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### Corporate social responsibility and financial markets

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## Chapter 3

# Banking on the Equator

### 3.1 Introduction

On June 4, 2003, ten multinational banks announced that they adopted the Equator Principles. These Principles are the banks' policy framework to guide large project finance lending decisions. In adopting these principles, the banks "...seek to ensure that the projects we finance are developed in a manner that is socially responsible and reflect sound environmental management practices".<sup>1</sup> The banks assess a project's impact on the natural environment and on society. As of summer 2006, about another thirty financial institutions have adopted the Equator Principles. Together, the 40 institutions (see Appendix I) account for about 85% of the market for *project finance* (see Esty et al., 2005). The Equator Principles were criticized, among others by Watchman (2005), for not going far enough in the direction of achieving sustainable development. The banks were also accused, for example by BankTrack (2004, 2005), of using the Principles to 'greenwash' their operations in developing countries.

In this chapter, we investigate whether the adopters of the Equator Principles behave in a significantly different manner with respect to their social, ethical, and environmental policies, than non-adopters. This is of importance as the governance of the Principles is rather weak. It is not clear whether banks that adopted the Principles really have different environmental and social policies in place and whether they actually behave accordingly. As such, we investigate corporate social responsibility (CSR) in the international financial industry. Heal (2005, p.393) defines CSR as (...) taking actions which reduce the extent of externalized costs or avoid distri-

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This chapter is based on Scholtens and Dam (2007)

<sup>1</sup> From the Preamble of the Equator Principles, [www.equator-principles.com](http://www.equator-principles.com)

butional conflicts.

In addition, we want to explore whether the financial markets assess these banks differently. This is of importance as the adopters assume that financial institutions that adopt the Principles ought to be able to better assess, mitigate, document and monitor credit risk and reputation risk associated with financing development projects. However, in order to do so, they have to invest in screening and monitoring mechanisms and they may forego some potentially profitable projects.

To find out whether the adopters of the Equator Principles stand out from the non-adopters, this chapter will look into the different attributes of the banks' social, ethical and environmental policies, their balance sheet and income state, their financial return and risk, and investigate whether and how these attributes differ between banks that adopted the Equator Principles and those that did not. At this stage we lack a formal model and hence, the study is rather explorative in nature. The financial data are derived from DataStream and BankScope. The data about social, environmental and ethical policies are provided by the Ethical Investment Research Service (EIRIS). We find that the social, ethical, and environmental policies of banks that adopted the Equator Principles significantly differ from those of non-adopters and especially their large size is a distinctive feature of the adopters. Most other financial and firm characteristics do not show significant differences. As such, it appears that there are scale effects involved in the adoption decision and the more responsible institutions signal their responsibility by adopting the Equator Principles. We infer that for larger banks, reputation appears to be more important. Furthermore, an event study shows that that shareholders do not respond to the adoption announcement of financial institutions; implying that shareholders seem to expect that adhering to the Equator Principles does not affect shareholder value. This can be related to the relative small size of the project finance portfolio in relation to the banks' overall activities. We do not find support for the view that adoption of the Equator Principles is merely window dressing as there are at least some costs involved and there are many project finance banks that do not adopt the Principles. We conclude that it appears that banks adopt the Equator Principles to signal their responsible conduct.

The structure of this chapter is as follows. Section 3.2 presents the background of the Equator Principles. Section 3.3 introduces the data and methods employed to assess the characteristics of the banks in the sample. The results are in section 3.4. Section 3.5 concludes.

## 3.2 Equator Principles

We present the key characteristics of the Equator Principles (EP) and briefly sketch its history and main features of project finance. We also give a brief overview of the costs and benefits of adoption. To illustrate the background of the EP we also link the EP to the literature on codes of conduct and industry self-regulation.

