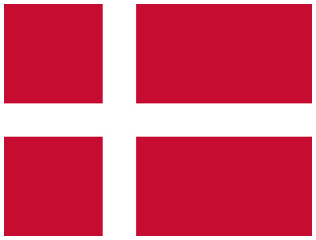
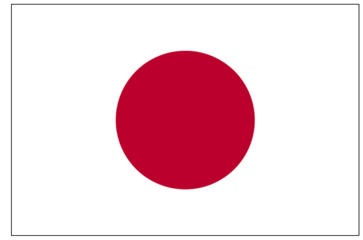




Evaluating the Business Case for Environmental and Social Risk Management in Financial Institutions

November 24, 2014

CONTENTS

Research Inputs

This report synthesizes and extends a body of academic research and practitioner-oriented literature on environmental and social risk in financial institutions, with additional desk research, interviews and an online survey undertaken in the summer of 2014, to evaluate the business case for environmental and social risk management by financial institutions. The telephone interviewees were leaders in environmental and social risk management in development finance institutions, international finance institutions, pension agencies and insurance institutions. The online survey captured the opinions and perceptions of nearly 40 respondents drawn from across these classes of institutions across 15 countries.

The IFC Financial Institutions Group ESRM team developed this report with the support of Witold Henisz, Deloitte & Touche Professor of Management and Rachel Pacheco, Doctoral Candidate both at the Wharton School at the University of Pennsylvania and Associate Professor Bennet Zelner at the Robert H. Smith School of Business at the University of Maryland.

List of Participants

We are grateful for the assistance of representatives from the following institutions who participated in the phone interviews, responded to the survey and provided other forms of support.

- African Development Bank
- Asian Development Bank
- AXA
- Banco Itaú BBA
- BBVA
- BNP Paribas
- Caixa Economica Federal
- Citigroup
- DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH
- Ecofact
- European Bank for Reconstruction and Development
- Export Development Canada (EDC)
- F&C Investments
- FirstRand Limited
- FMO
- Inter-American Development Bank

- International Labour Organization
- Japan Bank for International Cooperation
- JPMorgan
- Mizuho
- National Australia Bank
- Nedbank Group
- PensionDanmark
- PROPARCO
- Rabobank
- Santander
- Scotiabank
- Standard Chartered Bank
- Swedish International Development Cooperation Agency
- SwissRe
- The Bank of Tokyo-Mitsubishi UFJ, Ltd.

EXECUTIVE SUMMARY

The International Finance Corporation (IFC), a member of the World Bank Group, is the largest global development finance institution focused on the private sector in developing countries. IFC creates opportunity for people to escape poverty and improve their lives by providing financing to help businesses employ more people and supply essential services by mobilizing capital from others, and by delivering advisory services to ensure sustainable development. In line with its sustainability agenda, IFC promotes environmental and social risk management (ESRM) amongst financial institutions (FIs). The ESRM advisory product aims to support FIs in improving their environmental and social (E&S) risk management practices, ensuring that their lending to economic activities does not come at the cost of human well-being, natural resources, and vital ecosystems.

Despite extensive research on the societal importance of ESRM, a firm business case for adoption of ESRM processes has not yet been made. This project examines and extends our knowledge of the costs and benefits arising from the implementation of rigorous, standardized processes to assess environmental and social risks during the lending process. In emerging markets, one of the key challenges in convincing FIs to adopt ESRM systems and practices is the absence of a robust business case. Many emerging-market FIs accept the notion that sound ESRM practices can reduce reputational risks. However, it has been difficult to link the reduction in reputational and other risks to financial benefits, which are of central interest to FIs and their shareholders.

To address this gap, IFC is conducting a comprehensive study to investigate a set of hypotheses related to the impact of ESRM on financial institutions. This report summarizes findings from existing academic research and practitioner-oriented literature on ESRM's impact on FI outcomes, as well as phone interviews and an online survey of institutions that either work directly with emerging-market FIs or establish industry-wide norms of excellence in the ESRM space. The report examines how development finance institutions (DFIs), international finance institutions (IFIs), and other financial entities (such as pension funds and insurers) perceive partnerships and funding opportunities with emerging-market FIs based on these organizations' ESRM practices, as well as these organizations' perceptions of the overall benefits and challenges for ESRM adoption in emerging-market FIs.

Evidence of the Impact of ESRM in FIs

This study explored two key areas related to ESRM in FIs: (1) ESRM's ability to mitigate credit, liability and reputational risks; and (2) ESRM's ability to create market opportunities and other benefits for adopters. Hypotheses related to the first area were analyzed primarily through an extensive review of academic literature and practitioner case studies. Analysis of the second set of hypotheses was bolstered by phone interviews and an online survey of IFIs, DFIs, and other financial entities (primarily pension funds and insurers) that interact with and influence emerging-market FIs.

Much academic and practitioner literature has been written on the benefits of ESRM in reducing credit, liability and reputational risks in financial institutions. Case studies provide rich details of negative outcomes resulting from a lack of environmental and social risk assessment in financial institutions. For example, the liability risk created by contaminated collateral continues to impact banks in both developed and emerging markets. Furthermore, much has been written about the reputational attacks and subsequent damage resulting from NGO backlash to banks' lending practices to environmentally or socially unsavory clients. Beyond case studies, some academic research seeks to draw positive correlations between ESRM processes and improved loan performance. Such research, however, has not yet established a causal relationship between banks' adoption of ESRM processes and reduced credit, liability, or reputational risks, despite widespread feedback from DFIs, IFIs, and other financial entities that such evidence is critical to the successful adoption of ESRM in emerging-market FIs. These findings affirm the need for an empirically-based business case for ESRM.

Regarding the set of hypotheses exploring opportunities created by ESRM, academic studies and survey respondents extol the competitive advantage that ESRM creates for financial institutions by opening up market opportunities, accessing strategic partnerships, and providing preferential funding terms. For example, many DFIs give preferential treatment to emerging-market FIs that adopt ESRM in the form of margin reductions or free or reduced cost advisory services. Many DFIs and IFIs express a preference for emerging-market FI partners who have ESRM in place. Furthermore, practitioner case studies discuss how FIs' consideration of ESRM issues during the lending process provides "green" business opportunities (e.g., financing capital equipment for pollution abatement).

> *"Many institutional investors will not invest in FIs without [ESRM] policies in place…. If you don't have these policies in place, you'll cut off a large opportunity from institutional investors."*
>
> — Pension Fund

Yet, despite a strong preference for partners and clients who have ESRM in place, ESRM's competitive advantage remains unclear to many emerging-market FIs. Current academic and

> *"FIs in emerging markets may think that 'Standing out from the crowd, is, inviting troubles for yourself.' They don't want to stick out from their local standards on their own."*
>
> - International Finance Institution

practitioner literature falls short in clarifying this advantage, as most past studies on ESRM omit any questions about or explorations of potential market opportunities that could result from ESRM. Survey results confirmed this lack of clarity, as results show that some emerging-market FIs believe that ESRM may significantly disadvantage the FI and hurt its ability to compete in its market. For example, in certain geographies where ESRM is not widespread, some banks perceive a strong first-mover disadvantage in adopting ESRM given the perception that greater environmental and social risk scrutiny could prevent the bank from working with certain clients and that ESRM could slow down or delay the loan approval process. One interview respondent noted: "To not allow a bank to lend for new business to these risky customers – this becomes the argument that the local bank feels they are going to lose big companies and business." And, despite the importance of reputation to most IFIs, some survey respondents doubted the importance of reputation as a driver of ESRM adoption in emerging-market FIs. These findings exhibit the tradeoff between the partnership and lending opportunities that exist because of ESRM and the potential short-term loss of customers as perceived by emerging-market FIs.

Looking Ahead

Beyond the hypotheses we set out to explore, this study uncovered additional insights on the specific challenges of ESRM adoption and the overall landscape of ESRM in DFIs, IFIs, and other entities. Each player in the ESRM environment – from local and national regulators to IFIs to customers – has a distinct role in the success of ESRM adoption in emerging-market FIs, but also has a distinct view of the challenges in encouraging adoption. This report outlines the challenges foremost in effective adoption and implementation of ESRM in emerging-market FIs. Possible responses to these challenges that move EMFIs beyond compliance into positions of competitive advantages are outlined.

> *"How much can a bank do, when the local public sector is not functioning or delivering the appropriate framework?"*
>
> – International Financial Institution

Our findings consistently emphasized the need for more comprehensive data as input to develop a business case that empirically convinces financial institutions of the benefits that accrue because of ESRM adoption and effective use: FIs seek to understand how ESRM impacts the financial outcomes of their loan portfolios and overall financial performance, such as higher yields, better ratings, and higher profitability. Many FIs still remain unconvinced that the risk mitigation benefits of ESRM, along with the potential new market opportunities, outweigh the

> *“While from an intrinsic point of view the impact seems to be quite evident, a closer look at the "true opinion" from the demand side should be investigated - particularly as it pertains to the belief that additional requirements (i.e. E&S) may sometimes be seen as a constraint rather than a positive.”*
>
> \- Development Finance Institution

short-term costs of implementing such a program within their banks. Furthermore, many FIs still show concern that ESRM may diminish their ability to compete with other local banks, especially in areas where the local regulatory climate may not create a level playing field for competition. We believe that a clear business case for adoption, based on analysis of ESRM adoption and loan portfolio data from multiple emerging-market financial institutions, will help to promote the diffusion of ESRM to financial institutions, and consequently encourage adoption of such practices across the corporate sector more broadly.

