile or any actual or expected violation of risk limits or regulatory requirements. (See Appendix 1 for an example of CRO roles and responsibilities.) In this regard it is essential that we have a well-functioning financial data collecting and reporting system that can quickly and accurately aggregate data from all of our branches. Without good information technology the reports we need in order to assess our exposures and make informed decisions take too long to prepare, and risks may escalate in that time period.

Figure 14: Direct Access to the Chief Risk Officer

"It's crucial for the board to hear reports directly from the CRO as the management may be biased."

A chief risk officer of a MENA bank

Source: Interviews conducted by Nestor Advisors (2009).

"Second, the Chief Internal Auditor — who reports directly to the board's audit committee and can be appointed and dismissed only by the board — monitors the activity of the MFI to ensure that we are always operating within our policies and defined objectives and provides assurance that the control systems work as designed and that the information they supply, both to management and the board, is accurate. The board is alerted to any situations requiring the board's attention as and when they occur.

"Third, we create opportunities for non-executive directors to interact with managers below the executive level. This not only provides directors with an important view into potential candidates for succession purposes, but also provides other sources of information on the MFI and its risk culture. Without circumventing the Chief Executive Officer, there are formal and informal ways in which we encourage interaction between the board and managers. When foreign board members are going to be at meetings we make sure to schedule dinners or lunches with other members of the management, and once or twice we have arranged for branch visits as well. Nevertheless, it is sometimes difficult for foreign board members to add additional days to their trip when they attend a board meeting so we haven't organized exposure visits in a while. We hope to reinstate that practice now that you've agreed to become a board member.

Figure 15: On Information Sources

"You need to get outside the boardroom and go to the ground several times a year."

A non-executive director of a leading bank in Central Europe

Source: Interviews conducted by Nestor Advisors (2009)

"Fourth, we create opportunities for non-executive directors to receive advice from expert and independent outsiders. For example, if we hire consultants to provide technical assistance on a specific topic, we build time in to their work for you to meet with them and ask questions.

"Lastly, there are also periodic reviews of the MFI's position at board and committee meetings. Those reviews are included in your board materials and we try to reserve adequate time at committee and board meetings to fully discuss those reports. We often have these reviews by phone and after working hours, to accommodate our foreign board members."

Figure 16: Diversifying a Director's Sources of Information

As one director put it, "Boards need to somehow find broader sources of information, so they're not relying on one or two people."

"[Another] director advocated seeking broader sources of information but acknowledged that such approaches eat up time: "There is no substitute for time spent meeting with management of the different divisions or sectors that are the next level down the corporate ladder, having them present directly to the board, visiting operations, . . . getting in the field, getting a sense of operations—not interfering, but understanding on a more hands-on level."

Source: Lorsh, J., 2009. "Perspectives from the Boardroom," Harvard Business School.

General reporting guidelines

"Regardless of the level of our non-executive directors' banking experience," Tomas continued, "we follow certain principles in preparing board reports. One tactic that we will not allow, but which some managers from other firms use, is to present information in a very complex manner, in an effort to keep directors in the dark and inhibit board discussion. Part of my job is to prevent this from happening. I encourage you to tell me when we have fallen short of that objective.

"Another general guideline that we follow is to provide not only updates on the current position of the firm but also trends and variances. We have found reporting on exceptions and discussing outliers within those trends is particularly informative. From a risk perspective, an outlier with a positive impact on the business is as important to investigate as an outlier with a *negative* impact. For example, if a particular area of the business is growing rapidly, we ask management to discuss the drivers and risk implications—both in terms of exposure to the bank and the management of that risk."

CAMELS analysis

"The written reports you will receive before the board meetings," Tomas continued, "will include information on the aggregate performance of the business, as well as by business line, geography, and risk area. When there is external information or analysis (such as rating agencies reports or consultant assessments) available, I will also share that with you.

"We evaluate how our risk exposures relate to the board-defined risk appetite and risk limits. We measure those exposures on a global and consolidated basis, as well as by business segment.

"We do this along five axes: **C**apital adequacy, **A**sset quality, **M**anagement and particularly risk management, **E**arnings quality, **L**iquidity, and **S**ensitivity to other risks (including market and operational). This approach, referred to by the acronym CAMELS, is based on that used by the Federal Reserve System in the United States in the examination of commercial banks and mutual savings banks. Microfinance rating agencies frequently use a CAMELS analysis as well, or a modified version[3]

Figure 17: CAMELS Ratings	
Capital Adequacy	• Maintain capital commensurate with the nature and extent of risks • A function of credit, market, liquidity, solvency, legal, regulatory and other risks • Reflects the ability to manage, identify, measure, monitor and control risks
Asset Quality	• Reflects the size of existing and potential risk associated with loan and investment portfolio, real estate holdings and other on and off balance sheet assets
Management	• Capability of the board of directors and management to identify, measure, monitor and control the risks • Reflects management's ability to ensure bank's safe and efficient operations in compliance with laws and regulations
Earnings	• Reflects the quantity and trend of earnings • Assessment of factors that may affect the sustainability and quality of earnings
Liquidity	• A function of the current level and prospective sources of liquidity compared to funding needs • Reflects the funds-management practices relative to the size, complexity and risk profile of the bank
Sensitivity to other risks (including market and operational)	• Reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices or equity prices can adversely affect the bank's earning or economic capital (market risk) • Reflects the degree to which inadequate or failed internal processes, people and systems, or external events can adversely affect the bank's earning or economic capital (operational risk)

Source: Office of Thrift Supervision, Uniform Financial Institutions Rating System (Washington: 1997) (modified to reflect Basel II updates re: operational risk).

"Capital adequacy", Tomas continued, "reflects, on one hand, the nature and extent of our risk exposure and, on the other, our ability to manage, identify, measure, monitor and control risks. The thinking is that if we are unable to accurately predict our exposures or to respond quickly (as in the case of inadequate IT or delayed reports), then the level of capital held should be greater. This is not just a function of our bank's capabilities but also the general market environment. For example, if we see that exchange rates or interest rates are becoming more volatile as we approach an election, we should consider holding more capital.

"Capital adequacy is more than just a function of required regulatory capital; rather, it is a function of credit, market, liquidity, solvency, legal, regulatory, and other risks. As such, each of the other components of the CAMELS analysis informs our assessment of our capital adequacy.

"**A**sset quality," Tomas continued, "reflects the size of existing and potential risk associated with our loan portfolio and investments. Data tracked here includes:

[3] For example, GIRAFE is an acronym used by Planet Ratings covering **G**overnance, **I**nformation, **R**isk Management, **F**unding and Liquidity, **E**fficiency and Profitability

- The allowance for loan losses
- The level, distribution, severity, and trends of problems, including classified, non-accrual, restructured, delinquent, and non-performing assets
- Diversification of the loan portfolio
- Concentration of assets by counterparty, client, region, or sector
- Current and projected borrower defaults; the frequency of credit documentation exceptions
- Risks to the marketability of our assets other than client loans, including trends in the economy, financial markets, counterparties and clients

"When evaluating our **M**anagement of risks," Tomas described, "we present and discuss issues that have arisen with respect to not only the executives but also the board's oversight of risk and social performance.

"In addition," Tomas continued, "the board evaluates, with input from the executives, the quality of the board's own oversight of risk; the clarity of the board's directions to management regarding risk appetite and social performance goals; the quality and output of our discussions; and, the board's ability to respond in a timely manner to changing business conditions or the initiation of new activities."

"Can you tell me what you mean by social performance?" Alex interjected.

"Certainly," Tomas responded, "The term social performance refers to the fact that when we provide financial services to the poor, we hope to catalyze a chain of events that leads to their improved socio-economic well-being. Microcredit has been proven to have a positive impact on family income, but we want to know how this changes household behavior. Does a more profitable micro-enterprise mean that more children are attending school? Are families better nourished? Do their housing conditions improve? Can they afford medical care when a family member falls ill? Anecdotally, we know that these things can and do happen when the poor are given access to finance. What we need to monitor is whether or not our clients are achieving these social gains as a result of the products and services that we provide."

"That sounds like a difficult task." Alex commented, wondering how on earth such knowledge could be acquired and at what cost.

"Indeed," Tomas nodded, " We need to price our products in a way that covers our costs and need for growth capital, but we can't charge so much that our clients are unable to succeed. Fortunately, we are not alone in seeking to understand how our financial services affect the lives of our clients. A number of global industry initiatives are underway to define standard methodologies and indicators that are both practical and informative. Ask Aziz about how MFI Bank is engaged in this global dialogue around social performance metrics and what that means from a risk management perspective."

"Selma, is there anything you would like to add to this?" Tomas queried.

"Two things," Selma interjected. "Returning to the role of the board in managing both financial and social performance, first is the issue of board oversight and the concentration of power by any one director or executive. Board composition, which we will discuss later, is one way in which we manage this. Another is how I, as chair of the board, execute my job. All directors will evaluate the performance of the board as a whole and me as chair, annually. I highlight this to you: **a concentration of decision-making authority — whether formally or effectively — negatively impacts our risk profile and company performance.**

"A second point," Selma emphasised, "is one that you have likely heard elsewhere but is worth repeating here as it is our mantra: **Not everything we need to know to make our decisions are in the reports or produced by the analyses. We must never lose sight of the importance of our judgment and common sense."**

"Which brings us to the next category, **E**arnings quality" Tomas said. "Here we track the quantity, quality and trend in actual earnings, as well as factors that will influence future earnings. **Our goal is not to simply grow earnings, but to be aware of why and how earnings are being created and to make sure earnings are in line with our social performance targets**.