### 3.2.1 Background of the Equator Principles

The EP are a voluntary set of guidelines for promoting social and environmental responsibility in financing projects, especially in emerging markets. The EP specifically address the negative external effects of project finance. They apply to projects with a total cost of US\$ 10 million or more. The EP are based in large part on the policies and guidelines of the International Finance Corporation (IFC), a member of the World Bank Group. They require adopting institutions to categorize projects as high (A), medium (B), or low (C) in environmental or social risk as a precondition of consideration of financing. Borrowers have to conduct an Environmental Impact Assessment (EIA) and must prepare an Environmental Management Plan (EMP) for category A and B projects. Category C projects do not require an EIA. With Category A projects, the borrower or a third-party expert must also put an EMP in place to address project compliance, mitigation, action plans, and monitoring procedures. The compliance with the EMP is written into a project's loan covenant. As such, the bank can withdraw funding if a borrower breaches its obligations. In applying the EP, the lead arrangers, among other things, will have to reach a consensus on the categorization of the project (A, B, or C) and on the nature of the appropriate environmental assessment and covenant package. The approach used under the EP includes the categorization of a project according to its environmental and social impact using IFC's screening procedures.<sup>2</sup> The EIA will take into account

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<sup>2</sup> IFC uses a set of environmental and social policies, which are based on the set used by the World Bank. Some policies have been adapted to better reflect their applicability to IFC's private sector client base. Some however remain in their World Bank format and as such require careful interpretation for private sector projects. The safeguard policies provide guidance on matters relevant to IFC's operations, including environmental assessment, natural habitats, involuntary resettlement and indigenous peoples. The environmental assessment policy is a key umbrella policy for IFC, and various requirements, environmental and social, follow from it. In addition, to reflect the fact that IFC works with employers, IFC has adopted the Policy Statement on Harmful Child and Forced Labor. The World Bank's safeguard policies are geared to its public sector activities. Full text of the IFC safeguard policies is available at [www.ifc.org/enviro](http://www.ifc.org/enviro). IFC uses two sets of guidelines for its projects. The Pollution Prevention and Abatement Handbook (PPAH, also referred to as "the World Bank Guidelines") was adopted in 1998 and compiled by environmental staff from the World Bank and IFC. IFC also uses a series of environmental, health and safety guidelines ("the IFC Guidelines") that cover industries not included in the PPAH. It is anticipated that these guidelines will be added to from time to time covering new and emerging

the IFC's environmental, health and safety guidelines for all countries. However, for projects in low-, lower-middle, and upper-middle income countries (as defined by the World Bank), it will also take into account the IFC's safeguard policies. In high-impact projects, borrowers undertake appropriate consultation with affected local stakeholders and develop an environmental management plan that addresses mitigation and monitoring of environmental and social risk. The EP also apply to project finance advisory activities. Adopters are required to report on the progress and performance with respect to implementation on an annual basis.

The history of the EP is described by Esty et al. (2005). It dates back to the late 1990s when bankers at ABN·Amro first approached the IFC with concerns that there were no established principles to guide lending decisions when it came to social and environmental risks. ABN·Amro came across this problem when financing a mining project in Papua New Guinea that severely contaminated local water. In a meeting in London in October 2002, ABN·Amro and the IFC brought together three other players in project finance (Barclays, Citigroup and WestLB) to discuss their experiences. Following this meeting, the banks met to draft principles, which were sent out for comments by other banks, the IFC, non-governmental organizations, and clients. On June 4, 2003, ten banks announced that they were adopting the EP. In the next two and a half years, about another 30 financial institutions banks announced that they adopted the EP. The 40 institutions account for around 85% of the market for project finance in developing countries (see Esty et al., 2005).

The EP followed the IFC safeguard policies and the World Bank's Pollution Prevention and Abatement Guidelines. The former requires all project sponsors to assess a project's impact on the natural environment and on society. The IFC safeguard policies generally represent an approach to critical issues that cut across industry sectors, such as the protection of natural habitats or the physical or economic displacement of people (resettlement). The World Bank guidelines address levels of pollution discharge by industry and establish minimum standards. They are sector-specific environmental standards that are applicable to the processes, technologies, and issues that prevail in specific industries, and represent good practice within that sector. From the banks' perspective, the IFC's and World Bank's guidelines offer a benchmark for the EP. Therefore, they can be regarded as a set of instructions on how to implement the standards from the IFC and World Bank.