INTRODUCTION

As discussed above, this report outlines the findings of a comprehensive study aimed at building a business case based on the costs and benefits of implementing ESRM processes in emerging-market financial institutions. The research was based on a set of ten hypotheses regarding the impact of ESRM activities on financial institution performance and other outcomes.

Figure 1 – ESRM Hypotheses

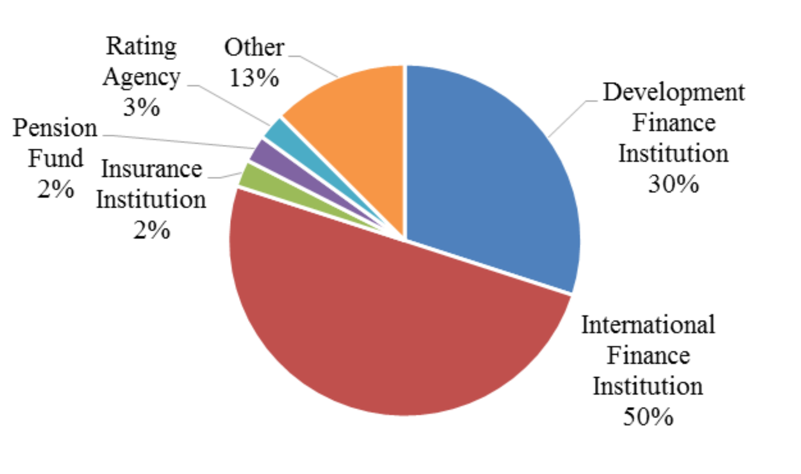
ID	HYPOTHESIS
A	E&S issues increasingly have an impact on FIs
B	ESRM leads to a decrease in credit risk and thus to an improved quality of loan portfolio (indirect risks)
C	ESRM leads to decreased reputational risks
D	ESRM leads to decreased liability risks (direct risks from clean-up costs)
E	ESRM leads to increased possibilities and improved conditions for partnerships and funding opportunities with DFIs and international FIs
F	ESRM leads to an increase in "green" lending and investments
G	ESRM leads to an improved reputation or brand value
H	ESRM leads to improved ratings of FIs
I	FIs that adopt ESRM have competitive advantages in the markets in which they operate in
J	ESRM leads to a decrease in the environmental footprint of FIs' portfolio and operations

These hypotheses were explored using three primary methodologies:

- A comprehensive literature review of over 90 academic articles and practitioner reports on environmental and social risk in financial institutions
- Phone interviews with DFIs, IFIs, pension funds, and insurance institutions
- An online survey targeting a larger sample of IFIs, DFIs, and other financial entities that partner, fund, or sell to emerging-market FIs

Based on the literature review and preliminary phone interviews, the online survey primarily explored hypotheses E, G, and I. The sample for the online survey consisted of DFIs, IFIs, insurance institutions, pension funds, and other financial entities in 14 countries. Figure 2 provides an overview of the sample.

Figure 2 – Online Survey Sample



CHAPTER ONE: ESRM AS A SOURCE OF RISK MITIGATION

> *"Reputation, credit, liability risk – they are all so linked to each other. I wouldn't distinguish, I wouldn't say one is more important than the other. Reputational risk occurs because there is already a liability, and that might translate to financial loss."*
>
> – Development Finance Institution

Hypotheses in this chapter set out to explore how banks are impacted by E&S issues and how ESRM impacts the credit, liability, and reputational risks that banks face when lending to clients. Exploration of these hypotheses was mainly done through a comprehensive literature review of both academic and practitioner studies on financial institutions. Starting in the early 1990s with the confluence of United States "Superfund" regulations[i] and the landmark Fleet Factor Bank lawsuit, in which Fleet Factor Bank was deemed to have had the ability to influence the borrower's environmental policies and found liable for the borrower's environmental clean-up costs,[ii] much has been written about the risks that banks face when lending to potentially "risky" clients. Despite the rich case studies and long list of historic lawsuits, NGO campaigns, and public backlash against financial institution involvement in lending to potentially risky clients, academic research and practitioner-oriented literature remain incomplete in establishing causal relationships between banks' adoption of ESRM practices and risk reduction. We discuss each hypothesis in turn.

Hypothesis A: E&S issues increasingly have an impact on FIs

Financial institutions are facing increased E&S pressures for two main reasons. First, according to the United Nations, there has not only been an increase in natural disasters that threaten to interrupt business operations across multiple sectors, but also in environmental regulations and environmental disclosure protocols. For example, International Accounting Standards (IAS 39) now requires companies to disclose material environmental and social risks. Second, financial institutions specifically face increased scrutiny for their actions as a result of the global financial crisis and the increased prominence of corporate social responsibility (CSR) more generally.

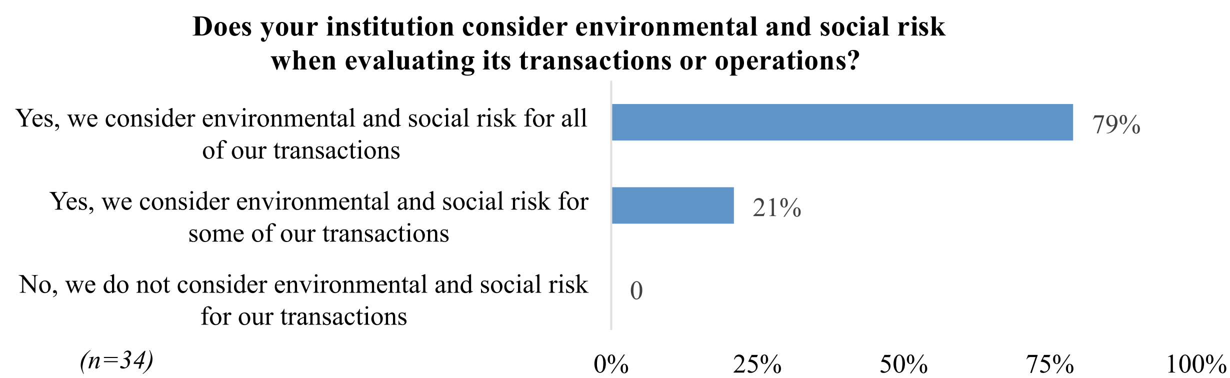
Though the pressures from the external environment point to increased pressure on banks to address environmental and social issues, there is little research on the increased direct impact of environmental and social issues on FIs. However, much research has been conducted on the increased adoption of environmental and social policies by banks, implying an increased importance of these issues to banks' operations. For example, a study of 32

> *"Nobody can hide anymore."*
>
> -Insurance Institution

international banks over a five year period found an increase in the reporting of CSR activities, the use of certified environmental management systems, the number of signatories to codes of conduct (e.g., the Equator Principles[iii]), and the number and type of responsible financial products.[iv] Banks consider environmental and social issues important and are increasingly adopting policies and protocols to address these issues.[v]

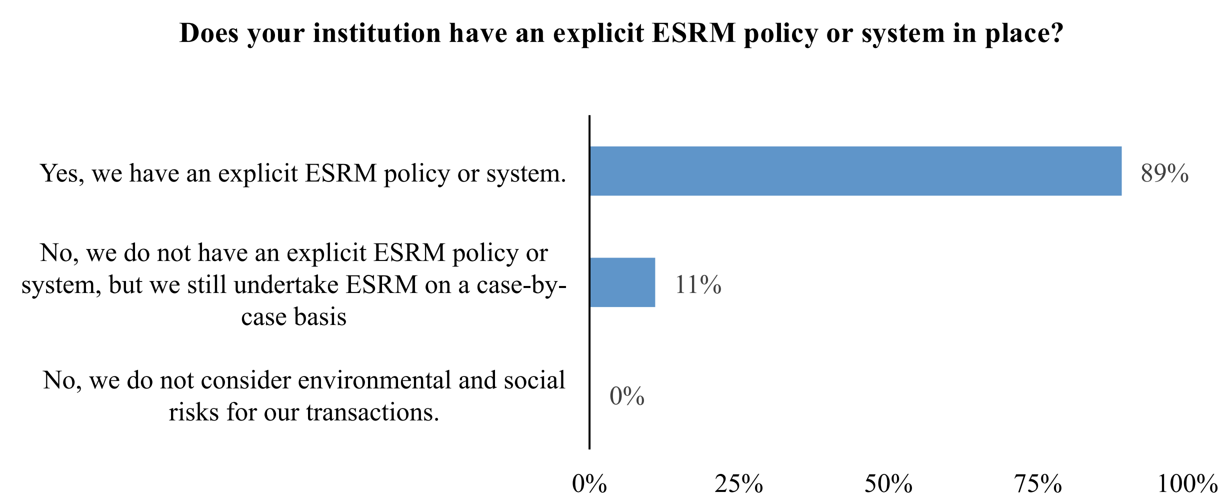
Our findings are consistent with past research on the importance of environmental and social issues and the adoption of policies and processes to address these issues in financial institutions. Figure 2 from our online survey shows that every single respondent we polled considers environmental and social risk when evaluating transactions or undertaking operations.

Figure 3 – E&S issue consideration in transactions and operations



Furthermore, FIs are taking this concern seriously and responding with explicit ESRM policies and systems as evidenced in Figure 3, which shows a significant ESRM adoption rate among respondents.

Figure 4 – ESRM adoption rate of survey respondents



Phone interviews affirmed the emphasis that some financial institutions place on environmental and social issues for reasons ranging from credit risk to reputational risk to honoring their commitment to partaking in established norms like the *Equator Principles*.

