LUMES

Lund University International Master's Programme in Environmental Science

SUSTAINABLE FINANCE:
An assessment of environmental risks and opportunities in Latin America

Alberto Pacheco Capella

Tel. +46-70-466-1593

Email: alberto.pacheco@unep.ch

Supervisor:

Tareq Emtairah, PhD Candidate

International Institute for Industrial Environmental Economics (IIIEE)

Email: tareq.emtairah@iiiee.lu.se

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Abstract

Financial institutions in developed countries are beginning to take environmental and social issues as an integrated part of their operations, providing the basic pillars for sustainable finance. Two elements are providing an internal drive for banks: environmental risk and the opportunities of the "green" market. There are also external pressures coming from stakeholders in the way of accountability and transparency, which creates fears of reputational risk. This being the case, the need to visualize how Latin American banks are internalizing these global issues paved the way for this research. The purpose of this thesis is to find an answer to what extent are Latin American Banks taking environmental risk into consideration and what are the incentives and barriers for them to do so. In order to reach an answer to this, interviews were carried out with Latin American bankers, United Nations Environment Programme Finance Initiatives and other stakeholders with the purpose to expose what is the current situation in terms of institutional framework and players of the financial system in the region. The research found that at the moment the majority of Latin American banks are not taking environmental risk into consideration into their credit screening process, and moreover, they lack clear visibility of the potential gains from the "green" market. The current situation as discussed in the paper is motivated lax legislation and institutions that supervise banking activities, because of lack of information and proper training. Possible solutions to this problem point out to a need to reform and enforce the institutional framework to assess issues such as the environment and society, only then can sustainable finance be promoted in the region.

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1. Introduction

Towards the end of the 1980s, environmental issues challenged and changed the attitudes and practices of many resource-based companies, which resulted in the incorporation of environmental considerations into every stage of a product's life cycle (Thompson, 1998). In recent years, the financial sector has experienced similar challenges and changes, due mainly to the recognition by stakeholders that "banks are inextricably linked by their lending and investment practices to commercial activity that degrades the natural environment." (Thompson, 1998). And secondly, the financial risks (e.g. the variability in returns to equity capital and cash flows (Willet 2000)) that these environment based risks might bring to the overall value of the lending portfolio.

In this sense, the change towards acknowledging environmental risk as a significant factor which can influence a bank's financial risk is being recognized by corporate leaders, as a challenge to be tackle to ensure continuity and minimize the risk of losses for the bank. In the same while, by acknowledging these risks, careful environmental considerations are more often being taken as an integral part of the credit screening process.

In 1993, the European Bank for Reconstructions and Development (EBRD), carried out an international survey which was set to provide information to what extent financial institutions were being exposed to environmental risks throughout the United States of America, Western Europe and Southeast Asia. The survey reached 56 financial institutions from 7 countries, and achieved primarily the following results:

- Over one third of the banks stated that they had experienced significant losses resulting directly or indirectly from environmental risks.
- The most common sources of loss were loans which fell in default, written off in preference to exercising rights over collateral security, which could have exposed lenders to the costs of undertaking remedial costs.

- Large numbers of financial institutions also reported losses arising from remedial works undertaken by the lenders after foreclosure and from loans which defaulted as a result of environmental upgrading legislation or costs of remedial works incurred by the borrower.
- Smaller but significant number of banks testified to reduced share values and dividend payments, resulting from environmental violations or costs incurred by customers, together with increased volatility of shares prices as a result of increased environmental risk across their equity portfolio.

A similar survey performed by the United Nations Environment Programme (UNEP) in 1994, Global Survey on Environmental Policies and Practices of the Financial Services Industry, identified similar trends with regards to environmental risk and exposure loss by many financial institutions.

The outcome of both studies opened discussions within the financial world and its stakeholders on the topic of, to which extend do environmental risk pose a serious threat and opportunity to financial institutions. The main result of these ongoing dialogues can be appreciated among others, in the introduction of more efficient environmental risk management (UNEP, 1998) and the development of new opportunities such as environment investment funds (Jeucken, 2001).

Likewise, external stakeholders (Government, NGOs, customers, shareholders, society, and media) are pressuring banks to become more sustainable towards social and environmental issues, when it comes to their credit lending. This change is also being powered by internal drives within banks themselves, arising through a need to establish their core objectives and identity (Jeucken, 2001), and in this path, becoming more cost-effective through internal adaptation to environmental issues, such as energy saving schemes and paper recycling, which have been prove to significantly reduce operational costs. Moreover, an increasingly important green market is taking forces, creating significant opportunities for investment.

A problem occurring is that this shift is taking force mainly by financial institutions operating in developed countries, and not as heavily in developing countries, particularly in Latin America, despite efforts to divulge this information by such entities such as UNEP Finance Initiatives (UNEP FI), Andean Development Corporation (CAF) and Brazilian Development Bank (BNDES), among others.

Thus, the need to perform a study to see how financial institutions in Latin America are coping with environmental risks and taking advantage of new opportunities paved the way for this investigation.

1.1. Problem Definition

Following this line of internal adjustments in banks to incorporate environmental aspects into their operations is the issue of environmental risk, because of its closeness to the overall performance outcome of the bank. In this area, strong efforts have been carried out in many banks, mainly by integrating successful environmental management into their operations. However, the observation made by the research is that, banks who are adapting to this new discipline are mainly coming from developed countries, with some exceptions in the developing world.

Thus, the main purpose of this investigation is to examine the Latin American Region, in order to assess the question:

To what extent Latin American Banks are taking environmental risk into consideration and what are incentives and barriers for them to do so?

In order to answer this question, it is necessary to explore the current environmental risk management situation in Latin America, to see if managers are taking these risks into consideration. Likewise, it is important to view the institutional framework (legislation, actors, regulators, etc.) of the financial system in the region to identify possible incentives and barriers to move towards sustainable finance.

1.2. Scope

The investigation has defined specific boundaries which are used to clearly define the target zone which seeks to be studied, and which is considered relevant to obtain optimal results.

Geographic: The research is performed in commercial and development banks which operate in Latin America, which includes banks with headquarters in other countries (e.g. US, Europe, Asia, etc.). However, as the universe of banks in Latin America is extensive, the scope has been reduced and limited to those who are signatories to the UNEP FI Statement by Financial Institutions on the Environment and Sustainable Development, which is a statement made by banks which commit to the integration of environmental considerations into all aspects of their operations. On the other hand, to ensure different perspectives on the problem of sustainable finance in the region, the investigation also interacted with stakeholders, such as NGOs and ECLAC (United Nations Economic Commission for Latin America and the Caribbean), based in Chile.

Time: The UNEP FI Statement by Financial Institutions on the Environment and Sustainable Development, was signed in May 1992, and revised in May 1997. The investigation will focused on the events and actions taken by these banks since the statement was revised in 1997. Thus, the investigation sets a time boundary on the last 5 years, which comprises the period 1997 - 2002.

1.3 Limitations

One of the main limitations of the investigation is related to the terms of confidentiality to which the interviews are carried out. The main reason for this limitation is related to the extent to which banks want their information in terms of internal operations to be accessed by peers. However this limitation was expected and did not affect the overall value of the research.

Another limitation to the investigation is the extensive number of banks operation in Latin America, thus a representative sample (defined in the geographic scope) had to be used due to time and financial constraints.

2. Methodology

The research has set a series of objectives to guide the way into understanding the current situation of Latin American banks when it comes to assessing environmental risk and capitalizing on the investment opportunities of green products.

2.1. Objectives

The main objectives of the investigation were founded on the need to learn and expand the issues related to environmental risk and investment opportunities in green products, by financial institutions in Latin America. Thus the objectives are as follows:

- To perform a regional investigation to measure to what extend is environmental risk being taken into consideration by Latin American banks in their operations.
- To describe if there is a current trend among managers Latin America to incorporate environmental issues into the credit screening process.
- Discuss the main limitations and opportunities in the integration of environmental considerations in the operations of Latin American banks.
- Identify how managers are capitalizing on potential opportunities of the “green” market,

2.2. Research Phases

The investigation was separated into three phases to allow an efficient strategy to fulfill the objectives established. Each phase is constituted by two sections or steps designed to bring more insight and to dig deeper into the problem identified and answer the primary question of this investigation.

A diagram of the research phases is presented below. These phases show the steps taken to fulfill the objectives set and the source of information used to fulfill them.