With project finance, lenders base their credit appraisals on the projected revenues/ cash-flows from the operation of the facility - rather than on the general

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industry sectors. New guidelines are subject to an open period of consultation.

assets or the credit of the sponsor of the facility. They rely on the assets of the facility, including any revenue producing contracts and other cash-flow generated by the facility, as collateral for debt. In project financing, the debt terms are not primarily based on the sponsor's credit support or on the value of the physical assets of the project. Project performance, both technical and economic, is the core of project finance. At the heart of the project finance transaction usually is a Special Purpose Vehicle (SPV) that consists of the consortium shareholders who may be investors or have other interests in the project (such as the originator or contractor). Esty and Sesia (2005) find that private sector firms have used project finance for industrial projects such as mines, pipelines, and oil fields. During the 1990s, infrastructure projects (water, electricity, natural gas, transportation, and telecommunication) were increasingly privately financed as well. Especially the privatization of state-owned enterprises, the deregulation of traditional state monopolies and key industries (electricity, telecommunication), and the internationalization and integration of markets boosted the use of project finance. Project finance constitutes only a small part of the overall activities of the banks. For example, in the US in 2004, project finance was about 1% of total corporate financing (see Esty and Sesia, 2005, p. 1)

### 3.2.2 Costs and benefits of adopting the Equator Principles

From a microeconomic perspective, financial institutions are likely to engage in the EP if the perceived benefits exceed the associated costs.<sup>3</sup> Benefits might include a better reputation, better market access, the potential to charge a premium price for its product or enhanced possibilities to recruit and/or retain high quality employees. Many academic studies have focused on the differences and similarities between the financial performance of "responsible" firms and comparable firms that do not meet the same CSR criteria (see review studies like those of Margolis and Walsh (2001) and Orlitzky et al. (2003)) as well as the previous chapter). The reason why CSR behavior can coexist with profit maximizing behavior in equilibrium is that CSR activities create non-market value for certain stakeholders, who are willing to bear the associated costs in the form of foregone profits, wages or whatever payment applies to the stakeholder. If these stakeholders are consumers, who are willing to pay a higher price for the product if it is produced socially responsi-

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<sup>3</sup>Recent theories of CSR (P. Bansal and Roth, 2000; Baron, 2001; McWilliams and Siegel, 2001; Bagnoli and Watts, 2003; Heal, 2005) conjecture that firms engage in profit-maximizing CSR, based on the anticipated benefits from their activities.

ble, CSR can in fact turn out to be profitable, but sooner or later the entire industry will follow, and such CSR actions will become business as usual. The benefits of CSR can be in terms of non-market value which certain stakeholders (employees, shareholders, host countries) are willing to bear, but also in terms of reduced risk for the stakeholders of the firm. If a firm or bank does not engage in CSR, the non-market costs in the form of negative externalities for society as a whole will potentially be charged back to the firm. This back-firing of non-CSR behavior can take many forms, for example consumer boycotts, environmental scandals, employee actions, pressure from NGO's, negative publicity, or law-suits. The effects on the stock market value of companies or banks that experience such events can be economically significant. This potential back-firing links CSR to risk management. In this context, displaying CSR behavior might be of greater importance to banks that demonstrate considerable exposure, i.e. banks that are in the spotlight. In this case, investors - although it also holds for other stakeholders - are not ethical investors, but they view non-CSR behavior as a financial liability, or even a liability for the mere continuation of existence of the bank, which naturally affects all stakeholders.

Esty et al. (2005) argue that adopting the EP will lead to greater learning among project finance institutions on environmental and social issues, and that having larger expertise in these areas will better enable them to advise clients and control risks. Taking social and environmental issues into account would improve the banks' understanding of the interaction of the project with stakeholders and can improve credit risk management. Unfortunately, so far, there is no evidence of how the adopters implemented the EP. Another specification is that *reputational* risk is reduced when having the EP in place. Sethi (2002) and Florini (2003) stress that the impact on reputation is an important factor in adopting a codes of conduct.