Despite the strong consensus among our respondents on the importance of E&S issues and the use of ESRM policies in their own institutions, many respondents also highlighted the concern that emerging-market FIs may not see environmental and social issues as risks to their operations. Top management buy-in was cited as a key barrier to implementation of ESRM practices *(n=33)* in emerging-market FIs: executives within some banks are not concerned by environmental and social risks or that they see these issues as a moral concern, not a financial one.

> *"The number one barrier to implementing ESRM is management commitment…. The moral discussion does not help with CEOs - they are too far away from the investments."*
>
> – Development Finance Institution

Hypothesis B: ESRM leads to a decrease in credit risk and to an improved quality of loan portfolio

Credit risk is defined as the risk that a client is unwilling or unable to fulfill contractual obligations due to increased capital or operating costs. Credit risk may arise from the potential disruption of client operations stemming from environmental or social problems, and such risk is not trivial. For example, in a study of German banks, 10% of all credit losses were due to environmental risks.[vi] Practitioners and academics alike recognize that environmental and social risks can impact the credit risk of the loans that FIs provide.

> *"For us, one of the greatest benefits [of ESRM] is the reduction of the credit risk."*
>
> -Development Finance Institution

Despite the importance of credit risk driven by environmental and social factors, most academic and practitioner research on this topic focuses on borrower outcomes rather than the lender outcomes. For example, firms that receive loans from FIs that have ESRM practices in place exhibit positive abnormal stock returns.[vii] Similarly, there is extensive research on how environmental and social risk considerations improve the quality of equity portfolios.[viii] However, while findings on the general link between FIs' environmental and financial performance are widely available,[ix] research on the impact of environmental and social considerations on the health of an FI's loan portfolio is limited.

Recent research has found that integrating environmental issues into credit risk management improves credit risk prediction, prevents credit defaults and provides a financial benefit for the lender. In a study of 40 German banks and 180 loans, the inclusion of E&S criteria in the loan assessment process improved the classification of loan defaults by 7.7%.[x] More accurate assessment of credit risk improves loan portfolio quality. These findings are further bolstered by our online survey and interviews. Survey respondents are adamant about the importance of ESRM in mitigating credit risk, frequently citing "credit risk management" as the primary benefit to ESRM. One respondent noted that, "Emerging-market FIs with ESRM processes have better credit portfolios than other FIs, since the former conduct a more complete assessment of their credit risk than the latter by taking into account other factors that are not only financial ones."

Recent research has found that integrating environmental criteria into credit risk management improves credit risk prediction and prevents credit defaults.

Hypothesis C: ESRM leads to decreased reputational risks

Reputational risk – the risk of negative publicity from the actions of a client – is especially salient for FIs, which can be associated with each client to which they lend. Extensive case study evidence points to the impact of ESRM on reputational risk and establishes positive correlations between FIs' employment of ESRM processes and reputation.[xi] However, perhaps due to the difficulty of quantifying reputational risks, research has yet to establish a causal relationship between ESRM adoption and reputational risk reduction.

Nonetheless, there exists much evidence of the importance of reputational risks to banks and the increasing pressure they face in mitigating reputational risks. NGO campaigns and media scrutiny threaten lenders' reputations, as reflected in high-profile cases. For example, HSBC, UBS, BNP, Commerzbank and Bank of Taiwan all faced significant NGO and media backlash as a result of their involvement in lending to palm oil producers.[xii]

"ESRM processes can help FIs avoid becoming involved in transactions with unmitigated reputational risks, or assist them in assessing and mitigating risks where this is possible."
– International Finance Institution

Similarly, the World Wildlife Federation and Friends of the Earth directly criticized Barclays, Citigroup and other banks for their involvement in the financing of a Central Asian oil pipeline that cut through national wetlands and displaced local populations, while ABN AMRO attracted significant public criticism for financing mining operations in Papua New Guinea. Furthermore, coordinated global networks of NGOs such as BankTrack (comprising more than 40 organizations) have mobilized around environmental and social protection principles such as the *Collevecchio Declaration,*[xiii][xiv] heightening the reputational risks for FIs that fall outside the bounds of these declarations.

International financial institutions appear to view reputational risk as an important component of their risk management approach. In some surveys of FIs, reputational risk is seen as the primary driver for engaging in ESRM. For example, in a survey of 55 banks in the United Kingdom, 90% were most concerned about the impact that environmental risks had on their reputations, versus other performance outcomes such as borrower default rates and the recovery value of collateral.[xv] Survey and interview findings confirmed the importance of decreasing reputational risk through ESRM practices. One respondent from a Latin American IFI noted: “ESRM processes mitigate any eventual reputational risk that the financing of a big project can bring to FIs.”

However, the strong emphasis placed on reputational risk by IFIs may not carry much weight with emerging-market FIs. Many survey and interview respondents spoke about the importance of using ESRM to mitigate reputational risk in their own institutions, but expressed doubt about the importance of reputational risk to emerging-market FIs. A DFI remarked that, “Local reputation is not such a factor. In some advanced countries, maybe reputation with a regulator.” Respondents noted that many emerging-market FIs operate in a local market where media scrutiny or international NGO backlash may not be central. For small and medium-sized FIs especially, there may be limited concern around how to reduce reputational risks through ESRM processes. Survey respondents noted that in developing a business case to encourage ESRM adoption, the impact of ESRM on decreasing reputational risks may not resonate with local emerging-market FIs.

> *“I would say reputation is not the big issue – bank might not that be well known…. reputation doesn’t resound with smaller, local banks.”*
>
> – International Financial Institution

Hypothesis D: ESRM leads to decreased liability risks

Liability risk is the risk stemming from a client's legal obligations, such as the cost of cleaning-up contaminated land that was held as collateral. Since the early 1990s, a growing number of lawsuits have been brought against FIs for environmental liabilities stemming from the behavior of these firms' clients.[xvi] For example, in a study by the American Bankers Association in the 1990s, 14% of all commercial banks in the United States had incurred clean-up costs on property held as security.[xvii] Many of the case studies of FIs and liability risks focus on the United States and Europe, where regulations allowing for FI liability are firmly established. Again, as with the prior hypotheses, it is difficult to establish a strong causal link between the adoption of ESRM and decreased liability risk. However, existing research together with our survey findings indicate that ESRM is seen as an important way of mitigating liability risks and reducing the probability of significant financial losses due to legal obligations and contaminated collateral.

> 14% all commercial banks in the United States had incurred clean-up costs on property held as security.

Regulations that hold FIs liable for borrowers' environmental violations are evolving. The Fleet Factor case in the early 1990s is illustrative: Fleet was judged not to have gone far enough in shaping its client's environmental policies and thus was held liable for the client's polluting actions.[xviii] By extending the liability of clean-up and other costs to lenders, the case highlighted the perils of lending without considering environmental risk and bolstered the case for FIs to be proactive in addressing such risk with borrowers

FIs are responding accordingly. Many banks have created exclusion lists to preclude environmentally risky lending to repeat offenders, or have priced liability risk into the loan price. In a study of all commercial banks in the United States, 46% had discontinued the extension of credit to extremely environmentally sensitive sectors, such as the chemical and agricultural sectors.[xix] In another study of 58 loans to agribusinesses, interest rate risk premiums were charged on loans to environmentally risky agribusinesses.[xx] FIs recognize the financial risk that environmental and social liabilities create for them, and many cite the avoidance of environmental liabilities in collateral property as a key reason for incorporating environmental criteria into lending decisions.[xxi]

According to our survey respondents, for emerging-market FIs liability risk is a growing concern, especially as national regulations and environmental protocols become more stringent. Respondents saw strong value in emphasizing the liability risks that may result from contaminated collateral and other borrower actions. A Latin American IFI noted:

“The number one environment risk is contaminated land – [it] may be a boring subject but that’s where the biggest risk comes. In emerging markets this subject is growing. This subject may not be jungle biodiversity – but that yes, if you’re going to lend to a factory or real estate, these are the major issues for the medium sized banks. That is closer to their bread and butter.”

CHAPTER TWO: ESRM AS A SOURCE OF MARKET OPPORTUNITIES

Hypotheses in this chapter focus on how the integration of ESRM into an FI's operations can create competitive opportunities for the FI. Benefits may include preferential loan terms from an FI's lender, opportunities for strategic partnerships with IFIs and DFIs, enhanced reputation and awareness of the FI, and a competitive advantage in the local market. The literature review suggested that opportunities arising from ESRM are less apparent than risk mitigation potential from ESRM. Surveys asking banks about their motivations behind ESRM typically failed to explore the potential opportunities that might arise from this practice. Consistent with this view, a survey of 57 UK banks found that the environment is more likely to be viewed as threat than as an opportunity for profitable lending business, and that the primary basis for incorporating environmental considerations into bank lending decisions is risk management.[xxii]

Yet, our survey and interviews indicated found that IFIs, DFIs, and other financial entities consider ESRM to be an important source of opportunity and that, done well, ESRM may create a competitive advantage. At the same time, respondents also noted the mismatch between the opportunities that ESRM may actually create and the disadvantages that emerging-market FIs perceive to stem from the adoption of ESRM. Correcting this perception is a component of the business case for ESRM.