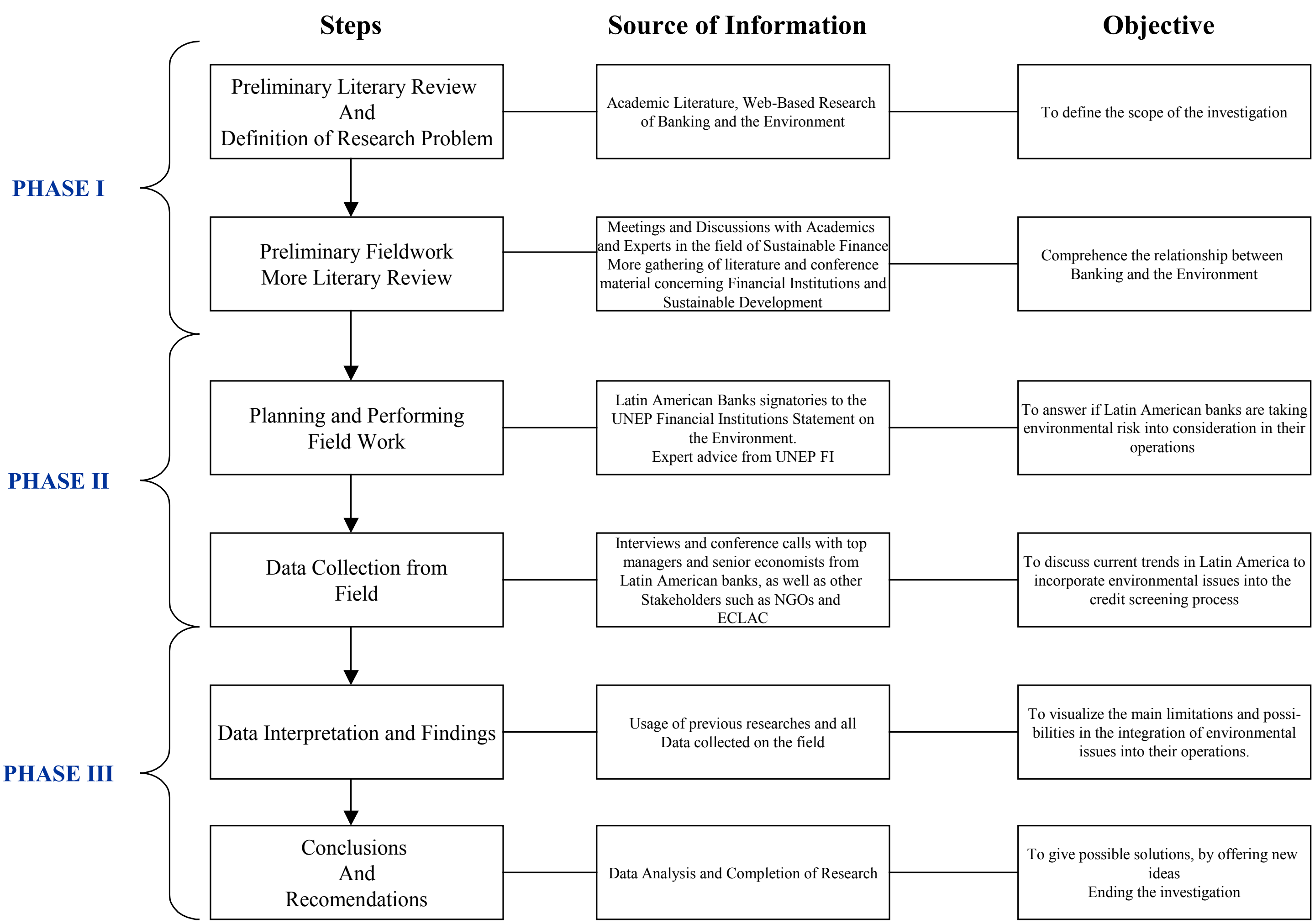

Figure 1: *Diagram of Research Phases*

PHASE I

2.2.1. Preliminary literary review

In order to understand the relationship of banking and the environment, it was necessary to recollect reading material from academic and non-academic sources. The investigation found comprehensive information about the subject but little reference to Latin America, where the scope of the research was determined. Web-Based literature was also consulted to obtain other sources of information from a variety of stakeholders.

2.2.2. Preliminary fieldwork and literary review

After initial literary review of the subject of banking and the environment, the investigation centered on the issue of environmental risk and opportunities of the new green market in Latin America, which was defined in the problem definition. More literature was gathered in the specified issues mainly in the archives of the UNEP Finance Initiatives in Geneva. Meetings and discussions with academics and experts in the field of sustainable finance were carried out at this step, in order to understand the close relationship between environmental risk and financial performance, under the increasingly liability effects that it encompasses. Researchers exploring this field in other parts of the world (e.g. North America and Africa) were also consulted in the UNEP offices in Geneva, in other to grasp the situation in other continents, with regards to this subject, under different institutional framework, which is believed to be a major factor into the integration of environmental issues in to banking.

PHASE II

2.2.3. Planning and performing fieldwork

The second phase of the investigation focused on taking the issues identified in the problem definition into the field. The purpose was to obtain more information, beside the already gathered literature, in other to understand in depth the dynamics of the banking system in Latin America with regards to the environment. Discussions were held with officials from the UNEP Finance Initiatives office in Geneva in order to set a strategy to tackle and obtain the information needed from the field e.g. Latin America to complete the research.

2.2.4. Data collection from the field

The information collected from the field consisted in answers by Latin American bankers with the propose of obtaining the needed information to learn more about the issues and players in the sector and how they interact with the environment. The information came from senior managers and senior economists from different commercial banks and development banks signatories of the UNEP FI Statement on the Environment. Also, information from stakeholder was extremely important to assess different views of the problem. In this sense, NGOs, ECLAC, UNEP FI staff and another senior manager from a Nordic country (with highly creditable Latin American expertise) supplied valuable information.

PHASE III

2.2.5. Data interpretation and findings

The third and final phase of the investigation consisted in the interpretation of all gathered data and its systematic processing in order to achieve the research's objective and thus its primary question: *To what extent Latin American Banks are taking environmental risk into consideration and what are incentives and barriers for them to do so?*, and secondly to seek and answer to the question of: *are they aware of the opportunities of the "green" market?*.

In the first round of findings, those related to the primary question of the research, from interviews with bankers in Latin America, it became clear that the institutional framework was to be looked at closer, due to the fact that regulatory bodies lack the information and the proactive ness to create a framework of regulations which can adjust to the current banking practices of the region, to which one banker stated "our (banking) reality is very different from that of Europe, where these (environmental) issues have been evolving for a period of time" (Executive from CAF).

The second round of findings, related to the opportunities of the "green" market, mixed signals in terms of importance and acceptance or even knowledge of this "green" market were found. Perhaps if managers were informed of the importance and size of this market, their interest will surely be much bigger. Mainly development banks are the financial institutions participating in this “green” market.

2.2.6. Conclusions and Recommendations

The investigation concluded with the interpretation of the all the findings which helped to answer the research question. Through these phases of uncovering the financial system in Latin America to visualize the atmosphere in terms of the environment, the research gives some recommendations into areas where attentions should be directed in order to reduce bank’s impact on the environment. These insights could pave the way into further researches.

3. Theoretical Framework

3.1 Environmental Risk

Environmental risk has been defined in many ways, mostly dependent on the area and scope to which the concept is being applied. For instance, Gilroy (1992), explains that in the context of global society, environmental risk is related to "hazards that exhibits scientific uncertainty, irreversibility, latency of effect, and high probability of a catastrophic outcome". However, this research centers on the perception that banks have of environmental risk, which is understood in terms of the "financial risks that may affect the present value of their loan portfolio" (Smith, 1994). It is necessary to state that as bank's lending principle remains centered upon financial risk management, environmental risk is considered primarily on this basis of risk management (Coulson, 1996).

Researched carried out by several authors (Thompson, 1998; UNEP Finance Initiatives, 2000; Magalhaes, 2001) have identified three major ways in which environmental risk can damage the final outcome of a bank's performance: direct, indirect and reputational.

Direct risk

Legislation differs from country to country, but in many cases countries adopt the "polluters pays" policy to pollution incidents. It is important, therefore, for a bank to avoid being placed in a position where it becomes directly responsible for the polluting actions of its customers. This can occur where a banks exercises operational control over a business, or in some cases, where a bank takes possession of a contaminated land held as security for a loan. In such cases, the bank may not only lose its original advance of the loan, but it may also be held liable and thus forced to meet substantial clean-up costs.