According to C. Wright and Rwabizambuga (2006), the screening and monitoring of the social and environmental issues is a difficult and costly task. They argue that not many bankers are used to it and it is not part of most standard banking procedures. However, in our opinion, although there undeniably is a cost involved in accounting for non-financial aspects of the projects, the size of such costs has to be put in perspective. In general, many projects are quite large; say more than \$1 billion. Now, let us assume (as suggested by one of the referees of *World Development*) that the project financier trains 50 people to undertake the analysis. This training might take 3 days at \$2,000 per day per person. If the financier additionally has 2 full-time CSR experts on the payroll to monitor the deal and the project for \$150,000 per person, the cost of screening and monitoring are \$600,000. This can

be put against the expected 1% advisory fee on the project, which is \$10 million. In this perspective, the cost of CSR screening and monitoring is limited. Another cost is in the missed opportunities or lost business to finance projects in case the country or firm who initiates the project is not in favor of scrutinizing social and environmental aspects of the project. As such, the adopters of the EP in fact reduce their potential market for project finance, implying opportunity costs. Relatedly, it is very likely that projects that meet the requirements of the Equator Principles have larger operational costs that need to be financed too and, as such, may increase the benefits. Not just the screening and monitoring is a costly activity, but also operating environmental friendly or socially responsible can imply higher operating costs for the project itself compared to the non-CSR alternatives. Again this is obvious by merely considering the “over-compliance” aspect of CSR. If operating socially responsible is less costly, it will become business as usual.

### 3.2.3 Governance issues

The EP can be regarded as self-regulation of the international banking community in the form of a code of conduct. Sethi (2002) and Florini (2003) provide a general discussion of the issues regarding corporate codes of conduct. This type of self-regulation is soft-law and contrasts with traditional command-and-control regulation. According to Shelton (2000), it fills a gap left by traditional law. Soft-law can evolve into industry standards and this can be the basis of binding law. As such, self-regulation may lead to stricter norms, rules and policies than usual. Carraro and Siniscalco (1998) argue that by developing and adopting codes of conduct corporations have set themselves stricter rules and policies, though not legally binding. Jenkins (2001) argues that as external parties cannot enforce firms to act upon codes of conduct, one may wonder whether codes of conduct are a realistic alternative to the traditional mechanisms of regulation. Adopting codes of conduct may positively impact upon the firm’s reputation. Management can adopt policies largely for symbolic purposes without necessarily applying them in practice. This is discussed, among others by Westphal and Zajac (1994, 2001) and Zajac and Westphal (1995).

In general, with any form of ‘voluntary collaboration’ we can expect free-rider problems. Gunningham and Sinclair (2002) argue there are two types of free-riding involved with codes of conduct and self-regulation. In the first, all parties agree to the terms and conditions of self-regulation, but some do not comply whereas others are maintaining the higher standards. By doing this, firms that do not comply with



the codes are able to reap the reputation benefits of being an adopter to the code without incurring the compliance costs. Here, monitoring and transparency are crucial to deal with free-riders. The second type of free-riding occurs when part of the firms in the industry refuses to adopt the self-regulation. This may lead to competitive disadvantages for the adopters and will jeopardize the effectiveness of the initiative. Since there is no formal control on actual performance, adoption of the EP introduces the free-rider problems. As a result, both types of free-riding might occur: some adopters may not put the EP to practice, and some project finance institutions do not adopt the EP.

P. Bansal and Hunter (2003) is an example of a study that investigates the determinants or the strategic explanations for the early adoption of a code of conduct. For their analysis of the ISO 14001 certification, they find that firms were reinforcing their commitment to the natural environment and internationalization. They did not find support for the view that firms were using the certification to reorient their strategies. C. Wright and Rwabizambuga (2006) argue that adopters are largely concentrated in institutional environments shaped by targeted advocacy campaigns organized by civil society groups and strong regulatory systems, i.e. in Europe and North-America. The adopters typically operate transnational and are more likely to have a visible role in high-risk project finance deals, which increases the likelihood that environmental malpractice may be exposed by stakeholders and causes damage to corporate reputation. C. Wright and Rwabizambuga (2006) also suggest that firm-specific characteristics might play a role as a few large-project finance institutions have opted against the EP. In particular, BNP Paribas and Société Générale, continue to opt out of the EP. EIRIS (2006) assesses the way in which EP banks apply the Principles. They find that from the nine banks they investigate, only two company's management response are classified as 'good', i.e. sufficient to mitigate social and environmental risks to an acceptable level. Six out of nine fail to report in detail on their compliance, monitoring, and auditing systems. And only three of the nine banks show evidence of client diagnostic tools or audits to evaluate social and environmental risks (see EIRIS, 2006)