Hypothesis E: ESRM leads to increased possibilities and improved conditions for partnerships and funding opportunities with DFIs and international FIs

Findings from our online survey and interviews highlighted the partnership and funding opportunities that can result from both an emerging-market FI's current ESRM processes and an emerging-market FI's willingness and desire to develop ESRM processes. Respondents emphasized the importance of openness and a shared set of values towards environmental and social issues when partnering with and funding emerging-market FIs. Many respondents noted that ESRM was not a prerequisite when choosing an FI partner or evaluating an FI borrower, but that the willingness of the partner or borrower to implement or improve their ESRM was of utmost importance. One DFI noted that, "It's not a condition to work with a co-financier who has an ESRM system, we tend to be the lead lender. It's not a requirement that the partner has ESRM – though it's ideal." Respondents further noted that benefits such as preferential loan pricing,

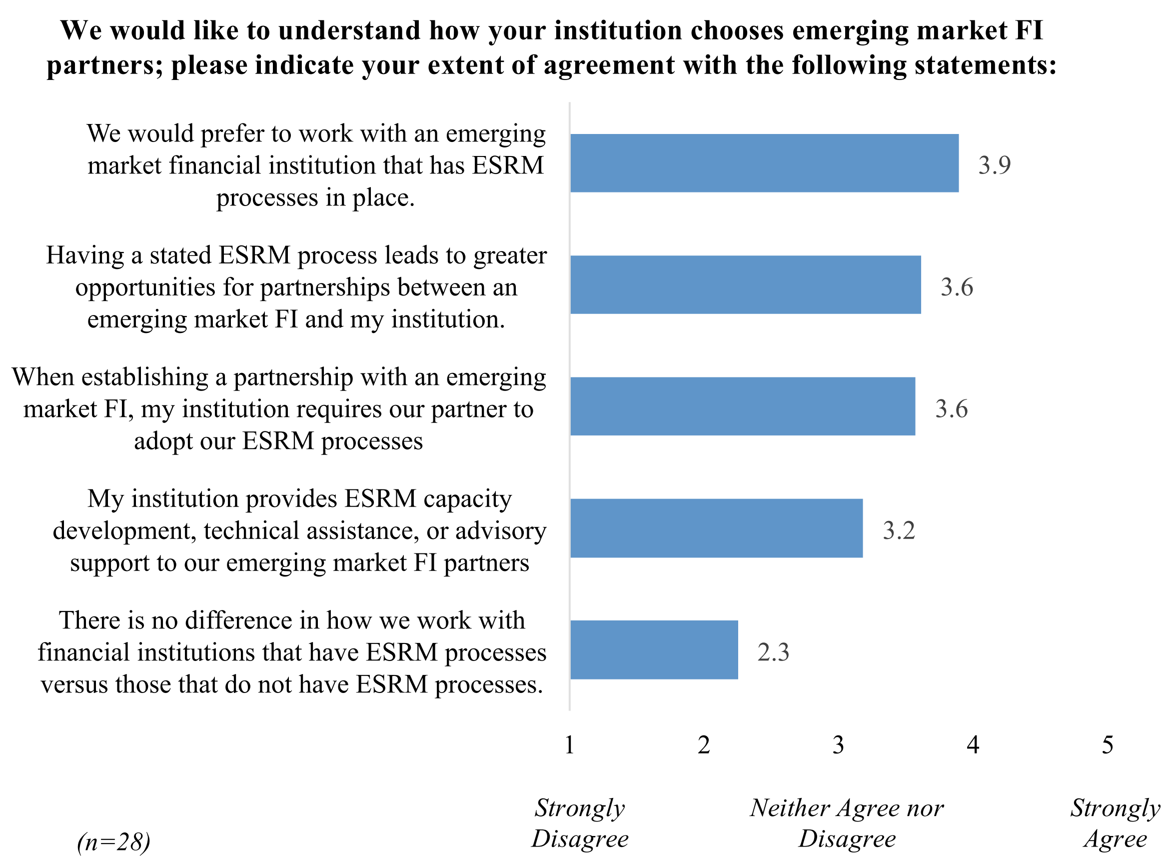
> *"Partners with ESRM processes in place are more credible. Working with FI partners that have strong ESRM processes in place is one of our key criteria."*
>
> – Insurance Institution

technical and advisory support, smoother and faster transactions, and introductions to other business opportunities all accrued because of ESRM implementation in emerging-market FIs. As noted by a respondent from an Asian FI, deal-making becomes much easier when other lenders have an ESRM policy in place.

Academic and practitioner-oriented studies in this area are limited. Case studies developed by the UNEFPI describe how the presence of an ESRM system led Bulbank of Bulgaria and the Sialius Bankas of Lithuania to develop successful partnerships with the European Bank of Reconstruction and Development (EBRD), the European Investment Bank (EIB), and the Nordic Investment Bank.[xxiii] Despite the lack of causal evidence linking ESRM to partnerships and funding opportunities, the majority of our survey and interview respondents agreed that ESRM processes promote the formation and smooth operation of partnerships and funding relationships.

Respondents to our survey indicated both a proclivity towards partners who have ESRM processes in place, as well as agreement that stated ESRM processes lead to greater opportunities for partnerships. A majority communicated that they had capacity development, technical assistance, or advisory support for partnering EMFIs.

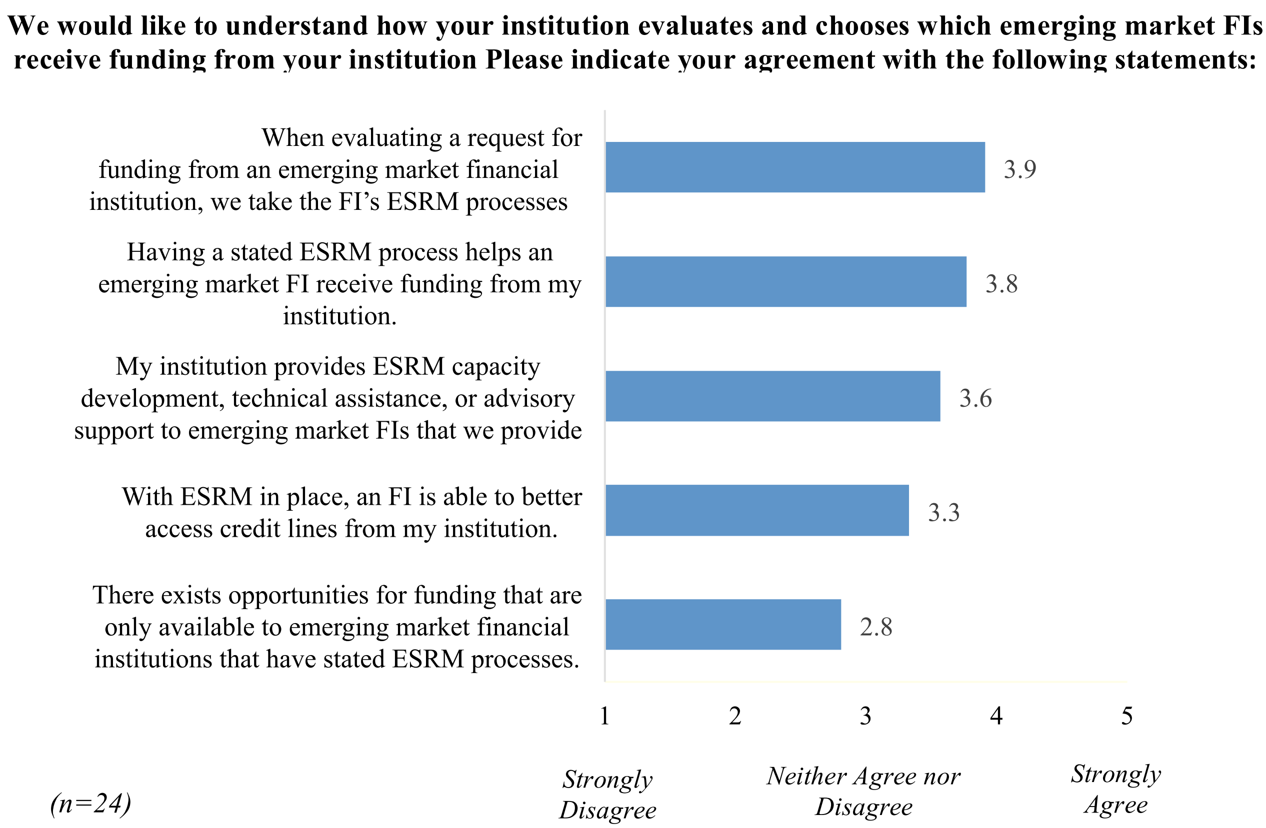
Figure 5 – How emerging-market FI partners are chosen



Our survey results were further supported by interview findings. Interviewees spoke of their preference for partners who have ESRM processes in place. Interestingly, this preference seemed to be driven not by the compatibility of the partners' ESRM processes, but rather the signal that ESRM provided about the emerging-market FI partners. Emerging-market FIs with ESRM processes in place were seen to have shared values and a shared approach to environmental and social issues. Respondents noted that partners with ESRM are "more credible," that good ESRM "is an indicator for good overall management," and that these partnerships "help with the reputational aspects to our own shareholders." One respondent noted that, "having a partner with ESRM allows us to find some type of common ground with end-clients as we are able, in theory, to relay the same expectations to the clients."

A similar approach characterized decisions about whether to fund emerging-market FIs. When evaluating an emerging-market FI as a borrower or client, most respondents agreed that the FI's ESRM processes are taken into account and that these processes help an FI receive funding, though again, are not a prerequisite to receiving funding.

Figure 6 – How emerging-market FI borrowers are chosen



Our interviews further supported our survey results, especially regarding the importance of emerging-market FI borrowers to put the ESRM system in place as a requirement for receiving funding from DFIs. Many DFIs do not require their clients to have ESRM when the investment decision is made, but require their clients to implement ESRM as part of the loan terms. A decision-maker at a European DFI noted:

> "It's important for us that every client has to have the process in place, that every bank signs with our contract to develop ESRM. We don't require a client to have the system in place when we invest. We see our role in supporting clients on our way to develop and implement. What is more important for us is a willingness to invest in new risk management systems and invest in personnel resources."