"For example," he continued, "questions that we might raise include the following:

- What is driving our earnings? Have we discussed and approved earnings targets and agreed how profits are to be used? (for dividends, retained to fuel future growth, etc.)
- Are we earning more because we are increasing our risk profile?
- Are we earning more because we are taking advantage of a lack of competition in our target market and therefore intentionally leaving prices high relative to our costs and profit targets?
- Is the risk profile of our clients changing such that we anticipate an increase in loan losses going forward? Has increased competition opened the possibility that our clients are taking several loans from multiple banks? Over-indebtedness in this scenario can affect our loan losses even if our loan is appropriate for the client. We try to manage this by setting a debt-to-income ratio, taking into account all household sources of income a client has to pay all outstanding debt. This can be difficult since we don't yet have a fully functioning credit information sharing system, and not all customers tell us about all of their other loans.
- Are we effectively managing credit risk? How does the credit risk of our core product (working capital loans) compare to the credit risk of newer products? Are our credit risk management policies and practices adequate to cover an increasingly diversified portfolio?
- Are we limiting our concentration of risk in any given geography or product? The small size of our average loan means that a single loan default doesn't have a large impact, however multiple losses in a particular loan product or geographic location can indeed increase our risk profile.
- Are we adequately provisioning for loan losses? Have we changed our reserves for loan losses in a way that materially affects earnings? If so, why? If not, why not? Is the collection rate of our bad loan workout group increasing or decreasing?
- What portion of earnings is being driven by non-loan activities?
- Is our exposure to interest-rate or other market risk increasing or decreasing and what is driving that change?
- How are economic trends impacting our expected interest expense and interest margin levels?

- How much capital can reasonably be expected to be generated by retained earnings?
- How are our operating expenses trending and what is the outlook? How do these compare with other MFIs on the one hand and with traditional commercial banks on the other?

Figure 18: On Abnormal Profits

"Abnormal profits are often a sign of excessive risk taking."

A former executive and director of a European bank

Source: Interviews conducted by Nestor Advisors (2009).

"The next area of analysis is **L**iquidity," Tomas continued. "Our liquidity objectives are to ensure that we have enough cash, cash-equivalent assets, readily saleable assets and available credit lines to meet any periods when we have more cash outflow than inflow; and to respond to unexpected changes in our funding sources (by which I mean our deposits and commercial borrowings).

"In monitoring our liquidity risk exposure, we assess our access to money markets and other funding sources; the composition of our sources of liquidity; the degree of our reliance on short-term sources of funds, including borrowings and time deposits to fund long-term assets; the trend and stability of deposits; and the risk management division's track record with respect to identifying, measuring, monitoring, and controlling our liquidity position.

"We also ensure that we have contingency funding plans in place that outline how and where we would get additional sources of funding in the case of a major liquidity disruption, either due to adverse market events or to an adverse event that is specific to MFI bank, like the sudden withdrawal of a funding source.

"Finally, we come to the 'S' of CAMELS namely **S**ensitivity to other risks (including market and operational). Here we seek to understand how market risk, such as interest-rate and foreign exchange risk, can impact our earnings and capital. We now broaden this to other risks, especially operational, which looks at how potential weaknesses or failures in people, process and systems, or external events can adversely affect our earnings or economic capital.

"As our portfolio of business is primarily microlending funded by customer deposits and commercial borrowings, our greatest market risk exposure is to interest-rate risk and foreign exchange risk, so proportionately the board spends a great deal of time on this subject. In addition, all of the new platforms for delivery of products and services (mobile money, branchless banking) mean that operational risks are becoming more important and complex too."

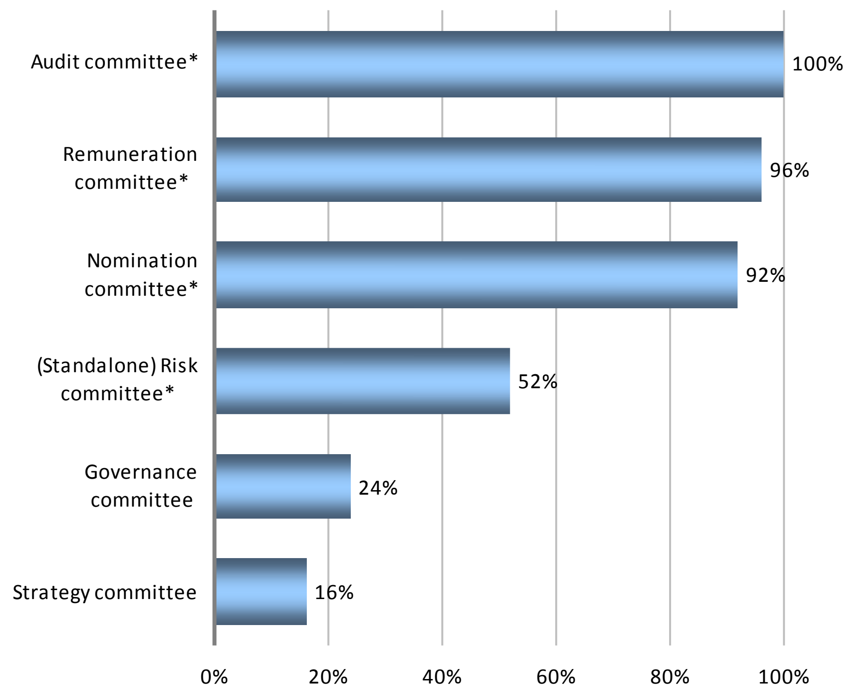
1.8. Risk governance and the work of board committees

"As with most large companies," Selma began, "we find it helpful to split our workload amongst various board committees. The committees deliberate certain matters and then present their views to the entire board. This allows us to be far more thorough, efficient, and effective than otherwise.

"We have established only those committees that are relevant for a MFI bank of our size: a risk committee, a separate audit committee, and a governance committee that covers management and staff remuneration, board nominations, conflicts of interest and succession planning. As shown in Figure 19, major European banks have those as well as a number of other committees. Figure 20 (page 29) gives an idea of committees that exist at other MFIs globally, which are more in line with our practice.

"Given that today's focus is on risk governance," Selma continued, "we'll discuss those committees most relevant to that topic."

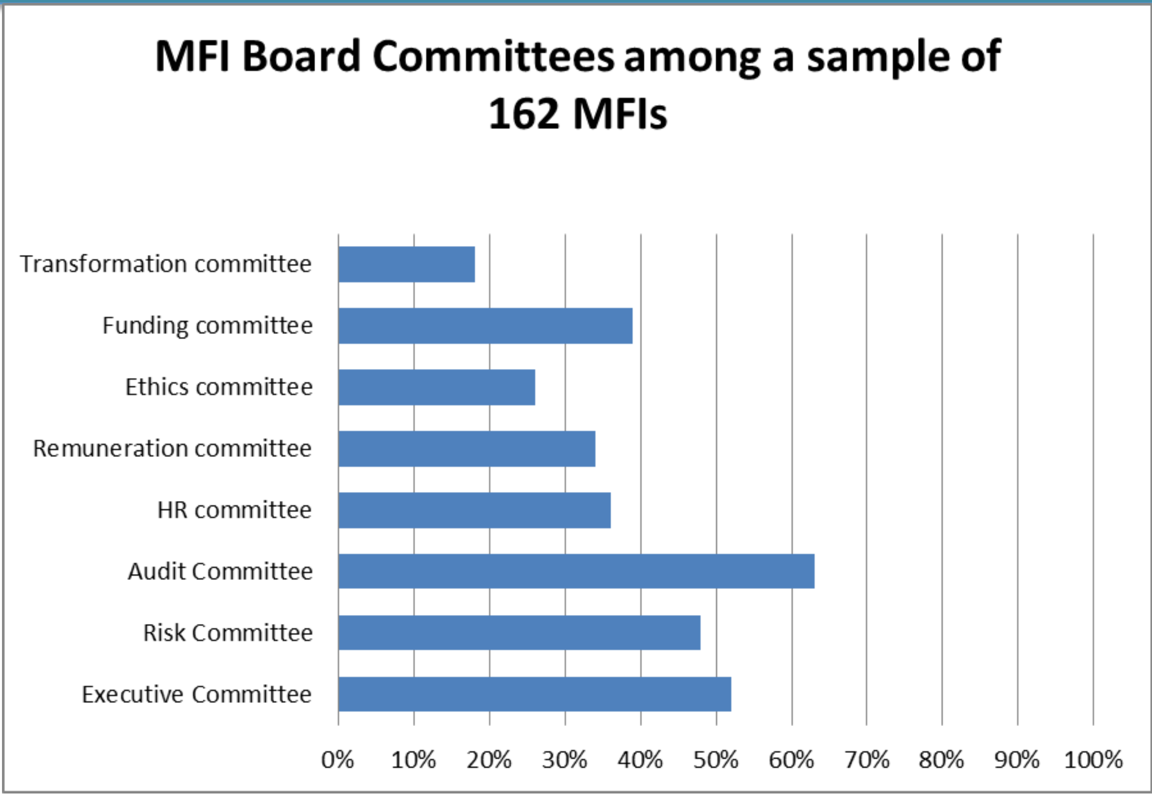
Figure 19: Board's Risk-Related Committees Among the 25 Largest European Banks



** or equivalent*

Source: Nestor Advisors, Bank Boards and the Financial Crisis: A Corporate Governance Study of the 25 Largest European Banks (London: 2009).