Another problem appears to be that local laws and regulations may hamper the power of banks to intervene and to enforce the contract. This can result in conflicts of interest. Perspectives of authorities and NGOs about employment, pollution and rights of various parties may conflict with the policies and claims of the banks. The outcome of any arbitration of such a conflict may be difficult to predict. Furthermore, there is no international standard to report about the CSR performance of

firms. (Watchman, 2005) points out that the current approach is rather top-down. It usually is the heads of the banks that have drawn up the CSR program and it is not very clear whether it is fully internalized by all employees. Furthermore, there is uncertainty about whether the IFC and World Bank raise their standards, which would imply that the EP have to become stricter too.

### 3.3 Hypotheses and data

This section presents the hypotheses, data on the financial performance and the social, ethical and environmental policies of internationally operating banks, as well as the methods employed. We introduce the variables and give descriptive statistics.

We assume that it is interesting for financial institutions, for financial authorities like the World Bank and IFC, as well as for NGOs to explore whether or not adopting the EP actually “makes a difference”, that is, does anything indicate that adopting the EP is more than just window-dressing. To this extent, we first find out whether or not the adopters are different from the non-adopters. We take three perspectives. First is the corporate social responsibility (CSR) perspective. Here, we compare the social, ethical and environmental policies of signatory and non-signatory banks. Second is the economic or firm perspective. Here, we investigate firm attributes like size, balance sheet composition, and performance. Third is the financial market perspective. Here, we look into the companies’ stock risk and return. Furthermore, we will perform an event study to investigate whether the announcement of adopting the EP has had a significant impact on stock market returns. This analysis is directed at an assessment of the impact of the adoption announcement on the stock market’s valuation of the bank.

As to the question whether adopters and non-adopters differ, three possibilities may hold. First is that the adopters in all respects are similar to the non-adopters. This may relate to their social responsibility, profitability, solvency, stock market returns, risks, etc. This suggests that adopting appears not to be associated with any other characteristic of the firm or to its performance. For example, in case of financial market characteristics, this is consistent with a world where the social responsibility feature of the firm is not priced (see Hamilton et al., 1993; Statman, 2000). The second hypothesis is that the performance of the EP adopters is ‘worse’ than that of non-adopters. For example, they have poorer CSR policies, are smaller, weaker, less profitable, more risky, etc. This would suggest that adoption and complying

with the EP is undertaken by the 'weaker' institutions. The third hypothesis is that Equator companies are those that - in some way or another - perform significantly better than non-signatories. This would suggest that the 'stronger' institutions are inclined to adopt the EP.

From a financial market perspective (see Hamilton et al., 1993) the last two hypotheses would suggest that investors that might take account of firms that do and those that do not adopt the EP might have an impact on stock prices. Investors may either increase the valuation of EP banks relative to the valuation of conventional firms by driving down the cost of capital of and the expected returns of their stock (see also Heinkel et al., 2001). Or investors consistently underestimate the probability that negative information can be released about firms that are not acting according to the EP. Key in assessing the financial value of the firm is the relation between (expected) cash flows of the firm and the appropriate discount rate, e.g. the accounting cost of capital. The discount rate is unlikely to be directly affected when adopting the EP. The main factors that affect the cash flow are the higher costs associated with operating socially responsible, which reduce market value and the additional income from activities that the bank has gained through its better reputation. The main factor that might affect - albeit indirectly- the discount rate by operating socially responsible is the reduced risk from the improved reputation. However, adoption also might impact on the cash flows as it is accompanied by some additional costs for staff, screening, monitoring, (re)negotiation as well as by the probability of more (or less) deals to be closed with the result of more (or less) income via fees and interest income, also improved reputation may positively impact on the financial institution's cash flow. This all boils down to identifying who is willing to bear the costs of operating socially responsible and if the benefits of this bearing outweigh the costs. To conclude, the second and third hypothesis both assume that EP adopters significantly differ from non-adopters, whereas the first hypothesis assumes that the two can not be distinguished on the basis of key attributes. We expect that the results of a cost-benefit analysis associated with CSR is potentially more positive for banks that are in the spotlight. Since larger banks experience more exposure, we expect the reduction in risk to be larger for these banks. Thus, basically, the reasoning might be that by adopting the Equator Principles, banks signal their CSR conduct which improves their reputation which, in turn, reduces their risk.