IFIs, DFIs, insurance institutions and other financial entities express concern over whether their partners and clients have ESRM policies in place. For DFIs, ESRM in partners and clients is not a prerequisite to funding, but often a requirement once funding is disbursed. For IFIs, the practice of ESRM by emerging-market partners and clients sends a strong signal of the institution's management capability, capacity to think through a range of risks, and overall concern for environmental and social issues.

Hypothesis F: ESRM leads to an increase in "green" lending and investments

Academic research and selected practitioner-oriented studies make a strong theoretical case in support of the hypothesis that ESRM leads to an increase in "green" lending and investments. FIs' consideration of environmental issues during the lending process may provide green investment opportunities when, for example, a borrower recognizes its environmental responsibility and seeks to finance the purchase of capital equipment for pollution abatement.[xxiv] Even though FIs' consideration of ESRM issues during the lending process may help identify green business opportunities, research shows that few banks may actually do this.[xxv]

> *"Having established ESRM processes would help justify an FI as a 'green' institution, which would aid in the issuance of debt instruments such as green bonds. Having these processes in hand in advance would add credibility to the FI's being able to provide credibility to investors that the instrument is supporting green business."*
>
> – Development Finance Institution

Goldman Sachs has developed ESG frameworks to highlight sustainable investment winners based on a 2007 sustainability report it published. Société Générale, in a 2013 report on ESG ratings, highlights that ESG-focused financial companies are increasingly expanding their investments in "green" products and services promoting sustainable innovations. Despite the limited research on this topic, green lending and investment appears to be a significant opportunity for emerging-market FIs. A DFI respondent remarked that, "good ESRM can help generate business opportunities for green and social impact financing." Another interview respondent from a Latin American FI noted:

> "Green opportunities for the banking industries are the most promising, but the most difficult frontier. There are opportunities to finance corrections and all kinds of things, however, how do you detect these things. I'm amazed at how often people in the commercial area miss this…'we need to build a new treatment station' – that's an opportunity right there. It's a difficult mindset to get into in terms of looking to these things. You have to organize people in a different way."

Given the strong potential opportunity but limited research, this hypothesis should remain a priority for future study.

Hypothesis G: ESRM leads to an improved reputation or brand value

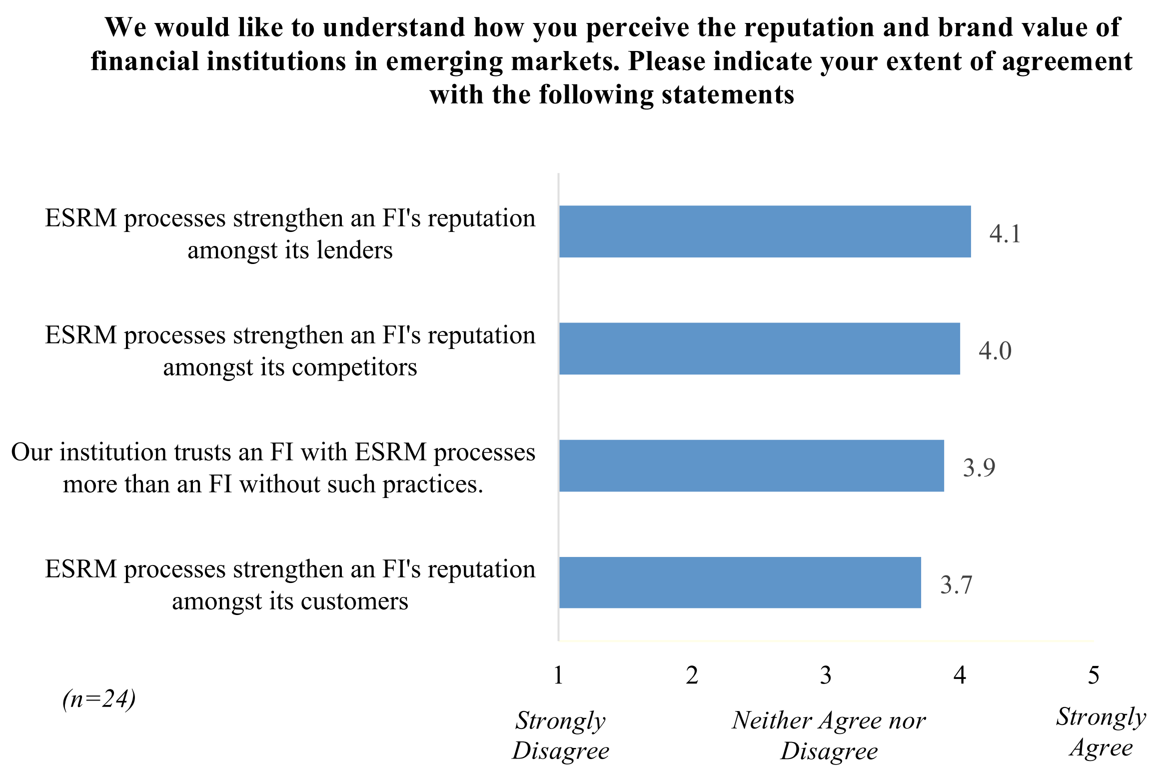
Case study literature and public opinion surveys indicate an increasing recognition of reputation and brand value among FIs. Many banks that undertake strong environmental sustainability work in general are rewarded with public recognition, inclusion on sustainability indices, and promotion from partners. For example, South Africa's Nedbank Group has made sustainability a core part of its strategy and has won various awards for its sustainability work, which includes inclusion in the Dow Jones Sustainability Index and wining the most "Socially Responsible Bank of the Year Award" at the 2014 African Bankers Awards. Other banks such as Santander, Itaú, BAC International Bank, Garanti Bank, and Mizuho have similarly been recognized on international lists, resulting in increased visibility with corporate clients, consumers, and competitors. Furthermore, in a study of 12 Portuguese banks, the level of disclosure of corporate social responsibility practices correlated strongly with greater public visibility of the bank.[xxvi]

> *"The public in some countries doesn't understand the risk management part – ESRM doesn't lend itself well for positioning in the market."*
>
> – Development Finance Institution

Nonetheless, many of the case studies as well as the criteria for inclusion in sustainability indices focus on banks' general sustainability practices rather than ESRM policies specifically, despite evidence that the inclusion of environmental risk in bank lending processes matters to the public at large.[xxvii] A limited amount of research has sought to directly link ESRM to enhanced reputation or brand image. For example, a study of the Cooperative Bank in the UK found that the bank saw a 15% to 18% increase in pre-tax profits in the year 2000 due to enhanced brand and reputation following adoption of ESRM.[xxviii] Similarly, a recent brand study by Unibanco showed a seven-fold improvement in the bank's brand recognition just 90 days after adoption of the Equator Principles.[xxix]

Respondents to our online survey agreed that ESRM can enhance an FI's brand image and reputation amongst its various stakeholders. ESRM's reputation effects seem to be most salient with other banks – whether those other banks are competitors or lenders.

Figure 7 - Connecting ESRM to reputation or brand value



Interview responses further supported the notion that ESRM strengthens an FI's reputation with lenders and other financial institutions. Respondents noted that ESRM brings reputational benefits to an emerging-market FI but that those reputational benefits are most noticeable to DFIs, IFIs, and international investors such as pension funds. A survey respondent noted that, "Effective ESRM processes allow FIs – by building a reputation as a socially and environmentally responsible business – to maximize brand recognition, expand customer base and enhance competitive advantage."

As discussed earlier in the report, there remains a belief that emerging-market FIs are less likely to consider or be concerned with the reputational risks or reputational benefits that may accrue because of ESRM. For local banks, reputation may not be seen as an important factor with consumers or corporate clients, and inclusion on international indices or recognition with sustainability awards may be out of reach. Again, reputational risks and opportunities may resonate less with small and medium-sized local banks.

> *"ESRM does bring reputational benefits but these are mostly visible to other financial institutions that could provide funding and have ESRM as a requisite. Emerging-market FIs could maximize the benefits by making it more visible at the customer level."*
>
> – Development Finance Institution

Hypothesis H: ESRM leads to improved ratings of FIs

A limited amount of research considers the hypothesis that ESRM leads to improved ratings of FIs. Though there is some research on ESG policies and corporate credit ratings, it does not establish causal relationships.

A study of 582 banks in the US from 1995-2006 shows a positive correlation between FIs' environmental performance and their borrowers' credit ratings, and this correlation increased over time.[xxx] Yet, other research on UK banks finds that recognition of the materiality of environmental risk in banks is uncommon among sell-side analysts who cover these banks. Sell-side analysts appear to ignore environmental narratives and regard the disclosures as perfunctory when analyzing an FI.[xxxi]

This hypothesis is a good candidate for further observation and research.

Hypothesis I: FIs that adopt ESRM have competitive advantage in the markets in which they operate

> *"The competitive disadvantage [of ESRM] is a short-term view, but it's something we hear about…. It's a bit how you see it – if you are the only FI applying E&S standards and others are not, you may lose business. This is something which is there. Definitely relevant."*
>
> – Development Finance Institution

Findings on the hypothesis that FIs that adopt ESRM have competitive advantage in the markets in which they operate are mixed. On one hand, past research and survey respondents wholly agree that ESRM provides a competitive advantage to those banks that successfully adopt and implement it. This competitive advantage comes in the form of greater access to partners and clients, preferential pricing, and new business opportunities. However, many respondents spoke of the perceived competitive disadvantage of ESRM that many emerging-market FIs believe to be case. In some geographies where adoption across FIs is not widespread, emerging-market FIs believe that use of ESRM will slow down their loan processes and preclude them from working with certain local clients. Resolving this tension appears to be critical in successful adoption of ESRM across emerging markets.