In the case of the United States, regulators increased their tools to recover cleanup costs from liable parties as far back as 1980 with the CERCLA Law. The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) specifies that parties responsible for cleanup costs following an environmental accident may include, among others, the current and past owners and operators of the facility. When a bank has been relatively closed involved in the supervision or monitoring of a firm's activities, it may be considered by the courts as an operator and therefore liable for cleaning up the damages (Boyer and Laffont, 1996). Similar examples of liability laws are Germany's Umwelthaftungsgedures, as well as other European countries' liability laws. In the case of Latin America, the research singled-out, through interviews with banking experts, that these liability laws are not in place in these countries. Clearly, there is the need by countries in this region to take into their legislations environmental liability, in line with Article 13 of the Rio Declaration:

> *"States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction."*

One example of a recorded case where a bank was held liable for cleanup costs was the case of the US vs. Fleet Factors Corporation in 1990-91, where the bank was found liable for cleanup costs on the basis that its participation in the financial management of the firm gave it an "ability to influence" the overall management of the firm, if the bank was not involved in the operations of the firm (Boyer et al, 1996). Many other examples in different countries where also found, proving that these risks could occur anywhere.

Indirect Risk

As countries tighten their environmental regulations and public interest groups grow, pressure increases on business to minimize their environmental impacts. This may increase companies' capital and operating costs in order to comply with environmental regulations, thus, causing serious effects on a company's cashflow and a borrower's ability to meet loan repayments. Where borrowers do not comply with environmental regulations, they face fines, liability for cleanup costs and even business closure. It is important, therefore, to assess environmental performance and risk management as part of the normal credit appraisal process.

Jeucken (2001) has identified six environmental aspects related to indirect risks, which could threaten a company's continuity, thus endangering the borrowing clients' repayment capacity:

- **Changing government requirements:** It entails the issuance of permits by the government to institutions which are established, expanded or changed. In this cases, a company's continuity could be hampered if the government denies the permit because the company's environmental impact does not fulfil existing or modified government requirements for a permit.

- **Changing market environment:** This is related to market evolution and competitive advantages from peers. For example, when a company's main competitors introduce more environmentally responsible products (and offer them at comparable or lower prices), added risks develop for a borrowing company that does not have such products itself. An example given is the case of the KBC Bank, which made provision of around EUR 44 million due to the BSE crisis in Europe, as consumers changed their consumption patterns of meat in double digits.

- **Changing external environmental conditions:** These issues are related to external environmental risk, outside the company's direct operations, for instance Climate Change. A recent study elaborated by the UNEP FI Climate Change Working Group (October 2002) states that "Climate Change posses a major risk to the global economy. The increasing frequency of severe climate events, coupled with social trends, has the potential to stress insurers, reinsurers and banks to the point of impaired viability or even insolvency. Worldwide economic losses due to natural disasters appear to be doubling every 10 years and, on current trends, annual losses will reach almost $150 billion in the next decade."

- **Private liability:** Private environmental liability is growing around the world, bringing risk to banks who finance companies with considerable environmental impacts, thus could be held liable for violating environmental permits or in the case of an accident.

- **Government sanctions:** A borrowing company can be confronted with various government sanctions if it does not comply with the required permits or with the relevant regulations. The most common instrument used by governments to sanction companies is a default fine, but could be strengthen by retracting the company's permits or by even issuing a closing order. The risks to both companies and bank in this matter are substantial.

- **Criminal prosecution:** In some cases the levels of environmental offence can be as severe to involve fines, imprisonment or closure of the company, which causes higher risk exposure to banks.

Reputational Risk

In this area banks are possibly must vulnerable. Specially considering recent problems facing the corporate world, in terms of accountability, transparency and credibility. This risk, in terms of environmental risk is based on increased expectations from bank's stakeholders (Fig. 2.) (e.g. government, regulators, NGOs, shareholders, customers, media, etc.), especially when providing financing to highly sensible environmental areas and developing countries. Failure to give careful consideration to environmental impacts arising from a borrower's operations can result in negative publicity for both the customer and the bank.

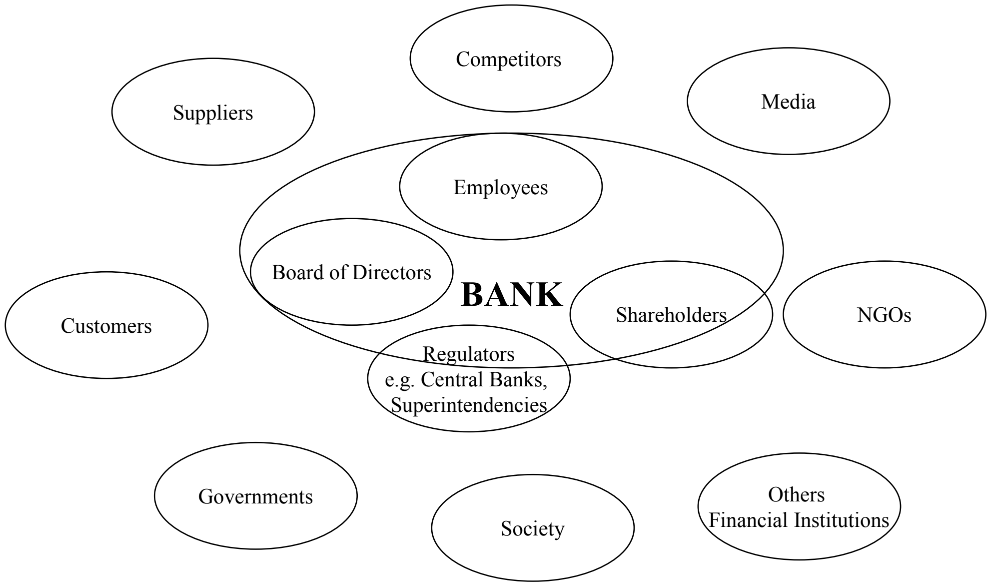

Figure 2. *Bank Stakeholders*
Source: Based on Jeucken (2001)

The main outcome of negative publicity for a bank will lead it to miss out on acquiring new clients or/and having its existing clients leave. In other words, reputational risk involves the bank's entire lending portfolio and not merely a specific loan or investment itself. Nowadays, NGOs are playing a more significant role in keeping an eye for project financing which could affect the environment.

This pressure has already been felt by some global banks such as ABN Amro, and its financing of a company which severely hampered the environment through mining operations. Likewise, Morgan Stanley Dean Witter and Credit Suisse were targeted for their involvement in the emissions of government bonds for the construction of the Three Gorges Dam in China. Many other examples could be offered illustrating the same point: banks have to pay more attention to the environmental impact of their loans and investments.

Jeucken (2001) states "if such campaigns receive widespread media attention and /or are taken seriously by the public, they can result in considerable damage for the bank. Such situations should be therefore prevented. This can only be done when a bank's environmental code is strictly observed. For this reason, simply monitoring or requiring an environmental permit, especially in developing countries, is not enough. A general rule should be that a company or project will have to be investigated in terms of its environmental aspects (especially in developing countries) before financing can be arranged". These developments are affecting the banking industry by their effects on the availability of credit, the cost of capital and the structure of banking contracts for firms in those industries, which are sources of environmental risk (Boyer et al, 1996).

3.2 Banking and the Environment

In order to understand the relationship of banks and the environment, the investigation briefly describes how the financial system functions in the global economy, in order to further along explain the link with the environment.

By nature, the basic role of a bank is to receive funds from customers by way of deposits and allocate these funds where there is a need or shortage of capital, this is called Financial Intermediation. However, through the evolution of financial services, the role has broaden to include among others, consumer credit, mortgage lending, leasing, treasury, securities trading and insurance. Some financial institutions have focused on one or more of these products, and there are some who have focused on offering the entire spectrum of financial services, these institutions receive the name of Universal Banks.

The importance of universal banks is that due to their size and ability to influence monetary markets, their impact on the environment could be significant due to their lending operations. In this sense, banks extend credit, which results in the creation of money. The creation of money and the allocation of this money among industries (in some cases very pollutant) ultimately influence the nature of economic growth (Jeucken, 2001). Taking this into account, one understands the power and influence banks have in the economic system, thus its ability to provide finance to industries with considerable environmental impact, and its importance in achieving sustainable development, as a UNEP director stated, "if financial institutions do not get involved in the stewardship of the environment, sustainable development will loose its power".

In the figure below (Fig.3), a representation of the dynamics of financial markets in sustainable development is presented.