As to the event study about the announcement effects of adopting the EP, we also have that three possibilities can occur. First is that there are significant and

positive abnormal returns. This suggests that investors assume that the benefits of adoption in terms of pecuniary benefits and reputation outweigh the costs. We specifically expect to observe this type of investor behavior in markets where the share of socially responsible investors is large or markets where investors view EP adoption as a means of risk reduction. Second is that there are significant and negative abnormal returns. This suggests that investors assume that the operational costs of adoption are higher than the benefits. Third is that there are no significant abnormal returns. This suggests that investors assume that the net effect of costs and benefits is small and does not affect the value of the firm in a significant manner or that any cost or benefit of adopting is small on an a priori basis as the relative size of project finance is limited from the perspective of the adopting institution's balance sheet and income statement.

To test the first three hypotheses, we will perform a simple test of equality of means on the key attributes of the adopters and compare their 'scores' with those of non-adopters. In order to find out whether adoption does make a difference from the perspective of financial market participants - i.e. the second bunch of hypotheses - we conduct an event study after the impact of the adoption announcement on the stock price of the firm.

Social, ethical and environmental policy data are derived from EIRIS. EIRIS is a not-for-profit organization set up in the UK in 1983 with the help of a group of churches and charities. EIRIS researches almost 2700 companies from the UK, continental Europe, North America (US and Canada) and the Asia-Pacific region (Australia, New Zealand, Japan, Singapore and Hong Kong). EIRIS gathers the data on the basis of a questionnaire and a survey of the firms in six different areas: Environment, governance, human rights, positive products and services, stakeholder issues, and other ethical concerns. EIRIS investigates the policies that are in place within the firm. Performance is not the focal point as reporting systems in this respect are still very weak and inconsistent between countries and industries and in time. With environment, policy, management, reporting, and performance are the main topics. Other topics analyzed by EIRIS are whether or not and if so to what extent, a firm is involved in various specific activities, such as water pollution, the use of tropical hardwood, nuclear power etc. Second is governance. Here, it is the relation with various stakeholders that is investigated as well as the position vis-à-vis various codes of conduct. Human rights also relates to policy, management, reporting, and performance. Positive products and services go into the share of turnover that comes from particular economic activities such as health care, waste disposal, energy

efficiency. Stakeholder issues relate to stakeholder engagement and management and to employee issues, to customer and supplier relationships, and to community involvement. Other ethical concerns relate to the involvement of the firm with issues as animal testing, gambling, pornography, or tobacco. To assess the firms' policies, EIRIS has a scoring table which consists of six scales or grades. We give a score of 3 to the high positive grade, 2 to med positive, 1 to low positive, -1 to low negative, -2 to med negative, and -3 to high negative. Firm characteristics are derived from BankScope. This is a database about banks and financial institutions and used a lot in the economics literature (see, for example, Claessens et al., 2001). Financial market information is derived from DataStream.

We took the financial institutions in EIRIS as the starting point for our sample.<sup>4</sup> EIRIS has information about social, ethical, and environmental policies for 412 financial institutions. In BankScope, we were able to derive information about 239 of these institutions. DataStream provided information about 236 institutions that also were in the EIRIS and in the BankScope databases. From these 236 institutions we picked the 56 largest ones that were involved in project finance on the basis of the league tables in Project Finance Magazine composed by Dealogic, and checked for project finance on their websites. We had all information regarding CSR policies, firm characteristics and risk and return of 27 of the EP adopters. The key characteristics of our dataset are presented in table 3.1. It gives, among others, the average score or value and standard deviation for indicators of CSR (in fact, we used factor analysis, see section 3.4 below) as well as for firm characteristics and financial market indicators for the two subgroups (i.e. EP banks and banks involved in project finance but not adopters of the EP).