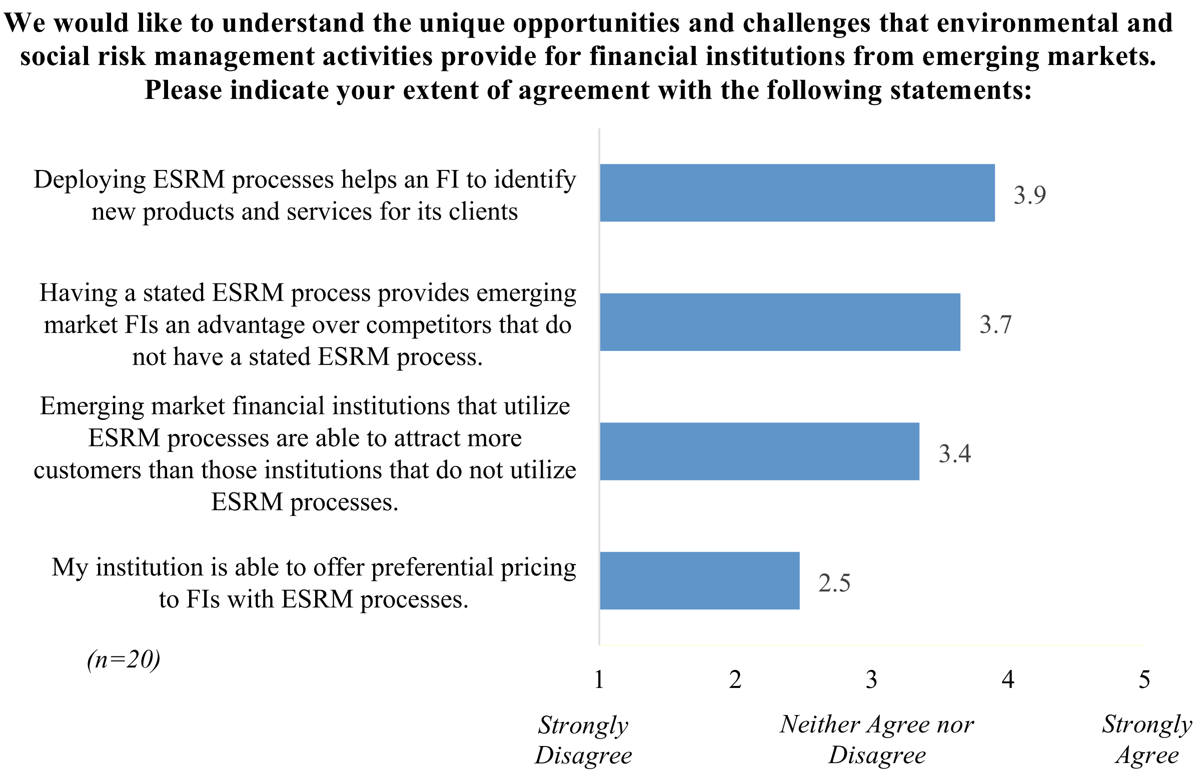
Researchers have documented the positive relationship between corporate financial performance and, respectively, more robust corporate governance, greater corporate social responsibility, and a heightened focus on sustainability. Financial institutions with superior corporate social responsibility and corporate social disclosure practices have been show to have a higher return on assets, lower loan losses,[xxxii] faster asset growth,[xxxiii] and faster corporate growth and overall financial performance.[xxxiv] These findings extend to emerging markets: in a study of 38 listed banking companies in India, size and assets are positively related to the amount of voluntary corporate social disclosure.[xxxv] One recent study found that a bank that is more socially responsible is perceived as fairer with regard to pricing policies; therefore, customers are less sensitive to price dynamics, allowing the bank to impose a ''price premium'' reflecting a competitive advantage.[xxxvi]

The link between ESRM and competitive advantages is less firmly established, though recent research has begun to explore this relationship. FIs' adoption of the Equator Principles was associated with increased market share and fewer NGO attacks.[xxxvii] A study of 3,580 loans showed that banks with superior monitoring ability are able to charge a higher yield spread because of the benefits to the borrower associated with superior monitoring; and to lend for longer maturities because the banks are better able to reduce "moral hazard."[xxxviii] [xxxix] Furthermore, banks with stronger monitoring abilities add more value (as measured by positive abnormal stock market returns) to their borrowers than do banks with weaker monitoring abilities.[xl]

Based on our survey and interview findings, the competitive advantage accruing to FIs from ESRM stems from stronger positioning in the marketplace, preferential pricing and other financial benefits, technical assistance, capability building, advisory support, and access to other intangibles such as introductions to new partners or clients. Survey results also indicate that respondents wholly agree that deploying ESRM processes helps FIs identify new products and services for their clients, better positioning them to compete in their local markets.

> *"We do prioritize those with ESRM systems as clients - in terms of the attention they receive from us, making connections, putting them in touch with other clients, all the other intangibles, they do receive preferential treatment."*
>
> \- Development Finance Institution

Figure 8 - Competitive advantages afforded by ESRM



Many DFIs offer preferential pricing for clients with ESRM processes in place. For example, FMO offers margin reductions between 15-25 basis points on loans to FIs who successfully implement ESRM. Other DFIs provide extensive consulting services and technical support to those FIs implementing ESRM. Furthermore, investments from institutional investors, like international pension funds, may require ESRM.

"We have offered reductions in interest rates to clients upon development and launch of ESMS, which means that they can earn back on the saved interest costs…this gives much more ownership to the clients, gets the attention of the CFO, CEO, and the business case becomes much more real."

- Development Finance Institution

Our survey and interviews highlighted that the perceived competitive advantage of ESRM may be country and region specific. For example, in Latin America – especially Brazil – FIs are using ESRM to differentiate themselves in a competitive market, in turn prompting other FIs to follow suit so as not to be left out. Furthermore, some emerging-market FIs are using ESRM to differentiate themselves in the international marketplace, especially to attract IFI and DFI funding (as discussed in prior hypotheses). A Latin American IFI noted:

> "Brazil is in a culture where my profession [ESRM manager] already exists in several other banks. To give you the case of Brazil – there are at least 40 people who look at environmental risk. That excludes other people who look at sustainability departments. …Very few banks here say that it is unimportant. All of the major banks and medium sized banks consider the topic important."

In other regions, however, ESRM is perceived as a potential disadvantage. Respondents repeatedly noted that emerging-market FIs, especially smaller ones, are concerned that adoption of ESRM will prevent them from taking on risky clients and that they will in turn lose business to competitors without ESRM. One respondent noted that in Asia, FIs may fear that they will be at a competitive disadvantage if they are the first ones to adopt ESRM in their local markets; and that the reputational benefits of adopting ESRM are smaller than the costs of adoption. Similarly, a DFI noted that one of the challenges it faced in implementing ESRM in banks in Nigeria was the concern by the FIs that they would lose clients if they were the only bank with those policies in place.

This perceived competitive disadvantage may arise not only because of the inability to lend to certain clients, but also because the ESRM process may slow down the processing of loans. One DFI remarked:

> "Another big worry is slowing down the process – key competitive disadvantage – hard to get financing from one of those banks and it takes a long time. If they do it properly it takes a longer time. Banks get around it by not being terribly strict – accepting that

> clients may not have an environmental license…. Allows them to advance with the process even though it isn't where it should be."

Emerging-market FIs exhibit a strong concern that they may lose business to domestic and international competitors if they are the only FI to practice ESRM locally. Given this disjuncture between the potential competitive advantages of ESRM and emerging-market FIs' perceptions of disadvantage, this hypothesis is a good candidate for further observation and research.

Hypothesis J: ESRM leads to a decrease in the environmental footprint of FIs' portfolio and operations

There have been extensive discussions about the pressure that FIs may exert on the behavior of borrowers. Furthermore, case studies on improvements to FI operations through environmental and social considerations show a positive correlation between the two but are insufficient to establish causality.

Banks who subscribe to the Equator Principles can only lend to those projects that meet the principles. Academic research develops the link between the Equator Principles and improved operation, as screening and monitoring a project can impact the social responsible behavior of the firm, and in turn can affect the actual operation of the firm financed under the Equator Principles.[xli] This adoption of Equator Principles by lenders and borrowers creates a virtuous cycle in project finance where projects get designed around these principles.[xlii] FI influence grows on project design when the borrower is engaged in an early stage of business development. Research from other areas of finance support the potential benefits to green operations. For example, a study of 72 firms in German speaking countries showed that for equity investments, firms that were invested in by environmentally friendly funds (ERFs) have better environmental management practices overall.[xliii] Interestingly, the good environmental performance of such firms did not seem to be driven by the firms' desire to be invested in by an ERF, but rather by other reasons, such as an environmental management system within the firm.