Financial markets have enormous power as entities of money creation, which in turn influences economy. Economy is fuelled by inflows of money into different industries provided by banks and other financial institutions (financial markets), thus the development of certain industries is related to the amount of interest and investment that these institutions seek out in them. In this sense, financial markets have traditionally focused on highly profitable industries with a short term gains, leaving environmental and social issues aside. Likewise, the economy has the power to influence financial markets due to its interactions with society (e.g. politics, etc.) and the environment.

However, society limits the growth of financial markets through their power to invest or maintain aversion towards putting their money into the system. Also, there is a dual action between society and the economy as one shapes the actions of the other. Meaning that a shift in consumer preferences, for instance in green products, due to recognition of impacts on the environment, its directly channeled to the economy, which in turns brings this information to financial markets. Financial markets have the duty (if in their interest) to allocate fresh capital into these new ideas and products.

The environment on the other hand, can cause serious damages to financial markets, as natural disaster present valuable risk, which could cripple the global economy. Likewise, it can present clear opportunities in the forms of Clean Development Mechanism (CDM)[1] and Emissions Trading[2], and needs for improvement of technology, such as Cleaner Production (CP), which needs to be financed.

In the relation between economy and environment, some companies are shifting towards promoting eco-efficiency. But there are greater challenges ahead, like environmental economics, shadow pricing and ecological taxes. Likewise, the area of social and environment, environmental training and

[1] The Kyoto Protocol establishes the CDM to enable industrialized countries to finance emissions-avoiding projects in developing countries and receive credit for doing so.
[2] The Kyoto Protocol establishes a mechanism whereby Parties with emissions commitments may trade their emission allowances with other Parties. The aim is to improve the overall flexibility and economic efficiency of making emissions cuts.

awareness are being promoted, although challenges such as environmental justice, environmental refugees remain to be looked at. Finally economic and social issues are being looked at through Socially Responsible Investment, but business ethics, fair trade, among many other will need to be assessed in the near future.

In order to allow sustainable development to occur, corporations must not focus only on economic value added, but also on the environmental and social value added or destroyed. Financial Institutions and other corporations alike, most start using a framework for measuring and reporting corporate performance against economic, social and environmental parameters, in what is called the Triple Bottom Line (WBCSD, 2002).

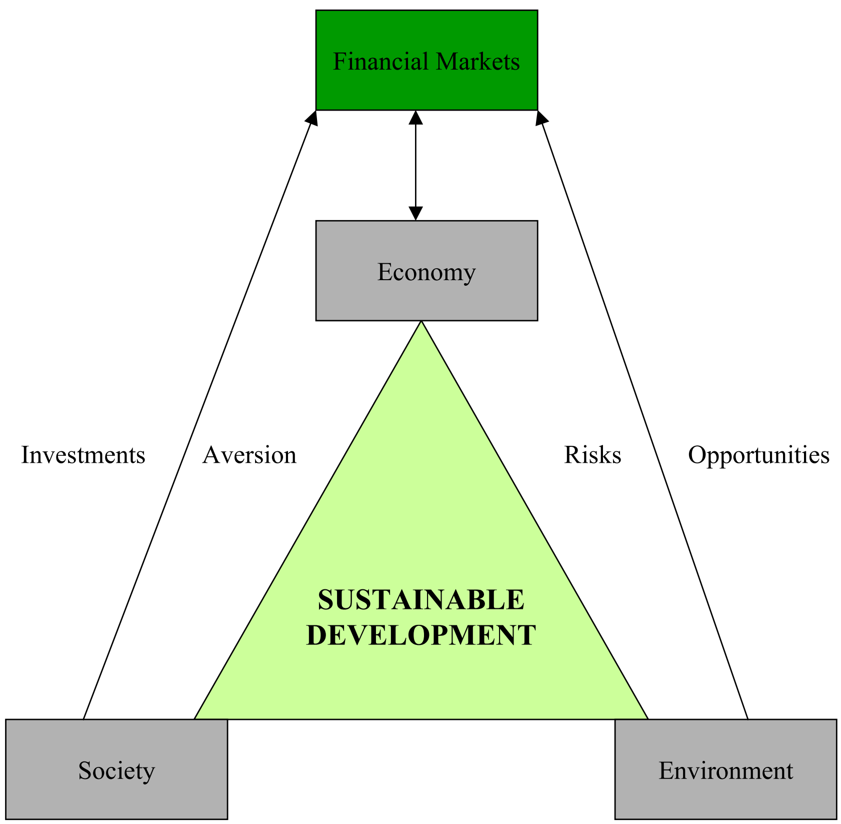

Figure 3. *Role of financial markets in Sustainable Development*

Many authors and institutions (Thompson, 1998; UNEP FI, 1999; Jeucken, 2001) have made a clear distinction on the ways a bank's operations impact the environment.

Internal Operations

Banking as an industry is considered to be a relatively clean sector. Compared to other industries, such as chemical, mining, oil and gas, pharmaceutical, printing and paper, textiles, among others (Thompson, 1998) the impacts of banking are considerably minimal, except if viewed in absolute terms, in which case the impact, due to its large size, could be significant.

Three major areas are looked at when elaborating on internal operations impacts on the environment. The first one is related to energy. The consumption of energy by a bank can be considered its main point of impact on the environment, of course, depending on the location (country) of the bank and their main source of energy, be it, renewable (hydro-power, etc.) or non-renewable (fossil fuel, etc.).

To mitigate this impact, many banks have established energy saving schemes (Jeucken, 2001) where the goal it is believed to reduce costs regardless of reducing impacts on the environment. This point is important to consider when assessing financial institutions, as management has traditionally focused on short term goals, such as reducing cost, instead of fully integrating these processes into their operations.

The second point of impact on the environment is related to water consumption, as the infrastructure is usually significant in size to need substantial water to keep its operations running. Finally, paper consumption. The consumption of paper within banks in highly significant, as the main process of information keeping and records are still being done with paper. This issue over the years is being modified as more and more technology plays a significant role in the data collection and storing. On the other hand, paper recycling schemes have proven to serve as pool of options to reduce cost related to this consumption.

Some examples of how internal operations impacts on the environment can be reduced and ultimately be more cost efficient are recorded in the annual reports of banks like UBS, Credit Suisse, Triodos Bank, among others.

In Latin America, it should be noted that some banks are more active than others. In this sense, these three points are merely a beginning in a series of actions to take more environmental conscience, as expressed by a manager, “This is only the homework to be done”.

External Operations

The external operations are related to the “core” business of banks: *Loans*. The denominated financial flows, matching the supply flow with the demand flow of financial resources (Lundgren and Catasus, 2000), which is believed to be where banks have significantly more impacts on the environment, in the ways their credit portfolio is diversified among industries which contributed to environmental degradation. Banks products themselves are not harmful to the environment, but the users of these products can have considerable impact on the environment. As sentenced by several authors (Sarokin and Schulkin, 1991; Smith 1994; Thompson, 1998), banks are inextricably linked by their lending and investment practices to commercial activity that degrades the natural environment.

These issues of “indirect” impact of banks on the environment is starting to be tackled mostly in the developed world, as risks of liability arise in legislations and from growing awareness of stakeholders (Bisset, 1995; Mc Cabe 1995, Boyer et al, 1995, Jeucken, 2001).

Stakeholders’ pressure on the banking sector is believed to be a major force for this new tendency to consider environmental aspects into lending procedures. The reason is because their reputation is exposed to public scrutiny, and could significantly affect their customer base, thus the final financial performance. Concluding that, the power of the public resides in the power to shift from one institution to another which is inline with their environmental and social principles (Lundgren et al, 2000; Jeucken, 2001).

3.3. Banking in Latin America

The financial system in Latin America has evolved through the past three decades to integrate itself to the challenges of global financial markets (Estupinan, 1997). Although, this evolution of the global financial market in recent decades, have been marked by failure to asses important, if not vital, issues such as the environment and society, focusing only on economic growth. Consequently, Latin American banks have followed the same path of unsustainable banking practices as in the north, but are failing to realize that the global financial market, in its continuous evolution, is changing once again to integrate environmental and social issues, thought to be indispensable to ensure continuity of the financial system (Jeucken, 2001).

In order to understand the present situation and evolution of the financial systems in Latin America, the past three decades are very briefly exposed.

In the seventies, the United States were among the first countries in the world to eliminated state control over interest rates, leaving financial institutions to compete in terms of attractiveness of interest rates and creation of new financial instruments. This model used through the developed world promoted competitiveness and efficiency, paving the way for International Banking (Parkhe and Miller, 1998). In other words, the promotion to expand banks through Foreign Direct Investment (FDI) into other countries, especially developing counties, where regulations are often less strict compared to those in developed countries and allow multinational banks to take the advantages of offering a broad range of financial services (including investment banking and retail banking), often limited in the home country, as Parkhe and Miller (1998) discussed in their analysis of foreign operations of US banks[3].