Figure 20: Board Committees at a Sample of 162 MFIs Globally



Source: MIX, "Measuring Governance in Microfinance," MIX Microbanking Bulletin, April 2012.

Risk committee

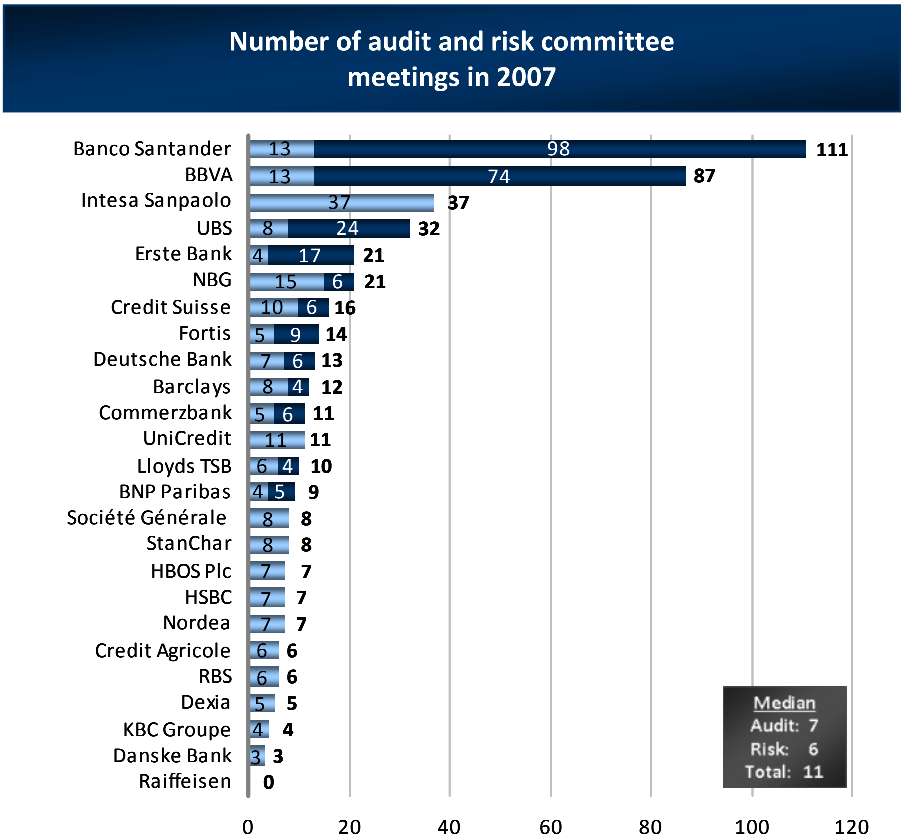
Selma then introduced Vikram, the chair of the risk committee.

"Our committee," Vikram began, "advises the board on matters such as setting risk appetite, the use and appropriate levels of risk limits, the bank's risk framework, management's capabilities with regard to risk management, and, its risk management policies and procedures."

"We also oversee the firm's interaction with other stakeholders as it relates to risk," Vikram explained. "For example, we review the reports on risk governance prepared by management that are published in our annual report and on our website, as well as any reports on risk assessment and control procedures submitted to the banking regulator. We are briefed on significant reputational risk matters and on management's proposed responses or pre-emptive actions.

Figure 21: Frequency of Meeting of the Risk Committees of the 25 Largest European Banks

The work intensity of board audit and risk committees varies considerably across Europe with the Spanish banks being, and by far, the most active.



Source: Nestor Advisors, Bank Boards and the Financial Crisis: A Corporate Governance Study of the 25 Largest European Banks *(London: 2009).*

"The committee meets every other month," Vikram continued. "As shown in Figure 21, the risk committees of the top European banks met on average six times per year in 2007, and we try to follow their example because many of these banks operate subsidiaries in our country so we use them as a benchmark for some of our risk practices. We feel that meeting every other month enables the committee to adequately keep abreast of the bank's risk profile and outlook, as well as allowing the capacity to respond to significant events in a timely manner. We do, of course, have extraordinary committee meetings in person or by telephone, if necessary.

Figure 22: A Nimble Risk Committee

"Our board risk committee meets monthly and has authority. Hence it can switch directions when needed and our bank is very reactive."

A non-executive director of a bank in Central Asia

Source: Interviews conducted by Nestor Advisors (2009).

"The committee is composed," Vikram described, "solely of non-executive directors, and particularly those with a background in finance and banking. Our chief executive officer and chief financial officer are members of the board but are not members of the risk committee, though they are frequently invited to attend the risk committee's meetings. Our chief risk officer is neither a member of the board nor a member of the risk committee but always attends the risk committee meetings.

"As Tomas suggested earlier today," Vikram continued, "part of the chief risk officer's job is to effectively distil and analyze information for the risk committee's review. Our working relationship is a close one. Yet, despite this closeness, I work to facilitate an atmosphere that encourages well-informed questioning, rather than one in which directors rubber stamp management recommendations.

"In addition, the committee regularly receives presentations by persons who report directly to the chief risk officer, including those most responsible for monitoring market, credit, and operational risk (for example, the head of operations or credit risk). As Tomas mentioned, this not only diversifies information sources but also provides insights for succession planning purposes."

Figure 23: A Fundamental Task of a Director: Ask Questions

"We. . . don't want to manage the company. But we want to direct the company. . . Asking detailed questions to understand more fully what's going on in a company is, I think, a requirement to be an effective director. . . I have no insight about what we should do until I have significant insight as to what's really going on, and you can't get that by somebody doing a PowerPoint presentation."

Board director

Source: Lorsh, J., 2009. "Perspectives from the Boardroom," Harvard Business School.

Selma added, "We created the risk committee just a few years ago. Previously, the risk committee's work had been performed by the audit committee, which struggled to find enough time, between reviewing the bank's financial accounts and its other audit-related duties, to focus on the bank's risk profile in-depth. Risk committee members review key risk indicators every other month and exchange questions or comments about the reports with Aziz as necessary. Then when we meet as a board they summarize the key risk issues and changes for us, including making any recommendations related to limit changes, or changes in policies or processes.

Figure 24: Bank Audit Committee Versus Bank Risk Committee

	Benefits of this committee having a risk oversight function	*Challenges to the committee in executing its risk oversight function*
Audit Committee	• Links risk to financial statements • Plays a central role in ensuring robust internal controls	• Ensure sufficient time is allocated to risk matters • Ensure all risks are sufficiently covered
Risk Committee	• Promotes routine focus oversight of risks • Creates a forum which is comfortable handling specialized discussion of risk • Eases the growing workload of board and its audit committee • Contributes to focus on longer term risks and social performance risk	• Keep the entire board involved in risk oversight • Coordinate its work with the audit committee

Source: Nestor Advisors (2010), modified to include social performance risk.

"A number of banks do not have risk committees," Selma described, "because they prefer to have the entire board participate in risk discussions. Our experience, however, is that the risk committee's work significantly enhances subsequent board discussion of not only risk but also the risk implications of matters such as remuneration, succession planning, and board director nominations process.

"We recognize," Selma continued, "that one of the potential pitfalls of having a risk committee is that the board might not discuss risk issues as it should. Hence, Tomas and I work to ensure that the board also has proper discussion of all risks, albeit without needing to go into the level of detail that the committee does. **The key issues are these: that the board has a holistic view of risk, and that the board has the appropriate time, information, and resources to adequately discharge its risk governance duties. Our choice is that the risk committee is a resource that supports the board's work, it does not replace the board."**

The audit committee

"In supporting the board's risk governance work," Selma added, "the risk committee works very closely with the audit committee. Included among the audit committee's responsibilities are oversight of the internal controls of operations, and the efficacy of internal audit, both of which have significant implications for risk management."

Governance committee

"Another committee with which the risk committee works," Selma continued, "is the governance committee. This group reviews human resource policies, opines on the remuneration structure of executives and key employees (including loan officers), sets the remuneration of the executive members of the board, evaluates our corporate governance structures and procedures and is responsible for both the composition of our board and the ongoing professional training of our board members. The composition of our board can be an important advantage as well as a risk management tool. We seek to have members who can provide leadership to the bank. Most directors have financial industry expertise and all have a demeanour that encourages debate with the executives."