CHAPTER THREE: LOOKING AHEAD – ESRM IN EMERGING-MARKET FIS

Adoption Challenges for Emerging-market FIs

Emerging-market FIs face significant hurdles in effectively adopting and implementing ESRM. The perceived competitive disadvantage of ESRM appears to be the greatest obstacle to adoption by emerging-market FIs. Many such firms are unable to see the financial payoffs given their perception that ESRM is time consuming and could cost the FI lucrative clients and customers. This sentiment, however, is not universal and varies by region. Latin America, especially Brazil, is seen as a leader in the adoption of ESRM in local and international FIs. FIs in this region note the competitive advantage of ESRM and the strong desire of local banks to develop these policies. Other regions, such as Asia, are seen as behind the curve in ESRM adoption, creating a feeling of competitive disadvantage for those banks that do adopt such policies. One respondent noted that, "Countries like China, India, and Turkey that have significant challenges on environmental issues are falling behind the global competitive landscape in terms of ESRM. They are not part of the conversation."

Banks in certain regions are hesitant to be a "first mover" in adopting ESRM. It is these same regions that would benefit most from early adopters whose experience might assure other FIs about the net benefits of ESRM. Establishment of a causal relationship between ESRM adoption and improved financial performance – in the form of higher yields, better ratings, and greater profitability – might help to move such regions past the tipping point.

> *"The emerging market financial institutions feel that they would have a competitive disadvantage if they are the first ones to adopt. In Asia, the reputational advantages do not outweigh the financial disadvantages of adopting principles. Fear that it would be loss of business."*
>
> – International Finance Institution

> *"Certain clients try to brand as 'first bank to adopt Equator Principles' or 'first bank to establish a systematic approach'; this especially happens in Latin America - there's lots of competition… they want to be leaders, it's part of the strategy of branding, attracting clients and finance; it's more than just avoiding reputational risk."*
>
> – International Finance Institution

Given the strong concern that ESRM might create a competitive disadvantage in certain markets, many view local and national regulators as having a role to play in creating a level playing field by bringing all banks in their markets up to a minimum level of conformity. Many respondents strongly believed that the government and regulators were the missing piece to driving adoption in emerging-market FIs. One Asian IFI noted: "What [emerging-market financial institutions] really need is that it has to work top-down. They really want their regulators to put an ESRM framework in place… many banks are still waiting for regulators." Others saw the government's chief role not as regulative, but as supportive in driving adoption through positive reinforcement. One Latin American IFI noted: "What we need is for government to join that equation – we need the government to bring some positive and negative externality to make the difference. For example, a tax benefit for wind power plants."

> *"Right now I believe that what is stopping ESRM – they [FIs] don't want to be the first ones to adopt. They realize the importance, very close to implement, but don't want to be first. Need level playing field."*
>
> \- International Finance Institution

Interestingly, there were some interview respondents who believed that regulators and national policy got in the way of successful ESRM adoption and effective implementation in emerging markets. These respondents expressed a concern that national regulators and mandated international protocol create standards that are impossible for emerging-market FIs to achieve. Respondents noted that local banks may not be able to achieve international standards, but may still be active in utilizing sound ESRM systems. One respondent from an IFI noted that smaller, local banks may not need as complex an ESRM system as a larger, international bank that undertakes project finance and other complicated deals. An insurance institution remarked that, "Regulators are not rewarding us for [following the same regulations]. Good banks in emerging markets are being penalized indirectly for not following the same international standards as us - we are waiting because we have the same long-term business objectives." Similarly, an IFI noted that "International standards are far-fetched for any bank – local banks and compliance with local law is the starting point."

> *"Many local banks are only active in local country – don't feel like they need to adopt the international standards, only local country's standards."*
>
> – International Finance Institution

Our findings showed that some institutions believe that national regulations should be more stringent and made mandatory for all financial institutions; while others thought that national and especially international regulations were impractical and potentially harm effective ESRM adoption. These mixed findings point to the importance of a localized approach in developing a strategy to drive ESRM adoption across emerging markets.

Implementation Challenges for Emerging-market FIs

Based on our findings, we believe that the greatest challenge to adoption of ESRM by emerging-market FIs is the perceived competitive disadvantage that such believe ESRM would create. Convincing FIs of the financial and other benefits of ESRM will be a significant step in promoting adoption. However, many respondents noted other challenges that FIs face in successfully implementing ESRM. For those FIs that are wholly convinced of the benefits of ESRM, there still remain significant hurdles in developing a thorough, effective ESRM system. Respondents voiced the greatest concern around two sets of implementation challenges: (1) expertise and technical assistance, and (2) management commitment and buy-in.

> *"Why haven't ESRM systems been developed? … Basically it's training, it's money."*
>
> \- International Finance Institution

Despite strong technical and advisory support from DFIs in implementing ESRM, there remains a lack of local expertise in effective ESRM processes. Many respondents noted that once a DFI helps to set up an ESRM system, the emerging-market FI may struggle to find local technical consultants or other advisors to offer ongoing support. One DFI spoke about the significant cost that arose from flying in international experts to support emerging-market FIs and about the unsustainability of this model. Furthermore, FI employees tasked with managing ESRM processes may not have the necessary experience or technical knowledge to make the program successful. A DFI aptly summed up this challenge:

> *"The challenge is around who to reach out to for expertise – environmental and social experts – reach out for some due diligence… Not all local experts may be familiar with our institutions and our institution policies."*
>
> – Development Finance Institution

> "The second challenge to ESRM is really knowledge – once you have gone through awareness – it's how to build capacity of investment managers, who have the client interface, have the knowledge of ESRM to build the client... how can we help build that knowledge and capacity, essentially the ability of qualified external consultants to support the banks... build local external capacity to support the market. How do we build local consultants – most flown in by developed world so we have flight and accommodations from the developed world – doesn't help the goal of long-term sustainability."

Management commitment and senior-level buy-in are also seen as major stumbling blocks when it comes to ESRM implementation. Respondents from DFIs and IFIs spoke of the challenges of convincing corporate-level executives of the importance of ESRM, resulting in a lack of effort, resources, and commitment when attempting to implement ESRM processes. Furthermore, respondents noted that senior managers may not integrate ESRM into the FI's core business strategy, rendering the ESRM system ineffective. A lack of management commitment may also result in inadequate training and staffing for ESRM initiatives. A respondent from a DFI remarked, "The number one barrier to implementing ESRM is management commitment. It creates weak E&S personnel and non-qualified staff. Needs to be integrated into core businesses, and for a transformation from paper into a system."

Again, a robust business case outlining the costs and benefits of ESRM can help convince senior management of the financial and other benefits that would accrue through effective implementation. A respondent from a DFI noted the importance of communicating hard facts to senior members of FIs in order to drive adoption: "I would say CEO and CFOs are interested in seeing hard facts - ESRM will help to mitigate financial risks. The moral discussion does not help with CEOs – they are too far away from the investments."

BUILDING THE ESRM BUSINESS CASE : RECOMMENDATIONS FOR NEXT STEPS

Many of the challenges that surfaced in our research speak to the need for more granular data on the financial impact that adoption of ESRM has on a bank's operations and the means to implement change within a given FI. Thus, our recommended next steps focus on further research into the causal relationships between ESRM adoption and outcomes (as highlighted in the ten hypotheses) in order to address one of the key challenges of ESRM adoption by emerging-market FIs. Ideally, this would include contextual data on the historical context of each FI and the implementation process, including a set of ESRM intermediate outcomes to better guide the implementation of ESRM by future adopters.

Specifically, next steps would include conducting detailed case studies of four or five FIs to:

- Identify the costs and processes of developing an ESRM system
- Develop quantitative evidence of the impact that ESRM has on measures of financial performance
- Identify business opportunities and other benefits that may arise because of the development of ESRM processes
- Identify intermediate milestones and performance measures.

These objectives are in line with the challenges outlined in this report. A further breakdown of ESRM elements will help better correlate and ultimate establish some causal connections between ESRM adoption and outcomes.

Further research relies on the support of emerging-market FIs who will be the subject of the case studies. We believe that the FIs that partake in this study would significantly benefit from this collaboration, specifically by gaining a deeper understanding of the true costs and outcomes that result from their internal processes, as well as by receiving a customized benchmarking report comparing their performance to the anonymized results from the other subject FIs. They would also benefit from a greater understanding of the implementation challenges provide by the qualitative description of the process of adoption across peer institutions.

In turn, IFC and its constituents would greatly benefit from the additional insight and lessons that these case studies can provide around the successful adoption and diffusion of ESRM in emerging-market FIs. The "hard facts" will be a powerful lever of advocacy for change in client practices as well as in discussions with national regulatory authorities, industry associations, and other bodies about potential policy reforms and advocacy campaigns that could promote diffusion. In addition to the quantitative analysis, the qualitative review of implementation can help to guide technical advisory services not only on the structure of best practices, but also on the best means to move from the status quo for a given financial institution of a given size in a country with greater or weaker policies or norms closer to the frontier of best practice.

To achieve these goals for emerging-market financial institutions and for the IFC, we recommend that further research be conducted by a team with expertise in ESRM practices broadly as well as in financial institutions; the type of quantitative analysis that dominates the academic literature; the internal financial models that dominate discourse among top management teams and boards; and the organizational change processes that ultimately alter behavior among practitioners. In the absence of rigorous econometric analysis, the question of causality (i.e., are better managed banks adopting ESRM as well as a host of other reforms) will undermine the impact of the research and raise questions regarding its practical relevance. Absent the use of the same models for analysis of loan portfolio performance currently used by emerging-market FIs, the impact on top management teams and boards will be hamstrung by efforts to translate academic research into practically relevant insights. Absent familiarity with organizational change initiatives, even research and analysis that sways the top management and boards of emerging-market FIs may not influence loan officers, compliance teams and other employees.