### 3.4 Results

In this section, we first analyze whether the adopting banks differ from those that did not adopt the EP. We try to find out whether there are significant differences in firm characteristics, performance and in social, ethical and environmental policies of the two groups. To this extent we first perform tests for the equality of means. The issue here is whether the performance of the two groups of banks does significantly differ (or not).

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<sup>4</sup> As EIRIS tries to gather as much information on quoted companies as possible, we do not particularly expect a sample bias

Table 3.1. Descriptive Statistics and test for equality of means

Size		number of banks	mean	standard deviation	min.	max	t-stat. <sup>a</sup>	t-stat. <sup>b</sup>
Number of Employees <sup>c</sup>	N	41	36,195	26,107	1,472	126,488	4.12***	4.21***
	E	19	95,925	79,792	12,487	315,434		
Total Assets (million US\$) <sup>c</sup>	N	56	304,839	321,806	12,781	1,533,036	3.05***	2.89***
	E	31	666,586	482,386	3,292	1,484,101		
Equity (million US\$) <sup>c</sup>	N	56	15,950	11,917	1,099	55,741	2.1**	1.78*
	E	31	33,422	31,372	123	111,155		
Deposits & Short term funding (million US\$) <sup>c</sup>	N	56	192,179	202,786	1,505	905,893	3.43***	3.49***
	E	31	458,314	333,023	3,113	1,009,238		
Net Income (million US\$) <sup>c</sup>	N	56	2,160	1,815	-128	7,546	1.79*	1.53
	E	30	3,764	4,769	-4,960	17,273		
Total Deposits (million US\$) <sup>c</sup>	N	55	153,121	168,179	0	810,862	3.59***	3.7***
	E	31	381,875	271,654	3,113	813,301		
Loans (million US\$) <sup>c</sup>	N	56	116,730	115,222	0	561,378	3.79***	3.66***
	E	31	287,890	204,188	2,705	733,527		

Table 3.1. Descriptive Statistics and Test for Equality of Means (continued)

<b>Structure</b>		number of banks	mean	standard deviation	min.	max.	t-stat. <sup>a</sup>	t-stat. <sup>b</sup>
Tier 1 Ratio (%)	N	36	8.8	2.4	5.3	17	-1.33	-1.41
	E	22	8.1	1.8	5.3	12.3		
Net Loans / Total Assets (%)	N	56	50.3	23.4	0	94	-0.13	-0.14
	E	31	49.8	14.9	16.9	82.2		
Equity / Total assets (%)	N	56	8.7	8.1	2.3	46.7	-2.94***	-3.32***
	E	31	5.2	2	2.2	9.2		
Total Capital Ratio (%)	N	38	12.7	2.8	9.5	21.2	-1.08	-1.23
	E	22	11.9	1.7	9.7	16.6		
<b>Operating Profit</b>								
Return on Average Equity (ROAE; %)	N	56	13.8	5.8	-2	29.3	-0.7	-0.6
	E	30	12.6	9.8	-20.6	24.3		
Net Interest Margin (%)	N	56	2.9	3.9	-1.2	19.9	-1.48	-1.95*
	E	30	1.8	1.1	0.4	4.9		
Return on Average Assets (ROAA; %)	N	56	1.1	0.7	-0.1	3.7	-2.71***	-2.99***
	E	30	0.7	0.5	-0.7	1.7		

Table 3.1. Descriptive Statistics and Test for Equality of Means (continued)