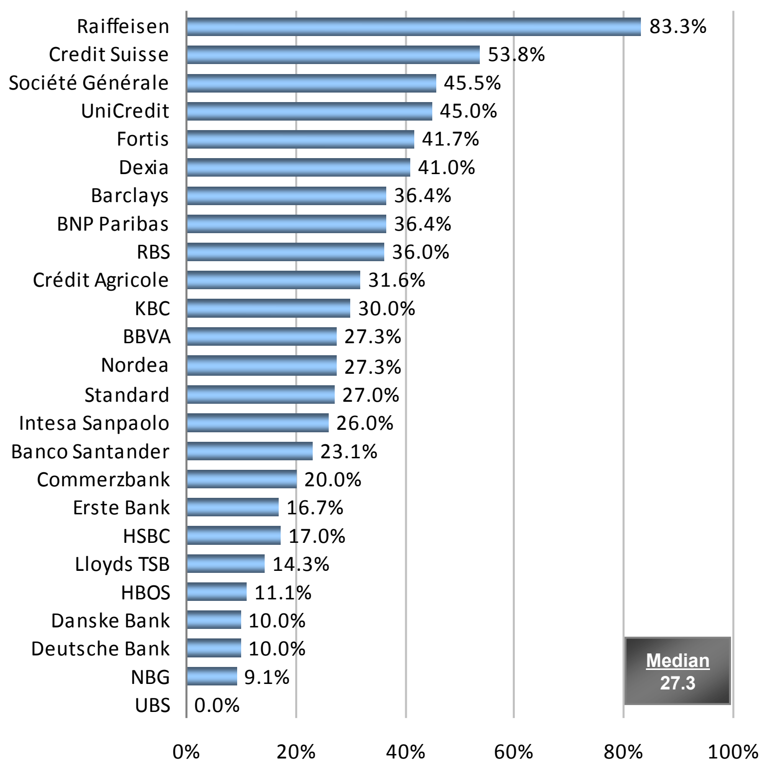
"The risk committee will collaborate with the governance committee to assess:

- The incentives remuneration policies create for managers, both with respect to growing the business and managing risks
- Whether the incentives sufficiently encourage managers to promote the firm's approved risk appetite

"For example, at MFI bank, we used to give bonuses to loan officers and branch managers based solely on whether they reached projected loan disbursement targets. Then we had some problems with increasing portfolio at risk (PAR) in several branches, at the same time as portfolio growth was exceeding our targets in those branches. The governance and risk committees sat together to discuss this issue and the outcome was a change in the incentive structure for loan officers and branch managers.

"Now bonuses for loan officers and branch managers are allocated based on a combination of the quality of the loan portfolio and meeting projected disbursement targets. Branch managers are responsible for the quality of the loan portfolio of every loan officer in their branch, and not just meeting or exceeding disbursement projections. If portfolio quality is high but disbursements are below projections there is a discussion, but some bonus will still be awarded.

Figure 25: The Percentage of Non-Executive Directors with Financial Industry Expertise 2007 Year-End

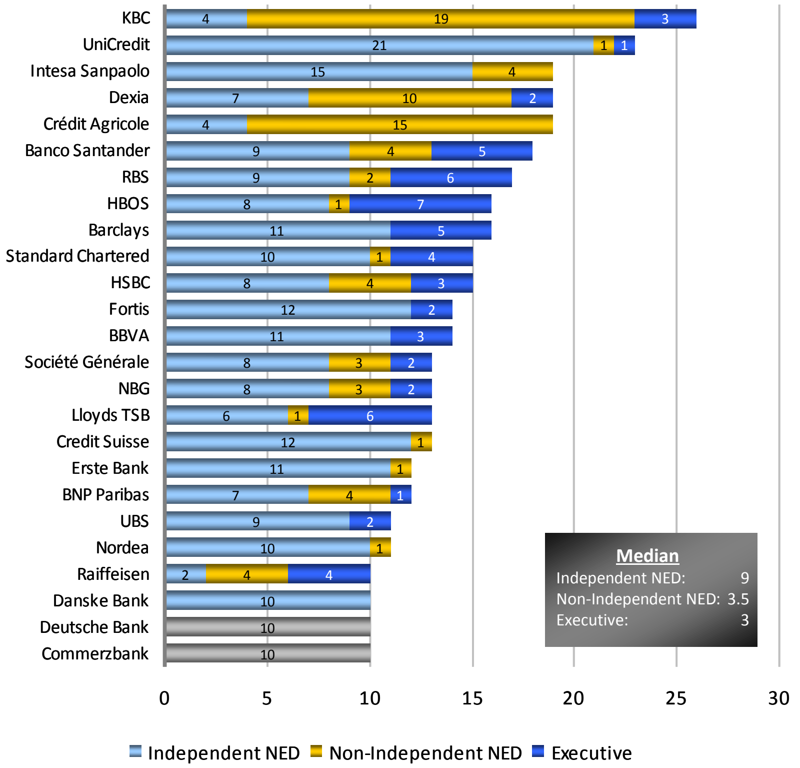


Source: Nestor Advisors, Bank Boards and the Financial Crisis: A Corporate Governance Study of the 25 Largest European Banks *(London: 2009).*

"In addition, we are currently seeking to have more directors that are independent. While having independent board members may not prevent a bank from suffering failure, it promotes the chances that the board may deliberate, rather than rubberstamp management's recommendations. Again, we look to some European banks to get an idea of how many independent directors are sitting on their boards, and we received guidance on this from a governance consultant." (Figure 25)

"Finally," Selma added. "Just as you should challenge executives, you should not always rely on directors with banking expertise to lead board discussions. Each director should always seek to make his/her own judgement. Having directors with a strong banking experience does not prevent banks from making mistakes.

Figure 26: Board Composition at the Start of 2009



Note: Deutsche Bank and Commerzbank do not disclose the number of independent members

Source: Nestor Advisors, Bank Boards and the Financial Crisis: A Corporate Governance Study of the 25 Largest European Banks *(London: 2009).*

Section Review Questions

- Ideally, what kinds of skills and background should a director of a bank or MFI bank board have? Discuss the differences between independent directors and non-independent directors.
- What minimum level of banking-related skills should all directors of bank boards seek to acquire regardless of their background?
- What is risk governance? What is the responsibility of the board with respect to risk governance?
- What is social performance management? What is the responsibility of the board with respect to it? What are risk limits? Who sets which limits at your institution?
- What are the responsibilities of the board chair?
- Describe how directors at your institution challenge proposals put forth by the executives? Are discussions robust? Do they assist the executives with refining and improving proposals?
- Why is the independence and authority of the chief risk officer important? How can it be achieved? How is it achieved at your institution?
- How do risk considerations inform executive and board decisions regarding strategic opportunities, executive remuneration?
- How does a board ensure that it receives the right information? What are some of the information sources MFI directors receive or should seek to access?
- Why is it important for board directors to have a view on their institution's capital adequacy, asset quality, management and risk management quality, earnings quality, liquidity profile, and sensitivity to market risk?
- What are the advantages and disadvantages of having a board level risk committee, or assigning risk-governance related tasks to the board's audit committee?

APPENDIX 1: CHIEF RISK OFFICER/RISK MANAGER OUTLINE OF PRIMARY ROLES AND RESPONSIBILITIES

Three main functions:

1. **Risk reporting**
   - Ensuring that all necessary reports are currently being produced
   - Insuring accuracy of inputs to reports through an annual review process (or as needed, for example when new products or funders are added). This is done in coordination with the IT department and with management responsible for the reports

2. **Risk monitoring/analysis**

Monitor and analyse all risks – Credit, Market, Operational, social performance, solvency, reputational risk, with a specific focus on where those risks overlap. Operations head, Credit Head, Finance Manager, IT Manager, Admin/HR head and Internal Audit head, respectively, are primarily responsible for risks falling in their areas so Risk Manager should coordinate with them.

3. **Represent the risk perspective on Senior Management team (especially the Risk Management Committee and ALCO)**

Input as needed when discussing new products, strategies, etc. Responsible for stress testing and scenario planning.

APPENDIX 2: INTERPRETING SUMMARY STATISTICS

Interpreting summary statistics is the desired goal behind designing scenario and sensitivity analyses.

Start with a real or hypothetical portfolio, then create scenarios and design sensitivity tests. As a third step, apply the tests to the portfolio to see what losses result. These tests produce a large number of possible outcomes. Look at the range of outcomes and then use statistics to summarize the findings.

For example, if there are 20 possible outcomes, use one statistic to summarize the findings. You may say, for example, that in 19 out of 20 cases, the loss projected over the quarter is less than €10 million. This could be stated in a number of ways, such as: there is a 95 percent chance that the portfolio may lose *no more than* €10 million in a quarter; there is a 5 percent chance that the portfolio will lose *at least* €10 million in a quarter; and, the loss for the portfolio is €10 million at a probability of 5 percent for a quarter.

All three sentences mean the same thing but how they are said makes all the difference. The last is typically the method risk managers and statisticians prefer, but statistical jargon can be unhelpful. The simplest way to present summary statistics is to translate the statement into an 'at least' statement. This version emphasises the fact that the analysis suggests that the loss is *at minimum* €10 million, and that it may very well be more. This is better than the phrase "there is a '95 percent chance that the portfolio may lose *no more than* €10 million in a quarter." which suggests that one should take confidence that the loss will be 'no more than'. This type of presentation hides what might happen in the 5 percent of the cases.