Data Structure

During the case study process, we propose to gather the following FI data for the purpose of the quantitative analysis (all data will be confidential):

I. *FI Characteristics and Performance*
- FI Characteristics
    - Domestic and international Locations
    - Age
    - Quantity and Quality of Bank Staff (e.g., salary expense ratio)
    - Number of Shareholders
    - Stock exchange listing and presence on other indices
    - Number of branches
    - Bank ownership
    - Primary bank sectors
- FI Performance
    - Profitability (e.g., ROA, ROE, ROCE)
    - Portfolio at Risk (Non-performing loans; loan losses to total loans)
    - Net Profit
    - Credit rating
    - Financial Strength Ratings (e.g., Moody's Financial Strength Rating)

II. *Loan Characteristics and Performance*

- Loan Characteristics

    - Number of loans (e.g., number of outstanding loans; number of loans disbursed)
    - Size of loans (e.g., dollar amount of outstanding loans, dollar amount of loans disbursed)
    - Interest rate charged to borrowers
    - Type and use of collateral
    - Loan processing time (e.g., average loan processing time, loan processing time for different categories of E&S risk)
    - Loan sectors
- Loan Performance
    - Default vs. non-default loans
    - Loan maturity
    - Loan yield spread
    - Credit risk of borrowers and accuracy of forecasts thereof (i.e., how did forecast credit defaults for a given tier of borrowers compare to actual)

III. FI Environmental & Social Risk Management Characteristics and Intermediate Outcomes

- ESRM Processes
    - Steps of ESRM Process
    - Use of ESRM Process (e.g., internal management, policy and strategy)
    - Years ESRM Process in practice
    - Total length of ESRM Process (in months)
    - Total length to implement ESRM Process (in months)
    - Cost of Implementation of ESRM Process (e.g., cost of consultants; cost of staff training)
    - Operational costs of ESRM Process (e.g., headcount)
    - Motivations behind ESRM implementation
    - Structure of ESRM (e.g., risk categories)
    - Partners in ESRM Process
    - Local, regional or national ESRM requirements
- Environmental and Social Risk Intermediate Outcomes
    - Voluntary donations to community, civil society and other organizations
    - Publication of Sustainability Report
    - Certification by Environmental or Social standards group (e.g., listing in an environmentally responsible fund / other E&S brand recognition including presence in DJIA or Domini 400 Sustainable Index)
    - Signatory to Environmental or Social Convention (e.g., Equator Principles)
    - Critical and positive (social) media mentions
    - Legal claims, judgments and other (potential) liabilities incurred because of Environmental or Social Factors

    - Amount of credit advanced to high environmental risk sectors
    - Amount of credit advanced to green sectors

IV. National and Local Context

- History of ESRM in country / region
- Environmental or Social issues in country with impact on FIs
- Other FIs engaging in ESRM
- Legal and regulatory context of ESRM (including upcoming regulatory changes)
    - Presence of DFIs supporting ESRM in country
    - Presence and quantity of government support of ESRM
- Consumer demand for ESRM

In addition to gathering these quantitative data, we recommend undertaking structured interviews with multiple managers in each emerging-market FI to learn about the context in which the ESRM practices were adopted, as well as the process by which these practices were implemented,. Specific topics to be covered would include:

- Background and summary of FI
- Contextual characteristics of the financial sector and country (other FIs engaging in ESRM, environmental and social issues with substantial effects on FIs, etc.)
- Legal and regulatory context regarding ESRM
- Description of ESRM system of FI and changes therein over time
- Presentation of qualitative data supporting the quantitative business case
- Discussion of implementation challenges to the adoption of ESRM within the FI across various functions, classes of loans, geographies or groups of employees

Based on the combination of the rigorous analysis of the quantitative data and the contextual insights provides by the qualitative data, our recommendation is to develop a final report that would synthesize a practical "how-to" for other financial institutions considering the adoption or expansion of their ESRM practices. This analysis would take into account variation in the history of a given FI including its current scale and competitive position as well as variation in national financial sector and regulatory development. Finally, the guide would summarize key obstacles to implementation, offering some preliminary insight into how a given might FI might seek to overcome them. The final report would thus inform academic research on the business case for ESRM, the policy debate on the desirability of ESRM, the managerial debate on the business case for adoption and practical insight into how a given FI can achieve the benefits of ESRM given their current national context and managerial capacity.

ENDNOTES

[i] The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as "Superfund," is a United States federal law intended to clean up sites contaminated with hazardous substances as well as broadly define "pollutants or contaminants" (see www.epa.gov/superfund/)

[ii] See Coulson & Dixon (1995) for list of bank lawsuits exploring environmental liability; and Coulson & Dixon (1999) for more details on the Fleet Factor Bank lawsuit.

[iii] The Equator Principles is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making

[iv] Scholtens, Bert. "Corporate social responsibility in the international banking industry Journal of Business Ethics 86.2 (2009): 159-175.

[v] Numerous academic and practitioner surveys set out to test how important banks consider environmental and social risks to be. For example, in a study of 55 banks in the UK, 90% of respondents viewed the impact of environmental risks on their institution as being important (McKenzie & Wolf 2004).

[vi] Scholz RW, Weber O, Stünzi J, Ohlenroth W, Reuter A. 1995. Umweltrisiken systematisch erfassen [Systematically inventorying environmental risks]. *Schweizer Bank: Monatsmagazin für Führungskräfte aus Bank und Finanz* [*Swiss Bank: Magazine for Managers in Banks and Finance*] **10**(4): 45–47.

[vii] Coleman, Anthony DF, Neil Esho, and Ian G. Sharpe. "Does bank monitoring influence loan contract terms? Journal of Financial Services Research 30.2 (2006): 177-198.

[viii] Portfolios with better ESG ratings display substantially less downside risk of more than 200 basis points even if they have a substantially lower number of constituents. (Hoepner et al., 2011)

[ix] Research over more than a decade has shown positive correlations between financial institutions' environmental and financial performance. Financial performance metrics are focused on FI operational parameters such as ROE, cash flow and debt ratios (see Annandale et al., 2001; Dasgupta et al., 2002; Dowell et al., 2000; Klassen and McLaughlin, 1996; Nakao et al., 2007).

[x] Weber, Olaf, Roland W. Scholz, and Georg Michalik. "Incorporating sustainability criteria into credit risk management Business Strategy and the Environment 19.1 (2010): 39-50.

[xi] Coulson A. In press. How should banks govern the environment? Challenging the construction of action versus veto. Business Strategy and the Environment. http://dx.doi.org/10.1002/bse.584. Access date 17 November 2008.

[xii] Jeucken, M. (2001). Sustainable finance and banking: the financial sector and the future of the planet. London: Earthscan Publications Ltd.

[xiii] The Collevecchio Declaration calls on FIs to embrace six main principles that reflect civil society's expectations of the role and responsibilities of the financial services sector in fostering sustainability (Collevecchio Declaration: The role and responsibility of financial institutions).

[xiv]COLLEVECCHIO DECLARATION ON FINANCIAL INSTITUTIONS AND SUSTAINABILITY http://www.okobank.hu/doc/collevecchio_declaration.pdf (accessed October 10, 2014)

[xv] McKenzie, G., & Wolfe, S. (2004). The impact of environmental risk on the UK banking sector. Applied Financial Economics, 14(14), 1005-1016.

[xvi] Coulson A, Dixon R. 1995. Environmental risk and management strategy: the implications for financial institutions. International Journal of Bank Marketing 13(2): 22–29.

[xvii] Jeucken, M. (2001). Sustainable finance and banking: the financial sector and the future of the planet. London: Earthscan Publications Ltd.

[xviii] Coulson A, Monks V. 1999. Corporate environmental performance considerations within bank lending decisions. Eco-Management and Auditing 6: 1–10

[xix] Jeucken, M. (2001). Sustainable finance and banking: the financial sector and the future of the planet. London: Earthscan Publications Ltd.

[xx] Billiot MJ, Daughtrey ZW. 2001. Evaluating environmental liability through risk premiums charged on loans to agribusiness borrowers. Agribusiness 17(2): 273–297.

[xxi] In a survey of 57 banks in the UK, avoiding environmental liabilities and managing environmental risk emerged as two primary reasons for incorporating environmental criteria into lending decisions (Thompson, P. & Cowton, C., 2004

[xxii] Thompson, P. & Cowton, C. (2004). Bringing the environment into bank lending: implications for environmental reporting. The British Accounting Review, 36(2), 197-218.

[xxiii] UNEFPI, "Sustainability Management and Reporting: Benefits for Financial Institutions in Developing and Emerging Economies". (2005)

[xxiv] Coulson A, Monks V. 1999. Corporate environmental performance considerations within bank lending decisions. Eco-Management and Auditing 6: 1–10.

[xxv] In interviews with 12 UK banks, few respondents discussed attempts to capitalize on environmentally friendly companies and opportunities (Thompson 1998)

[xxvi] Branco, Manuel Castelo, and Lúcia Lima Rodrigues. "Social responsibility disclosure: a study of proxies for the public visibility of Portuguese banks The British Accounting Review 40.2 (2008): 161-181.

[xxvii] Mazahrih, Basman Jalal Saeed. "Incorporation of environmental issues into banks' lending decisions (2011).

[xxviii] UNEFPI, "Sustainability Management and Reporting: Benefits for Financial Institutions in Developing and Emerging Economies". (2005)

[xxix] ibid

[xxx] Bauer, Rob, and Daniel Hann. "Corporate environmental management and credit risk (2010).

[xxxi] Campbell, D., & Slack, R. (2011). Environmental disclosure and environmental risk: sceptical attitudes of UK sell-side bank analysts. The British Accounting Review, 43(1), 54-61.

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