Despite, the tendency of the Latin American banking system to follow northern models, the financial reality of the region was, that it was not mature enough to compete in these markets, either in terms of interest rates or broadness of financial products. Thus, governments decided to keep interest rates under

[3] See Parkhe and Miller (1998) "Foreign operations of U.S. banks: Impact of environmental differences and ownership advantages on organizational form preferences".

the control of Central Banks, to maintain tight barriers of entry, expansion and diversification of financial operations.

Although governments enforced tight controls over financial institutions, there were huge gaps in the regulatory framework, in such basic areas as deposit insurance, actions to take in case of credit default and liability.

The eighties mark the openness of the Latin American financial system, through allowing the free flow of interest rates and elimination of barriers of entry for foreign institutions. However, at that time, hard economic conditions in the US market, with staggering inflationary pressures, forced government to take interest rates once again into control, causing large differences in interest rates in the two markets. The outcome for Latin America was significant flows of capital from the north with short-term (speculative) expectations, which in turn caused the entire system to collapse, out of lack of institutional infrastructure to support such flows of money. Economic crisis followed through much of the decade, and adjustment of the institutional framework where visualize, especially in Chile, where the legislation set standards to be followed in Latin America.

The nineties saw Central Banks taking more influence on the economy of every country in the region, as they served as a regulatory body setting the minimum and maximum interest rates, controlling liquidity crunches and acting as the biggest buyer and sellers of Foreign Exchange, thus controlling the exchange market to meet government expectations. This move provided the means for many countries to stabilize their economies, with the economic support of financial institutions such as the IMF and World Bank, not to mention the important role of regional development banks as BNDES, CAF and IADB.

3.3.1. Players and Actors

A series of players and actors, within the large universe of financial services[4], in Latin American were identified to be extremely important to support a drive towards sustainable banking. These are:

Commercial Banks

Commercial banks have a significant role in the financial system. They offer limited services, usually limited to consumer banking and corporate lending. Their characteristics are that by law they cannot offer the entire spectrum of financial services (e.g. securities activities, insurance, others).

Universal Banks

Universal banks are also largely present in the region. They have the ability to offer a very broad range of products and are a major influence in the markets they serve. Most notably, in Latin America, multinational banks are at the forefront of these large institutions, and offer services derived from their sophisticated markets. At the moment, universal banks offer the wide variety of products, which include securities, insurance and other activities, through their wholly own subsidiaries in a structure visualized in Figure 4. Although the tendency is to moves towards full integration of offering financial services under one entity (Fig. 5).

[4] It should be noted that the identified institutions are not entirely representative of the whole financial system, as other financial institutions such as insurance companies and equity firms were not considered by this research, and could serve as further research into the analysis of Latin America.

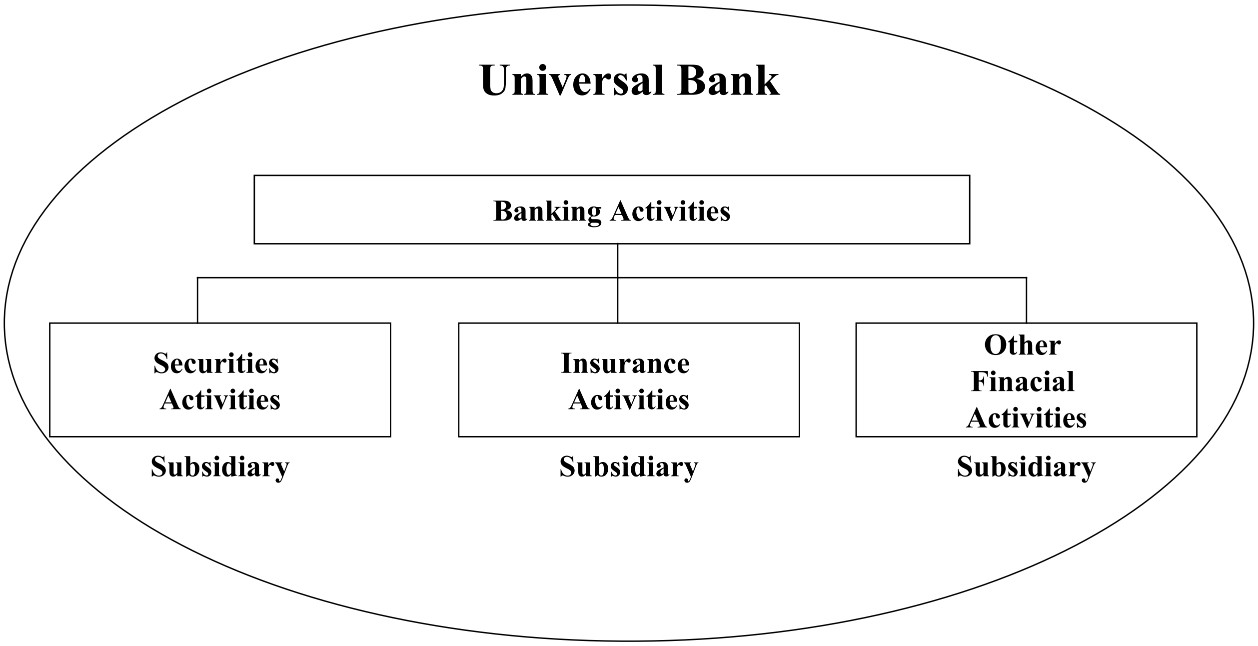

Figure 4. *Structure of Universal Banks in Latin America*
Source: Herring and Santomero (1990)

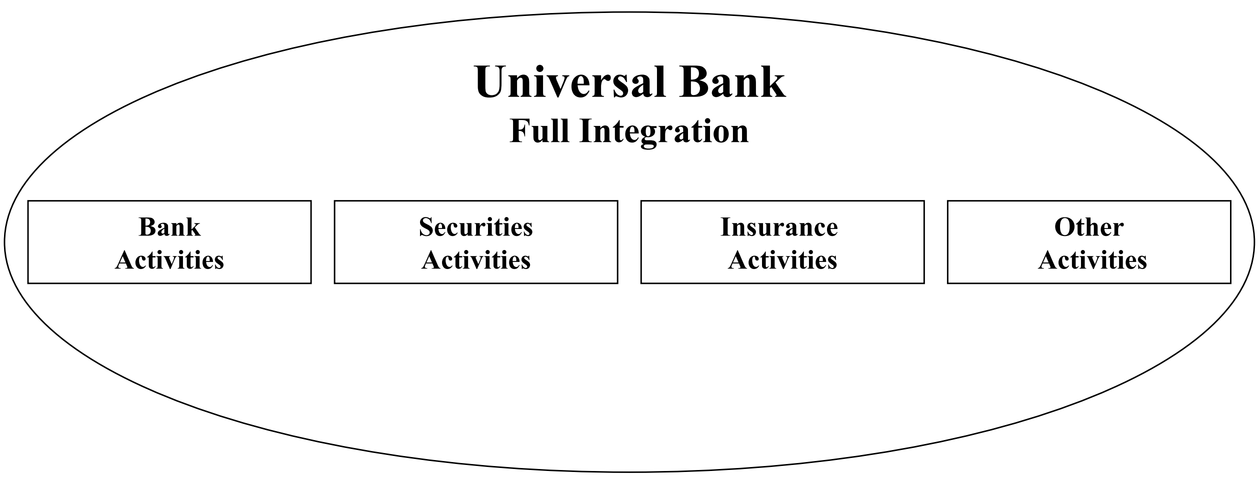

Figure 5. *Future structure of Universal Banks in Latin America*
Source: Herring and Santomero (1990)

In the past few years, universal banks have been a dominating force in terms of size and capacity to capture deposits. In fact, in most of Latin American countries, with the exception of Brazil, the largest banks are usually international banks, which settle themselves in the form of universal banks, to take advantage of a wide variety of services to be offered. Heavy investments coming from industrialized countries, especially Spain, are most visible through the expansion and acquisitions by banks like Banco Bilbao Vizcaya Argentaria and Banco Santander Central Hispano, all throughout the region. These inflows of heavy investment by international players are creating a very competitive market, which promotes the need to have competitive edge to maintain market share, what Porter and Wayland (1995) describe as Competitive Advantage.