Statistics allow managers to estimate a loss that we expect to exceed if the 'improbable' happens. **While these analyses produce precise numbers, precise numbers should not generate false confidence**.

Models are tested by applying stress assumptions to past data, and then comparing the model's estimated losses to actual losses incurred during the period. This is called **back testing**.

When defining a loss estimate, specify a time period and a probability. All things being equal, a lower probability will result in a greater loss estimate, or a longer time period will result in a greater loss estimate.

APPENDIX 3: RISKS IN THE BANKING AND TRADING LINES OF BUSINESS

The first step when risk managers identify, quantify, and manage the risks faced by a bank is to break the banking activities into two risk groups. One group is Structural risks, which relate to longer-term risks in the traditional banking "book" (deposits and loans), and the second group is market risks in the trading "book." (A book of business is a manner of speech that indicates that different transactions are *booked* in different accounts.) MFIs typically will not have a trading book since they do not engage in trading activities. There is no overlap between the structural and trading books; each transaction appears in one or the other and both books together form the bank's financial statements. What distinguishes the two books is the bank's intention with regard to positions held in each, and the way that profits and losses from each book are recorded on the income statement. If the bank plans to hold a position until maturity, they are classified as held-to-maturity and placed in the banking book. If they intend to actively trade the position, then it is classified with trading securities and placed in the trading book. In between are securities that the bank does not intend to trade, but does not plan to hold to maturity. These are designated as available-for-sale.

The banking book holds the positions that are MFIs' core business, like microloans and deposits.

One of the key issues to bear in mind with respect to the banking book and trading book is that they impact earnings differently. The driver of the difference is how income is earned from each. Take for example a loan in the banking book: Interest is earned periodically and interest and principal are received in accordance with the repayment schedule for that loan. In contrast, if MFIs had a trading book, the objective would not be to buy a bond to earn interest and wait for the principal to be repaid at maturity. Although interest would be earned along the way, the aim is to profit from the difference in value of the bond at the time of purchase and at the time of sale, which is usually before the bond matures.

Current international accounting convention is that if an item is in the trading book, the bank must record its change in value daily. This is referred to as **marked-to-market**. That change in value flows directly to the bank's profit and loss statement daily. Changes in the value of any investments that are intended to be held until maturity are not reflected in the daily profit and loss statement.

When thinking of the impact of interest-rate risk on the bank's earnings, the key matter to remember is that **the banking book generates net interest margin, and the trading book generates changes in security values**. Because of these accounting rules and the way that losses impact the bank's financial statements, structural risks in the banking book are identified, quantified and managed differently than market risk in the trading book. The analysis is similar and the two divisions working on interest rate-risk in the banking and trading books work together in using the same starting point. From there, the approaches differ.

Figure 62: Banking and Trading Books

Source: Dermine, J. Bissada, Y., Asset and Liability Management. *2nd ed. (Prentice Hall: 2007).*

APPENDIX 4: STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISK

(For a thorough discussion of these risks as they apply to MFIs, see "Asset Liability Management for Deposit Taking MFIs, CGAP Focus Note 55, June 2009)

Interest-rate risk

One of the most significant risk areas for banks is interest-rate risk, which is the loss that the bank would incur from a change in interest rates, such as the base rate managed by the central bank. It affects the value of assets and liabilities. It also affects the level of interest income and interest expense and therefore **net interest income (**another term for net interest income is **net interest margin**).

Different banks manage structural interest-rate risk differently. One approach is outlined below.

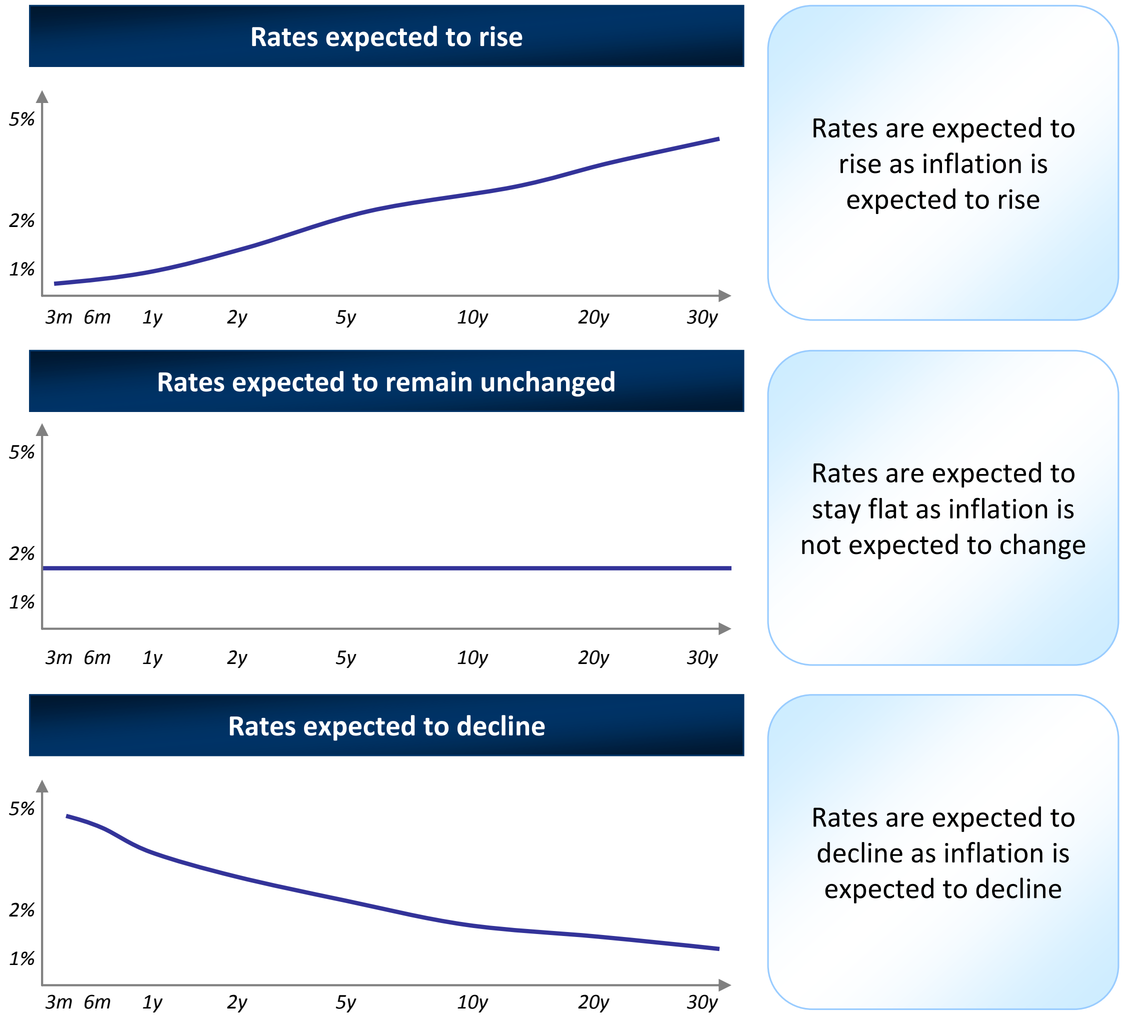
1. Determine *when* a change in interest rates would impact existing assets and liabilities. The driving question of this analysis is if interest rates go up or down tomorrow, when will the interest revenue or expense and the net interest margin be affected.

    - Some assets, with short maturities or floating rates in highly competitive markets—such as the interbank market—would reprice (the interest rate would change) rapidly. Others, such as fixed rate loans, would reprice as principal is repaid. Most MFI client loans are short term, usually less than 12 months, but we don't always pass on a change in funding costs to our clients, so repricing risk can be an issue for us.

    - On the liabilities side, loans payable are often variable rate or amortizing, which mean that they may reprice frequently –cost of funds can increase or decrease depending on market rates. Deposits can be fairly rigid or inelastic, meaning that most retail depositors don't expect or demand rate increases when there are small fluctuations in market interest rates, so retail deposits reprice infrequently. Corporate depositors are more demanding and will expect an increase in interest rates paid on their deposits when market rates increase.

2. Design several economic scenarios, using predictions of potential interest rate movements. These scenarios project the shape of the yield curve which, as shown in Figure 64 (page 101), may be upward sloping (assuming it is more expensive to borrow money long term), downward sloping (assuming it is more expensive to borrow money short term) or flat (there is no difference in the cost of borrowing between the short and long term). The scenarios may also envision shifts in the yield curve, whether it is a parallel or non-parallel shift, as shown in Figure 63 (page 100).