Development Banks

Development banks play a significant role in the financial system and have a leading role in fostering economic growth in the region. As regional institutions, they are well positioned to take advantage of their closeness to their clients and expertise in the region, as well of taking advantage of the credit rating to obtain easy access to international markets to finance their operations.

Currently, there are three major development banks in the region, the Andean Development Corporation (CAF), Brazilian Development Bank (BNDES), and the Inter-American Development Bank (IADB). These three banks are at the front of integrating environmental issues into their operations, by acknowledging the importance of environmental risks in project financing and more importantly in the conservation of the natural environment due to its direct link with society. Their operations seek to promote the sustainable development of the region and integration of member countries. They are summarized in the following statements[5]:

- CAF acts as a financial intermediary, mobilizing resources preferably from industrialized countries into the region and serving as a bridge between the region and the international capital markets.

[5] Statements taken from CAF, and represent the same kind of operations pursued by the other two development banks.

- It finances the development of productive infrastructure, especially where it facilitates physical and border integration of the region.
- It promotes the development, consolidation and integration of the financial and capital markets in its shareholder countries, especially in the Andean Region.
- It promotes trade, investment, and new business opportunities.
- It supports the entire spectrum of the business sector, from micro-enterprises to large corporations.
- It supports the structural reform processes being carried out by its shareholder countries to modernize their economies and to enhance their competitive participation in the process of globalisation.

One of the most important challenges and agendas for development banks in the region is to enhance their devotion by strengthening its support for regional development activities beyond national boundaries. As Latin American financial institutions, they should continue to play an important role in regional development programs, such as regional infrastructure projects and regional public goods, and it should become an effective coordinator for the possible movement of sustainable finance, which they are have successfully achieved through the integrated approaches of economic, environmental and social issues into their operations.

3.3.2. Regulatory Bodies

The regulatory bodies are governmental entities, which serve as controllers of the financial system of their respective country. In Latin America, these entities can have different names but their roles and responsibilities in the systems are the same. The investigation identified three major regulators in the financial systems of the region:

Ministry of Finance

The Ministry of Finance is a governmental entity, responsible for the regulation, formulation and monitoring of policies, as well as planning and execution of the activities of the National Executive in the financial and fiscal arena. The Ministry of Finance has also the powers to:

- Participate in the formulation and application of economic and monetary policy.
- Participate in matters related to public, domestic and external credit.
- Elaborate and manage the National Budget.
- Regulated, organize, inspect and control banking and credit policy (through the Superintendence of Banks and Financial Institutions).
- Supervise and control insurance activities (Through the Superintendence of Insurance and Re-insurance).
- Regulate and control the securities market (Through the Securities Exchange Commission)
- Ensure complete system of registration, inspection and supervision of savings banks, employee funds and related activities
- Entire functions of the National Treasury
- Collect, control and administrate all national and customs taxes (Through the Tax Collection Agency).

This governmental entity is at the forefront of all economic matter in the country. The importance of this entity in the financial system is that it directs Executives decisions, through its governing entities, which regulate and control financial institutions, down to the system. Thus, Executives decisions, from the President of the Country, are channelled through this Ministry.

Central Banks

Central banks are legal entities of public domain with the autonomy to formulate and coordinate general economic policies to fulfill the objectives of the State (Rojas and Rodriguez (in Spanish), 1997). They remain at the heart of the financial system in every country in Latin America (Executive from BNDES, 2002). Their overall purpose in the economy is to preserve internal and external monetary stability, facilitating the development of the local economy. More specific functions are:

- To formulate and execute monetary policies.
- Participate in the design and execution of exchange policies.
- Regulate credit and interest rates in the financial system.
- Regulate local currency and promote adequate liquidity of the financial system.
- Centralize and administer international monetary reserve of the country.
- Participate in the foreign exchange (FOREX) market, acting as surveillance and regulator of it, in terms of convenience to the executive powers of the State.
- Promote the correct functioning of the balance of payments of the country and establish its operational forms.
- Exercise, exclusive power, the faculty to emit local currencies.
- Serve as an advisor to national public powers in matters of its competency.
- Exercise and assume the obligations of the State in the International Monetary Fund, as established in bilateral agreements and in the law.
- Participate, regulate and realize operations in the gold market.

In terms of regulating environmental issues and liability acts, the Central Banks are not the entities to be looked at. However, in order to promote sustainable practices, Central Banks, through their influence in the economy, can support the move through their extensive network in the economies they serve.

Superintendence of Banks and Financial Institutions

The Superintendence of Banks and Financial Institutions is the regulatory body of the government for financial institutions. Its duties are to inspect, supervise, vigilance, regulate and control banks and other financial institutions. In other terms, it serves as the supervisory institution of the financial systems of the country, which strives to fortify the system's auto-control and to generate preventatives and correctives measures for the fruitful development of the economy. Its main objectives are:

- Systematic diagnosis of the financial system, by way of offsite and in-situ (on site) inspections of all financial institutions.
- Promote prudential banking practices, holding accountable board of directors of each institution, over the management of operations, control and information dealt with the capacities, risks and complexities of that institution.
- To ensure effective and preventative discipline to preserve and re-establish liquidity, solvency and stability of the financial institutions
- To ensure the sound stability of the financial system, and to promote transparency of information supplied to the public at large.
- To ensure, by ways of vigilance and control, that financial groups count with adequate procedures which allows them to continue their activities in accordance with the law.
- To warranty the consumer that their deposits will be invested in the operation of the financial institution.

After interviews with Latin American bankers, this entity is thought to be the best way to promote sustainable finance in the region. They have the power to regulate and supervise all activities of banks and are who can promote usage of best practices. Why has this sustainable practices not been implemented yet? The answer may lay in fact that these are government agencies which have traditionally focused on making sure banks keep transparency in their books and try to prevent pitfalls of in clients' deposits. Another fact is that these institutions lack the know how to tackle environmental issues, and are not to the levels of the regulatory bodies, for instance, in Europe.

If sustainable finance, through the acknowledgement of environmental risks as a serious threat to banks, is to be endured by the financial system, the Superintendence of Banks and Financial Institutions will be the perfect actor to take the primary lead.

4. Results

This research offers particular insight into the banking sector of Latin America. The results point out that the banking sector is still in its initial step towards acknowledging environmental issues as a serious risk factor and even more so as an area for opportunities and growth. In this sense, a survey carried out by Pratt and Rojas (2001) points out that only 30% of the banks in the region present a corporate commitment towards the environment (out of a total of 86 banks). Comparing these results with those obtained by UNEP FI's (1998) 69% (out of a total of 77 banks, distributed in Europe (65), North America (7), Africa (1) and Asia (4)) in similar survey in mainly industrialized countries, one can grasp the level of immaturity banks presently have to deal or support environmental issues. This level of immaturity is caused by the region's institutional framework[6], extremely important to support corporate environmental responsibility (UNRISD, 2000).

One of the finding of the investigation is that the institutional framework, regarding banking and the environment, is currently lax in the region. But the search to reach a possible answer to why is the institutional framework not in place, as its starting to occur in Africa (UNEP FI, 2002), was complicated.

In one front, international pressures are forcing governments, to incorporate environmental issues into their legislation, thus encouraging social and environmental responsibility in companies. In the Latin American banking sector this is not different, although pressures are coming from external groups (mainly NGOs) not governments through their Superintendence of Banks and Financial Institutions. Various high officials (CAF, BNDES and ECLAC) singled out that legislation through the Superintendence is a most, in order to send the right signals to the entire banking system, as only a handful of banks present specific environmental objectives (28%) (Pratt et al, 2001), showing their lack of interest in the matter, and even more so, the fact that no regulations entitle them to show any kind of environmental performance. Comparing these results with industrialized countries, a significantly different picture is obtained, as environmental objectives reach levels of 75%. When looking at the

[6] By institutional framework, it is meant to be legislation and governmental bodies to undoubtedly support the legislation, such as the Superintendence of Banks and Financial Institutions.

regulations in these countries, one can see why. Both in the United States and especially in the European Union, regulations are placed to make banks liable for their operations, thus encouraging them to be proactive in these issues. On the other hand, pressures from stakeholders in these countries have serious impacts on the bank's operations, in terms of reputation, thus being encouraged to show their environmental performance. In light of this, a conclusion is that both legislation and the involvement of stakeholders are necessary to make banks more aware of their environmental impacts.