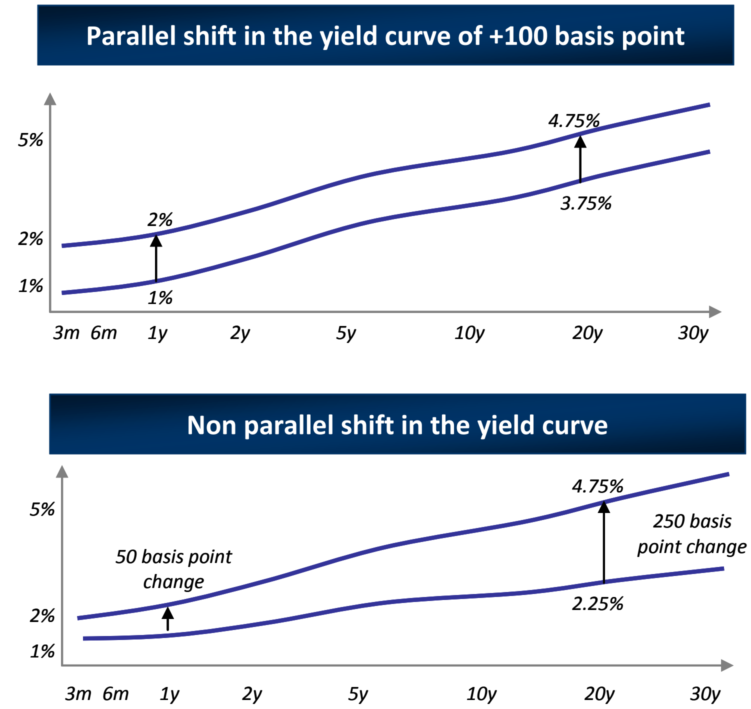
Figure 63: Yield Curves



Source: Nestor Advisors

Source: Nestor Advisors (2010).

Figure 64: Shifts in the Yield Curves



Source: Nestor Advisors (2010).

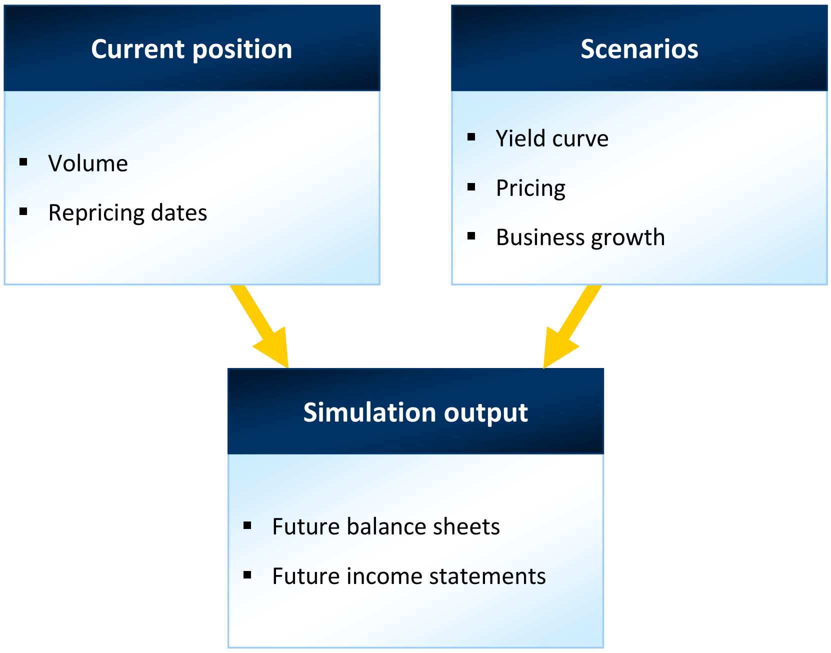
3. Forecast the impact of the projected yield curve on the *volume* of our deposits and loans. The assumption here is that the demand for products will change as interest rates change. For example, decreases in interest rates would reduce the demand for time deposits. For each scenario, we project the pricing of loans and deposits.

4. Forecast the balance sheet and earnings for each scenario. For example, assume that interest expenses on loans payable and time deposits increase when interest rates rise. Do not assume that interest income increases when interest rates increase, unless the MFI changes the interest rates charged to clients due to a change in market rates/funding costs. So if interest rates rise, profitability may fall. On the other hand, if interest rates decrease profitability will increase since interest expense is less and interest income is the same (MFIs typically don't reduce the rates charged to clients due to a change in market rates either).

Aggregate the information from each product line into an assessment of the impact of structural interest rate changes on projected earnings, for a specific period, such as a year, and segments within that period, such as monthly. For each month, identify the **gap** produced by the repricing of the assets and liabilities.

The analysis generates an estimate of what our **earnings-at-risk** is under the defined scenarios.

Figure 65: Determining Structural Interest Rate Risk



Source: Dermine, J., Bank Valuation & Value-based Management *(McGraw-Hill Finance & Investing: 2009).*

This approach can become quite complex to execute and may require sophisticated IT systems.

Structural exchange-rate risk

Currency risk is another market risk because many MFIs operate in countries where the currency is not a major currency, and they often have to borrow in Euros or Dollars.

The main currency risk is that MFIs often have to borrow in USD or Euros and then lend to their clients in local currency. If the local currency depreciates during the client's loan repayment term the MFI will receive less local currency in foreign currency terms and will not make as much money from our lending business. In extreme currency fluctuations MFIs could even lose money.

MFIs globally have discussed how to minimize exposure to foreign exchange risk if there are no currency hedging instruments available. One method used by some MFIs is to lend to clients in foreign currency, or to index their local currency repayments to the USD or Euro. This effectively transfers foreign currency risk to clients, who are usually less well prepared to handle it. This strategy might decrease foreign exchange risk, but it would probably increase credit risk. Clients might be less able to repay their loans in the case of a large depreciation of local currency, so repayments would go down/PAR would increase.

In general, it is better for us to hedge when possible, and to incorporate the cost of foreign currency fluctuation into the pricing of any new products.

Hedging interest-rate and exchange-rate risk

There are two ways to **hedge** currency or interest-rate risk, either by using financial market instruments or by changing commercial terms so as to encourage or discourage our borrowers towards or away from certain loans. Under the **market-based approach**, banks and MFIs use financial instruments such as forward rate agreements, financial futures, interest-rate options, swaps or other derivatives. In many countries and for many MFIs, the access to hedging products is limited, and/or MFIs don't yet have the skills or IT to manage such complex hedging instruments. Instead, MFIs are creative in hedging strategies – mainly using FX forwards or investing in time deposits or government bonds in USD or Euros as a type of hedge.

The **commercial approach –** active balance sheet management **–** involves choosing maturities or repricing dates for loans and deposits to ensure that the terms of assets and liabilities match as much as possible. In general, MFIs should keep the terms of loans as simple and transparent as possible for their clients, since many of them have only basic math and accounting skills. The same is true of deposit products, though MFIs should offer a range of products that meet clients' needs while balancing the institution's need for relatively inexpensive and stable funding sources. Last, negotiate intelligently with lenders so that loan terms on loans match the profile of assets. MFIs should definitely negotiate terms with lenders.

Commercial banks have more options for using the market-based approach since they have a wider variety of clients, including corporations, with a wider variety of needs. If banks put restrictions on maturity and repricing terms it could reduce demand for loans and hence profitability, so it is the more costly of the two options for them. For example, if banks only offered floating rate loans it is likely that it would decrease their interest rate sensitivity, but they would lose business to other banks willing to issue fixed interest loans. The same would occur if banks only offered loans in local currency. So, instead, they might go into the financial market and buy a fixed to floating swap or a FX (or foreign exchange) hedge.

APPENDIX 5: TRADING BOOK AGGREGATION OF MARKET RISKS

Figure 66: Market Risk

Source: Nestor Advisors (2010).

Although MFIs don't trade securities or derivatives as a line of business, many banks do, and these activities are part of their trading book (discussed in Appendix 3). Trading activities encompass a number of different market risks, such as risks related to changes in market factors like equity prices, commodity prices, the short-term local currency rates, long-term local currency rates, interest rates in local and foreign currency, and currency parity between local and foreign currencies.

All of these risks are aggregated using a methodology known as **value-at-risk**, or **VaR**. The VaR technique was developed by JPMorgan (now known as JPMorgan Chase & Co.) in the early 1990s and has since become accepted not only as standard across the industry, but also by regulators who use it as the basis for calculating market risk, against which capital is to be held.

VaR gives an estimate of what the minimum loss in the trading book might be over a given period of time and at a stated probability level, using different scenario and sensitivity analyses (discussed in the appendix on interpreting summary statistics). VAR is to the trading book what EAR (earnings at risk) is to the banking book.

VaRs can be derived a number of ways, each of which has its advantages and limitations. One is the **analytical** or **variance-covariance method**, which assumes that projected outcomes are normally distributed. A normal distribution is a statistical concept that describes how possible outcomes cluster, usually in a bell shaped curve.

For example, students taking an exam may have an equal number of persons having high and low grades, and most students getting an average grade. The problem is that not all financial products produce losses that are normally distributed.

Another method for estimating VaR is the **historical method**, which is superior in that it does not assume any particular distribution of outcomes. Its limitation, however, is that it is based on the performance results of a prior portfolio. If the characteristics of the current portfolio differ from the prior portfolio, then the historical method may not be the best to use.

A third approach is to use a **Monte Carlo simulation**, in which certain factors are isolated and input into a model which then generates random results. One advantage of this approach is that it does not assume a normal distribution. However, this method requires a significant investment in computing resources.

All VaR statistics, regardless of method used, have the common limitation of not being able to calculate a maximum possible loss. Rather it calculates least expected losses for a certain percent of time, over a defined period of time.

Once the minimum loss amount is estimated, they are used to set risk limits on different trading activities. There are different VaRs for different portfolios, given the complexity of the analysis and the varying characteristics of different trading businesses.

If limits are approached, the risk division recommends actions to the business lines to reduce exposures, either by unwinding positions or using hedges where sensible.

VaR analysis is also used to estimate how much capital the bank should hold in the event losses are realised, but cannot have absolute confidence that a bank is operating with an adequate safety margin just because it holds the recommended level of regulatory capital. Management and board need to remain on their toes and recalibrate exposures and analysis to how the market develops, because most models do not incorporate systemic risk. So, models assume that each bank's actions do not alter the market equilibrium or actions of other firms. This clearly is not the case in real life. What happens in part is that the equilibrium does change and large-scale liquidation increases liquidity risk, neither of which are incorporated into the models.

GLOSSARY OF BANKING TERMS

Asset and liability committee (ALCO) is a committee responsible for managing the bank's liquidity position, its interest-rate exposure, and the composition as well as the maturities of the bank's assets and liabilities.

Assets are resources controlled by the bank and from which future economic benefits are expected to flow. Examples include time deposits and client loans.

Back testing is the process of evaluating a model by applying it to historical data and comparing the model's projected results with actual results.

Banking book includes assets that are meant to be held until maturity, as well as liabilities like deposits and loans payable. Items in the banking book are carried at their historical cost.

BIS ratio, see capital adequacy ratio.

CAMELS analysis is a methodology used by the United States Federal Reserve Bank Division of Banking Supervision and Regulation to assess the financial soundness of a bank. The acronym refers to the six components that are analyzed: capital adequacy, asset quality, management, earnings quality, liquidity, and sensitivity to market risk.

The **capital adequacy ratio** is a measure of the financial strength of a bank, expressed as a ratio of its capital to its risk weighted assets. The Basel committee's target capital adequacy ratios are called Basel ratios, or BIS ratios or just capital ratios.

Cash-flow-gap table is a table that projects cash inflows and outflows for a specific time.

Compliance risk is the loss arising from not conforming to, laws, rules, regulations, prescribed practices, internal policies, and procedures or ethical standards. Compliance risk also arises in situations where the laws or rules governing certain bank products or activities of the Bank's clients may be ambiguous or untested. This risk exposes the institution to fines, civil money penalties, payment of damages, and the voiding of contracts.

Concentration risk is the potential of a loss arising from significant exposure to a particular group of counterparties.

The **Cooke capital ratio**, a capital adequacy ratio, expresses the amount of capital a bank should have as a percentage of its total risk-adjusted assets.

Counterparty risk is the potential of loss to one side of a transaction if the other party to the transaction is unable to meet its contractual obligations.

The **cost of capital** is the rate of return that suppliers of capital require as compensation for their contribution of capital. Usually the rate of return is expressed as an effective interest rate.

Credit risk is the potential of loss incurred if a borrower defaults on its obligations.

Deposit insurance is a scheme designed to limit the losses of depositors in the event of bank failure. Schemes vary as to the protection limits and how much the banks themselves contribute to the insurance fund, which is normally government-run.

Earnings-at-risk (EaR) measures the quantity by which earnings may change in response to changes in interest rates.

Financial intermediation is an activity in which an institution takes on liabilities (such as deposits) on its own account so as to acquire financial assets (such as loans) and in so doing channels funds from lenders to borrowers.

Interbank rate is the price at which excess funds are lent to other banks. The “overnight rate” is the one-day rate for those funds.

Interest expenses are expenses associated with attracting and keeping depositor's funds, or with paying other lenders.

Interest income is the revenue generated by a bank from lending and other interest-earning activities.

Interest-rate risk is the potential loss arising from a change in interest rates that reduces the bank’s earnings or alters the value of its asset and liabilities.

The **internal ratings-based approach (IRB)** to credit risk is one of the two broad methodologies defined by the Basel Committee for calculating bank capital requirements. An alternative to the standardised approach, the internal ratings-based approach is subject to the explicit approval of the bank’s supervisor and allow banks to use their internal rating systems for credit risk measurement.

Legal risk is the potential of a loss arising from the uncertainty of legal proceedings, such as bankruptcy, and potential legal proceedings.

Leverage is the amount of the shareholders’ equity relative to the assets.

Liabilities are obligations arising from past events, the settlement of which is expected to result in an outflow of resources.

Liquidity risk is the potential for loss if a bank were unable to meet its obligations as they come due.

Macro-prudential regulations are measures and rules meant to limit systemic risk by altering collective behaviours through, for example, the regulation of markets or specific products.

Market risk is the potential of losses on financial instruments caused by changes in market factors, such as equity market movements, commodity-price changes, interest rate and currency exchange rate changes.

Micro-prudential regulations are measures and rules that seek to improve a financial system’s soundness by safeguarding the stability of the system as a whole. They are often designed to safeguard the stability of individual institutions so as to prevent a “domino effect” from a series of bank failures.

Net interest margin is the net interest income expressed as a percentage of interest income. It can also be understood as the difference between interest income and interest expenses.

Non-interest expenses are banking expenses not associated with attracting and keeping depositor's funds. The non-interest expenses include almost all operating and overhead expenses.

Non-interest income is the income mainly derived from commissions, transaction fees, service and penalty charges and, a lesser extent, from asset sales and property leasing.

Operational risk is the potential of loss resulting from inadequate or failed internal processes, people and systems.

Portfolio at Risk (PAR) is the value of all loans outstanding that have one or more instalments of principal past due more than a certain number of days. It is typically expressed as a percentage, with value of past due loans divided by the gross loan portfolio.

Regulatory capital is the amount of risk capital held by a financial services company to enable it to absorb losses and withstand market, credit or other risks. The amount is determined by legislation or regulators.

Regulatory risk is the potential of loss resulting from changes and laws or rules issued by government agencies established to oversee a bank or other business.

Repricing gap measures the timing and amount of a change in the value of assets and liabilities resulting from changes in interest rates.

Reputational risk is the potential for loss in the value of the bank's business franchise that extends beyond actual event-related losses.

Reserves are an accounting term for the portions of the bank's profit that are retained in the business and not distributed to shareholders. The term "reserves" is also used to designate compulsory amounts that a bank must deposit and maintain with the authorities either for prudential purposes or for macro-economic purposes. (NB: These deposits generally do not earn interest and therefore impact the bank's profitability.)

Return on equity (ROE) is the ratio of net profit to shareholders' equity (also called book value, net assets or net worth). It measures how well a company uses shareholders' funds to generate profit.

A **run** is characterised by unusually large number of withdrawals by a bank's customers, normally sparked by fears that the bank may be in financial difficulties.

Sensitivity analysis, used for stress testing, consists in moving an individual risk factor to gauge its impact on possible outcomes.

Solvency risk is the potential for loss owing to the failure of a bank to have enough capital to cover its liabilities, even if all the bank's assets were to be liquidated.

The **standardised approach to credit risk** is one of the two broad methodologies defined by the Basel Committee for calculating bank capital requirements. An alternative to the internal ratings-based approach, the standardised approach enables banks to measure credit risk in a standardised manner, supported by external credit assessments.

A **stress test** is a “what if” scenario that takes the current position as given but assumes a major change in one or more variables in order to see what effect this would have on the position.

Systemic risk is the risk that the one institution instability will cause other institutions to also become unstable.

Tier 1 is a regulatory definition of bank capital. As defined by the Basel Committee on Banking Supervision, tier 1 capital consists of paid-up share capital, disclosed reserves, and non-cumulative perpetual preferred stock.

Tier 2 is a regulatory definition of bank capital. As defined by the Basel Committee on Banking Supervision, tier 2 capital consists of undisclosed reserves, asset re-evaluation reserves, general provisions and general loan-loss reserves, hybrid securities and subordinated debt with a maturity of greater than 5 years.

Tier 3 is a regulatory definition of bank capital. As defined by the Basel Committee on Banking Supervision, tier 3 capital consists of subordinated debt with a maturity of two to five years. Tier 3 capital serves the sole purpose of meeting a proportion of the capital requirements for market risks.

Trading book holds securities that are actively traded. Items in the trading book are carried at their current market value, and so are either marked-to-market where a liquid market exists for the securities or marked-to-model.

Value-at-risk (VaR) is a measurement for estimating the probability of portfolio losses exceeding some specified proportion based on a statistical analysis of historical market price trends, correlations, and volatilities. Value at Risk is applied to the trading book, while Earnings at Risk (EAR) is applied to the banking book.

BIBLIOGRAPHY

Adams, Renée and Hamid Mehran, "Is Corporate Governance Different for Bank Holding Companies?" *RBNY Economic Policy Review* 9 (2003): 123-142.

Allen, Franklin and Elena Carletti, "The Roles of Banks in Financial Systems," *Financial Institutions Center*, Wharton School, 2008.

Allen, Franklin and Elena Carletti. "The Roles of Liquidity in Financial Crisis". *Financial Institutions Center*, Wharton School, 2008.

Allen, Franklin, and Anthony Santomero. "The Theory of Financial Intermediation". *Financial Institutions Center*, Wharton School, 1996.

Andres, Pablo de, and Eleuterio Vallelado. "Corporate Governance in Banking: the Role of the Board of Directors". *Journal of Banking & Finance* 32 (2008): 2570-2580.