In the second front, also related to legislation, one can observe how multinational banks, which currently hold the majority of market share in every country in the region, except Brazil[7], operate. The drive towards integrating environmental issues by overseas branches in Latin America are not inspired by local concerns or regulations. The initiative is coming from competitive pressure in other OECD countries and parent directives (UNRISD, 2000). However, as discovered, the majority of these banks envision applying the same kind of international standards to the region, but recognized that they would be doing so, within local legal conditions. This is an important point to consider, as legislation is not in place in the region and any wrong doings will not be penalized as severely, if not at all, as in the countries (industrialized) where these banks are based. Thus, the outcome is for these large multinational banks to lower their standards to the countries' legislations, creating an adverse trend of what would be best for the entire system, environment and society. In this respect, by maintaining the same standards as in their own countries, these banks would rally others banks to follow their lead.

In the third and final front, governments state that they are assessing these issues, through expansion of resources and mandate to Ministries of Environment, but perhaps an answer to the question of, why is the institutional framework not in place in Latin America, is the reality that these issues are not being fully considered due to the current context of economic crisis, political turmoil and social deprivation which has generated other concerns and priorities.

When it comes to integrating environmental risk into operations, the main issue that initiated this research, Latin American banks showed low performance, as only 22% considered them in corporate lending and a slight increase when executing project finance, where the result was 33% (Pratt et al,

[7] The largest market share is held by Banco do Brasil.

2001). An interview with the chief economist of Chile's largest bank[8], highlighted this finding by saying, "these issues are a hard reality and we should be dealing with them" (2002) but currently they are not. One most wonder, if headquarters, based in Europe, are dealing with these issues, why are overseas branches not, the answer runs back to the institutional framework.

Currently bank managers are broadening their approach towards environmental risks in their credit operations. This can be corroborated in the interviews, with an outcome of engagement by taking the minimal steps, such as revising legislation and/or checking for environmental impacts of possible project financing. However, when ask about follow-up measures, the answer was unfortunately reversed, no follow troughs were being carried out.

In light of this, a finding is that there is lack of knowledge (know how) (e.g. models, instruments, procedures, criteria, etc.) when it comes to assessing environmental risks in credit analysis. A clear signal is the lack of usage of methods such as Environmental Impact Assessments (EIA), risk control, mitigation and monitoring of approved credits, where all banks interviewed answered negatively, except the development banks.

Concerning the opportunities of the "green" market, researched by Pratt et al (2001) points out that almost one quarter of the banks surveyed has some kind of product related to this field. Although, it most be stated that the majority those banks who answered positively are doing so by setting support funds which will proceed to an environmental program. An interview with a manager from Peru, added that this market is still in developing stages but still highly expensive for banks to support it. In definite, banks are not taken full advantage of this market, in contrast of developed countries where socially responsible investments (SRI) have proven to be highly popular among investors.

[8] BBVA Banco BHIF

5. Sustainable Banking

Before broadening the research by discussing sustainable banking in Latin America, there is a need to analyze what are the incentives and barriers to make this important shift.

Barriers

The crucial barrier is the institutional framework of the region. While environmental legislation is being approved in developed countries, and this "green" area is receiving a lot of attention, in Latin America legislation is still not being considered heavily and even less attention is given to the "green" market. A possible reason is the shifting priorities of governments in power, which leads to forward movements and then backwards movements. Meaning that while environmental issues are tackled by one government in power, forcing these issues into the negotiation table of legislators, the following government with a different perception towards the environment reduces the pressure to pass such legislation (perhaps out of economic interests), thus limiting any kind future development in this arena. This is a recurring problem in Latin America: political inconsistency.

However, since the United Nations Conference on the Human Environment in Stockholm (1972), the region has evolved substantially on environmental issues. Governments to greater or lesser extent incorporated these issues in the public administration, paving the way for environmental policies (although non related to banking activities). However, not until the United Nations Conference on Environment and Development in Rio (1992) have Latin American countries created the institutions which would control and encourage these legislations e.g. Ministries and/or other governmental bodies (CEPAL/ECLAC, 2002). These enforcement institutions, as stated by ECLAC officials, do not have the extensive breadth to cover such an imposing duty, thus maintaining a lax supervision and out of dated environmental legislation.

The most powerful tool to encourage banks to integrate environmental issues into their agendas is by having proper legislations that guides them on how to handle themselves relating to the environment, taking prevention into their values, and to the core of their operations. Failure to do should also signify risks and possible losses, which can seriously harm the bank's financial position, due to liability in the performance of their loans and projects. Only this way, can we envision sustainable finance in the region.

Another barrier shadowing the incorporation of environmental issues is the lack of information and tools (models, instrument procedures, criteria, etc.) available to bankers. With regards to environmental risk, lack of information prevents managers from detecting their flaws in credit analysis, thus not entirely realizing the negative consequences that can occur. In this sense, banks lack the information to select projects and loans that can have lower environmental impact and lower risks for the bank. This barrier creates aversion and wrongful perception towards environmental issues. In many cases, managers have the believe that environmental projects or products usually have a lower yield than those that are not. This perception is not only wrong, as various studies have demonstrated that there is no sufficient evidence to maintain this argument, but in fact, various studies have also point out that there are billons of USD in opportunities with high yields in the "green" market.

In light of this, it can be discussed that there is a lack in the system to make the "green" market, and its huge opportunities, attractive to Latin bankers, in the case that their only objective are high performing investments. Perhaps, this lack of information is causing a big gap for banks on, how to integrate the environment into their operations. Gaps in the difficulty of understanding the environmental sector, how to segment it, and more importantly the costs involved in obtaining the necessary knowledge to approach it.

An interview with a CAF officer, pointed out that banks are more likely to take awareness of the environment if presented with opportunities and profits to be made. However, the "green" market is still in its initial steps, but very promising ones, as clients, which at the current moment not are immediately soliciting "green" products, start to perceive benefits coming from technology e.g. cleaner production. Although this perception is true, it is also extremely important for banks to grasp the risks involved in dealing with environmentally harmful projects. In both senses, banks can take awareness by way of risks and opportunities, but even more important is to take conscience of the strong relationship between their operations and the environment.

Incentives

Incentives for the banking sector can be found in the reduction of risk in their credit portfolio, if environmental risk starts to be taken into account. Following cases in developed countries and their huge losses tied to liability, this mitigation should be a clear motivator to begin the integrating process. However, in order to accomplish this, it is necessary for banks to learn in their own pace, and not rush without the visualizing the field. Although is there enough time? one could ask. At the moment banks are taking their initial step towards the environment, by acknowledging the impacts of their internal operations (See 3.2.) and starting to handle them through different kind of schemes. This can only bring in-house knowledge on how to handle these issues and creates an environmental conscience among all levels of staff. From this point, increasing information flows on this topic could prove to be beneficial as staff loose the initial fear of dealing with environmental issues, which is traditionally the first step.

A second incentive to move in this direction is the growing market possibilities in this "green" field. Throughout the world the "green" market has increased size by seven folds in the past 5 years (UNEP, 2002), giving reasonable attractiveness to banks to embark this market. By doing so, banks will also have another incentive: gain a competitive advantage towards their peers.

Having a competitive edge has always fuelled businesses into new areas, products and industries, as the potential gains can be rewarding. Banks can change their environmental and social consciousness to contribute more to the community and in this way give more value to their shareholders[9].

Finally another incentive for a more towards integrating environmental issues into operations is to meet with the requirement coming from major stakeholders[10] to assess these issues.

[9] See Appendix.
[10] See Figure 2

Towards Sustainability

Latin America has followed northern patterns of development in many areas, including the financial sector. However, realising current trends by developed countries to make their financial systems more sustainable should be a transition that Latin American bankers should capitalise on, instead of taking spending more years till the realisation that this trend is a most for society.

Society has the power to influence markets, thus a need towards encouraging markets to become sustainable is needed. This drive serves as a platform for Latin American banks to play their role in society, allocation of capital, in-line with current issues brought forward. In this sense, when potential market are opened and enforced by society, banks will follow their lead and start to accept financing greener products and ideas.

However this shift has many barriers identified in the section above, but this should not be a limiting factor, as the gains in making sound business are rewarding. The experience in developed countries should provide a substantial source of information that will allow Latin banks not to make the same mistakes in finance.

Governments are encouraged to take their role as regulators and controllers of the financial system in the region, as passing the right legislation with provide the backbone to which banking activities will be measured against. This is crucial in achieving sustainable finance in the region, as currently the lack of information is creating aversion towards embarking on these environmentally and socially important issues.

Finally the role of stakeholders (e.g. NGOs, media, communities, etc.) needs to be encouraged to provide different points of view on what the issues are and how to tackle them. Banks in turn will make the assessment of these issues in order to maintain their place in channelling into the economy a new way of sustainable finance.

6. Conclusions and Recommendations

6.1 Conclusions

In the ways towards sustainable finance in the region one has to balance the barriers with the incentives. If we consider the evolution of the financial markets, a clear peculiarity can be found, they tend towards integrating issues brought forward by stakeholders, specially in these fast moving times. This being the case, in the developed world environmental awareness, in terms of risks and opportunities, is taking more force in the financial sector, as reputational issues arise and a need for transparency is ever been more demanding. For Latin America, this shift is definitely going to have an impact in the way banks perceive the environment, and the way business in done, thus a need to open the financial system to these issues can only be the way towards achieving a development that is sustainable.

The research carried out sheds light into issues of environmental risks and opportunities for Latin banks. The main findings are as follows:

- The majority of managers in Latin America are still not taking environmental risk into consideration in their credit screening process. Small efforts are limited to checking legislation and environmental assessment only in project financing, not in regular loan to companies, and conservation (energy, water and paper) scheme.
- A vast majority of managers are not aware of the opportunities of the “green” market due to lack of information.
- Legislation towards banking and the environment is either lax or non existing.
- Legislation and stakeholders are necessary to impulse a sustainable shift in banking in the region.
- Multinational banks tend to reduce their environmental standards to fit local legislations of the region, thus creating the opposite trend that’s best for the financial system to be up to date with global trends.

- Environmental issues in banking are not given proper attention due to changing priorities of governments and their circumstances, economic crisis, political turmoil and social deprivation which has generated other concerns.
- Institutions which should support the shift don't have the sufficient resource and personnel to promote these issues.

6.2. Recommendations

The research provides potential solutions to the barriers holding back the integration of environmental issues into the Latin American banking systems.

In order to provide a shift towards sustainable banking in Latin America, the research points out that different levels have to be assessed. For instance at a national level, legislation and institutions need to be fortified to provide the institutional framework to provide a gradual shift in the banking systems. These entities should be empowered to have the knowledge of what is at the vanguard of environmental legislations in other to benefit from the years of experience in developed countries, of course, applying it to the regional cultural context. The Superintendence of Banks and Financial Institutions can play a significant role by encouraging banks to expose their environmental performance, as much as they encourage them to show their economic performance.

Likewise, their needs to the education of personnel in these institutions to provide know how skills in supervision and controlling roles, in order to provide banks with help and guidelines to steer them through the changes.

In the same level, environmental awareness can be advocated by educational programmes, which seek to create a more conscious society, which can detect and focus on those banks in line with their environmental and social values, to create the need for transformation in banks to assess the current needs of society.

On a more internal level for banks, the sustainable drives has to be fuelled from within the bank to provide better results, as opposed to being imposed. An initial breakthrough is the acknowledgement of the risks involved in not dealing with the environment in credit analysis and providing the right tools (models, instruments, procedures, criteria, etc) to managers and educational training in environmental awareness to all staff. Also the commitment of top management is also required to encourage banks to establish their corporate commitment, in order to allow the bank to progressively make the transition towards integrating these issues and tackling one of the hardest dilemmas faced by banks: lack of information.

Managers should explore the opportunities brought by the “green” market, which is believed bring a series of benefits to companies, as more and more managers equate corporate environmental performance with good management. According to the OECD, the environmental sector is worth approximately USD 700 billion a year, with this potential bankers in Latin America have an enormous motivator to integrate environmental issues into their agendas.

6.3. Further Research

The research has offered insight into the Latin American financial system and its struggles to integrate environmental issues into their operations by way of environmental risk or taking advantage of potential opportunities. Further research could be embark to quantify this potential “green” market, to provide bankers with an estimated amount of money that is not been realised. Likewise, the analysis of other financial institutions such as insurance services and equity firms in integrating environmental issues into their operations.

The banking sector in Latin America, as a whole needs to be injected with information available mainly in developed countries in assessing environmental and social issues. Further research that can inform bankers on how to make this transitional step is much need. Information and awareness will help succeed the goal of a sustainable future in Latin America.

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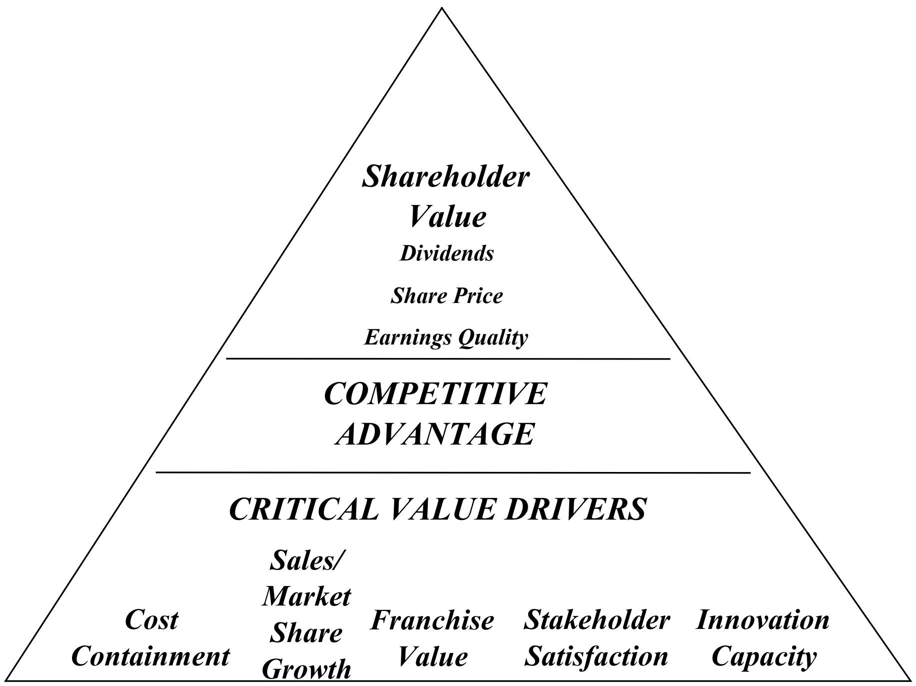
Appendix 1.
Competitive Advantage as value creator for Shareholders



Appendix 2.
List of Interviewees

Name of Contact	Institution	Country	Type of Interview
Carlos Joly	Storebrand	Norway	Telephone
Carmen Leonor Rodriguez	BBVA Banco Provincial	Venezuela	Director of Institutional Affairs
Christopher Wells	ABN Amro	Brasil	Head of Risk Management
George Fonseca	BBVA Banco Frances	Argentina	Senior Economist
Georgina Nunez	CEPAL/ECLAC	Chile/Latin America	Officer
Guillermo Larrain	BBVA Banco BHIF	Chile	Senior Economist
Isaura Frondiz	BNDES	Brasil/Mercosur	Director Sustainable Development Unit
Ken Maguire	UNEP Finance Initiatives	Switzerland	Administrator
Luis Juango	BBVA Banco Ganadero	Colombia	Head of Risk Management
Mareike Hussels	UNEP Finance Initiatives	Switzerland	Project Manager
Maria Teresa Szauer	CAF	Andean Community	Director Sustainable Development Unit
Mario Monzoni	Friends of the Earth	Brasil	Director
Niamh O'Sullivan	UNEP Finance Initiatives	Switzerland	Project Manager
Pablo Cardinale	CAF	Andean Community	Director Sustainable Development Unit
Paul Clements-Hunt	UNEP Finance Initiatives	Switzerland	Director
Phillip Moss	UNEP Finance Initiatives	Switzerland	Project Manager

Appendix 3.
Interview Questions

List of questions for managers in Latin American Banks:

1. Is environmental risk taken into consideration when extending a loan to a potential client?

2. How is environmental risk dealt with in the screening process of a loan? (e.g. is it integrated into the credit risk assessment)

3. Does the bank have any kind of external environmental standard certification? (e.g. ISO 14001)

4. Does the bank have an internal environmental policy in place?

5. Does the bank have external environmental policies?

6. What is the scope of Corporate Commitment? (e.g. are top level management involve, CEO)

7. Are there any separate environmental policies in the bank?

8. Does the bank have an environmental department in the bank?

9. Is there a review of environmental performance?

10. Is there an internal operational aspect that deals with environmental issues? (e.g. energy saving schemes, paper recycling)

11. Does the bank perceive the potential of the "green" market?

12. Does the bank have environmental financial products and service?

13. Does the bank have an external communication strategy?

14. Does the bank have an internal communication strategy?