Bank for International Settlements, 2000. *Sound Practices for Managing Liquidity in Banking Organisations*. Basel.

Bank for International Settlements, 2006. *The Management of Liquidity Risk in Financial Groups*. Basel.

Bank for International Settlements, 2006. *International Convergence of Capital Measurement and Capital Standards*. Basel.

Bank for International Settlements, 2006. *Enhancing Corporate Governance for Banking Organisations*. Basel.

Bank for International Settlements, 2006. *Core Principles for Effective Banking Supervision*. Basel.

Bank for International Settlements, 2009. *Revisions to the Basel II Market Risk Framework*. Basel.

Bank for International Settlements, 2009. *Stress Testing at Major Financial Institutions: Survey Results and Practices*. Basel.

Bank for International Settlements, 2009. *Enhancements to the Basel II Framework*. Basel.

Basel Committee on Banking Supervision, 2010. *Microfinance Activities and the Core Principles for Effective Banking Supervision.*

Bebchuck, Lucian, and Holger Spamman. "Regulating Bankers' Pay". *Harvard Discussion Paper* 641 (2009).

Beltratti, Andrea, and René Stulz. "Why Did Some Banks Perform Better During the Credit Crisis? A Cross-Country Study of the Impact of Governance and Regulation". *Fisher College of Business Working Paper* 2009-03-012 (2009).

Bervas, Arnaud. "Market Liquidity and its Incorporation into Risk Management". *Financial Stability Review* 8 (2006).

Brom, Karla. “Asset Liability Management for Deposit Taking Microfinance Institutions”. Consultative Group to Assist the Poor (CGAP), 2009.

Canadian Institute of Chartered Accountants, 2003. “*20 Questions Directors Should Ask About Risk”*. Toronto.

Canadian Institute of Chartered Accountants, 2008. *The Global Financial Meltdown – Questions for Directors to Ask*. Toronto.

Cannata, Francesco, and Mario Quagliariello. “The Role of Basel II in the Subprime Financial Crisis”. *Carefin*, Università Bocconi (2009).

Committee of European Banking Supervisors, 2009. *Compendium of Supplementary Guidelines on Implementation Issues of Operational Risk*. London.

Consensus Statement of the Council of Microfinance Equity Funds (CMEF), May 2005 (revised Aug 2012). “The Practice of Corporate Governance in Shareholder-Owned Microfinance Institutions”

Consultative Group to Assist the Poor (CGAP), A Guide to Regulation and Supervision of Microfinance: Consensus Guidelines, Robert Peck Christen, Timothy Lyman, Richard Rosenberg, CGAP, October 2012.

Dermine, Jean. “ALM in Banking”. *INSEAD,* 2003.

Dermine, Jean, and Youssef Bissada. *Asset & Liability Management, a Guide to Value Creation and Risk Control*. FT-Prentice Hall, 2007.

Dermine, Jean. *Bank Valuation & Value-based Management.* Mcgraw-Hill, 2009.

Diamond, Douglas, and Raghuram Rajan. “Liquidity Risk, Liquidity Creation and Financial Fragility: A Theory of Banking”. *University of Chicago*, 2009.

Duffee, Gregory, and Chunsheng Zhou. “Credit Derivatives in Banking: Useful Tools for Managing Risk?” *Journal of Monetary Economics* 48 (2001): 25-54.

Federal Reserve Bank, 1996. *Supervisory Letter SR 96-38, (SUP) on Uniform Financial Institutions Rating System*. Washington.

Financial Service Authority, 2009. *Reforming Remuneration Practices in Financial Services. Feedback on CP09/10 and Fin*al Rules. London.

Fitch Ratings, 2005. *Bank Operational Risk Assessment Methodology*. New York.

Global Corporate Governance Forum, 2008. *Corporate Governance Board Leadership Training Resources*. Washington.

Goodhart, Charles. “Liquidity Risk Management”. *Financial Institutions Center*, Wharton School, 2007.

Goodhart, Charles and al. “An Academic Response to Basel II”. *ESCR research paper*, 2001.

Hau, Harald, and Marcel Thum. "Subprime Crisis and Board, In-Competence: Private vs. Public Banks in Germany". *CESifo Working Paper Series* 2640 (2009).

House of Commons, 2009. *Banking Crisis: Regulation and Supervision*. Treasury Committee, Fourteenth Report. London.

Institute of International Finance, 2003. *Policies for Corporate Governance in Emerging Markets: Revised Guidelines*. Washington.

Institute of International Finance, 2007. *Principles of Liquidity Risk Management*. Washington.

Institute of International Finance, 2008. *Final Report of the IIF Committee on Market Best Practices: Principles of Conduct and Best Practice Recommendations.* Washington.

Institute of Internal Auditors, 2009. *Certified Financial Services Auditor Study Guide*. Altamonte Springs.

International Finance Corporation & Egyptian Banking Institute, 2007. *Corporate Governance Training Program for Bank's Board Members and Senior Management*. Washington.

Laeven, Luc, and Ross Levine. "Bank Governance, Regulation, and Risk Taking". *NBER and CEP,* 2008.

Levine, Ross. "The Corporate Governance of Banks: A Concise Discussion of Concepts and Issues". *Global Corporate Governance Forum Washington,* 2004.

Lorsh, Jay. "Perspectives From the Boardroom". *Harvard Business School,* 2009.

Macey, Jonathan R., and Maureen O'Hara. "The Corporate Governance of Banks". *Economic Policy Review* 9 (2003).

Maginn, John, Donald Tuttle, Dennis McLeavey, and Jerland Pinto. *Managing Investment Portfolios: A Dynamic Process (CFA Institute Investment Series)*. 3rd ed. Hoboken: Wiley, 2007

Microfinance Information Exchange (MIX), 2012. Measuring Governance in Microfinance: Initial Findings from a Pilot Project. Micol Pistelli, Stephanie Geake, Adrien Gonzalez.

Moody's Investors Service, 2006. *Best Practices for a Board's Role in Risk Oversight*. New York.

Moody's Investors Service, 2007. *Bank Financial Strength Ratings*. New York.

Moody's Investors Service, 2009. *Risk Governance at Large Banks: Current Status and Credit Implications*. New York.

Morgan, D., 2002. "Rating Banks: Risk and Uncertainty in an Opaque Industry". *American Economic Review*, vol. 92, no. 4, pp. 874-888.

Mülbert, P. O., 2009. "Corporate Governance of Banks". *ECGI - Law Working Paper*, no. 130/2009.

Nestor Advisors, 2009. *Bank Boards and the Financial Crisis: A Comparative Governance Study of the 25 Largest European Banks*. London.

OECD, 2008. *Using the OECD Principles of Corporate Governance: A Boardroom Perspective*. Paris.

OECD, 2009. *The Corporate Governance Lessons From the Financial Crisis*. Paris.

OECD, 2009. *Corporate Governance and the Financial Crisis: Key Findings and Main Messages*. Paris.

OECD, 2009. *Finance, Competition and Governance: Priorities for Reform and Strategies to Phase-Out Emergency Measures*. Paris.

Persaud, A., 2009. "Macro-prudential Regulation, Fixing Fundamental Market (and Regulatory) Failures." *Crisis response*, note no. 6, July 2009, Financial and Private Sector Development Vice Presidency", The World Bank Group.

Rajan, Raghuram. "Is There a Future in Banking? Towards a New Theory of the Commercial Bank". *University of Chicago*, 1996.

Rajan, Raghuram, Giovanni Dell'Ariccia, and Enrica Detragiache. "The Real Effect of Banking Crises". *Journal of Financial Intermediation* 17 (2007): 89–112.

Saidenberg, Marc, and Til Schuermann. "The New Basel Capital Accord and Questions for Research". *Financial Institutions Center*, Wharton School, 2003.

Santomero, Anthony, and George Oldfield. "The Place of Risk Management in Financial Institutions". *Financial Institutions Center*, Wharton School, 1995.

Santomero, Anthony. "Commercial Bank Risk Management: An Analysis of the Process". *Financial Institutions Center*, Wharton School, 1995.

Senior Supervisors Group, 2008. *Observations on Risk Management Practices during the Recent Market Turbulence*. Basel.

Steen, Thomsen, Casper Rose and Ole Risager. *Understanding the Financial Crisis: Investment, Risk and Governance.* SimCorp StrategyLab, 2009.

Lord Turner, A. "The Turner Review - A Regulatory Response to the Global Banking Crisis". *Financial Service Authority,* 2009.

UBS, 2008. *Shareholder Report on UBS's Write-Downs*. Zurich, Basel.

Sir Walker. "A Review of Corporate Governance in UK Banks and Other Financial industry Entities". *HRM Treasury*, 2009.

Walter, Ingo. "Reputational Risk and Conflicts of Interest in Banking and Finance". *Stern School of Business*, 2006.

Westman, Hanna. "Bank Corporate Governance in Different Regulatory Environments". *Hanken School of Economics*, 2009.

World Microfinance Forum Geneva, October 2010. "Same Game, Different League? What microfinance institutions can Learn from the large banks corporate governance debate", Geneva Papers on Inclusiveness No. 11