		number of banks	mean	standard deviation	min.	max.	t-stat. <sup>a</sup>	t-stat. <sup>b</sup>
Pre-tax operating income	N	50	1.5	1.3	-0.2	2.5	-1.99**	-2.45**
/ Average assets (%)	E	25	0.9	0.6	-0.3	2.7		
Cost to income ratio (%)	N	56	58.7	14.5	26.1	87.4	0.49	0.56
	E	30	60.2	9.3	41	79.7		
<b>Stock Market Performance</b>								
Average Stock Market Returns	N	52	0.10	0.05	-0.03	0.29	1.87*	1.63
(% per day jan03-jun06)	E	30	0.12	0.08	0.02	0.35		
Beta	N	54	1	0.42	0.26	1.85	1.96*	1.95*
(correlation with market index)	E	30	1.19	0.43	0.29	2.03		
Volatility (Standard Deviation	N	52	1.40	0.40	0.80	3.00	1.95*	1.66
of Stock Market Returns;%)	E	30	1.70	0.80	0.40	3.40		
<b>CSR Performance</b>								
Stakeholders <sup>d</sup>	N	56	0.33	0.99	-1.27	1.93	1.97*	2.05**
	E	31	0.74	0.85	-1.04	2.07		
Governance <sup>d</sup>	N	56	0.34	0.78	-1.89	1.33	0.88	0.89
	E	31	0.5	0.74	-1.96	1.27		



Table 3.1. Descriptive Statistics and Test for Equality of Means (continued)

	number of banks	mean	standard deviation	min.	max.	t-stat. <sup>a</sup>	t-stat. <sup>b</sup>
Environment <sup>d</sup>							
N	56	0.15	1.04	-0.79	2.31	2.46**	2.43**
E	31	0.73	1.08	-0.73	2.39		

Sources: Bankscope, Datastream, Ethical Investment Research Services (EIRIS)

E =Banks that adopted the Equator Principles, N=Banks that did not adopt the Equator Principles. See Appendix III for a list of the banks included in the analysis. All data are for the accounting year 2005, except for stock market returns (2003-2006). \*, \*\*, \*\*\* denote significance at 10%, 5%, and 1% respectively.

a t-test for equality of means, equal variances assumed.

b t-test for equality of means, equal variances not assumed.

c t-test for equality of means conducted on the natural logarithm of the variable to account for the non-normality of the data.

d Factor scores of CSR indicators, see table 3.2 for the factor analysis results.

Secondly, we conduct an event study to find out whether EP adoption does impact on the financial market value of the signatory banks. We stress the explorative nature of the analysis and as such, the analysis can be best interpreted as a descriptive study.

### 3.4.1 Descriptives and t-test of Equality of Means

As an explorative investigation, we test whether the mean scores of the two groups on the CSR variables, firm characteristics, and financial risk and return are significantly different. In the last two columns of table 3.1, we give the results of our tests for equality of the means of the variables. We present two t-statistics, one where we assume equal variances for both groups, and one where we do not assume equal variances. As to the CSR variables, we calculate factor scores based on a list of indicators that are in the EIRIS dataset. The values of the indicators are integer and range from -1 to 3. We conduct factor analysis on the initial 412 financial institutions in the EIRIS dataset and extract three factors. We label these three factors "Stakeholders", "Governance", and "Environment". The list of indicators and the factor loadings are in table 3.2. Table 3.1 shows that the financial institutions that adopted the EP have a significantly higher score on Environment and Stakeholders.

For the firm characteristics, we have the surprising finding that almost all the size related firm attributes are significantly different at the 1% level. Institutions that adopted the EP are significantly larger than those that did not. This hints at the notion - put forward in section 3.2 - that CSR behavior is especially displayed by banks that are in the spotlight. Adhering to the Equator Principles then can be seen as a way of reputation management. As to the financial structure of the banks, for equity to total assets the two groups are significantly different from one each other at the 5% level. When it comes to operating profits, we see that EP banks have a significantly lower Return on Average Assets, indicating that there might be real costs associated with signing up to the Principles. However, our test is not suitable to establish any causality. Also, we did not directly test the costs so we cannot confirm C. Wright and Rwabizambuga (2006) idea that CSR screening is difficult and costly. Furthermore, we establish that for the remaining items the differences between the two groups are not significantly different at 5%. As to the financial market perspective, table 3.1 shows that financial return, beta's and financial risk of the two groups of institutions are not that much different from each other. Where we do find significance, it is not very strong (only at 10%) and not very robust, i.e. one would have to assume identical variances. This does not

Table 3.2. Factor analysis of corporate social responsibility indicators

Pattern Matrix Variable	Factor Loading		
	<i>Stakeholders</i>	<i>Governance</i>	<i>Environment</i>
Environmental policy	0.04	0.06	<b>0.86</b>
Environmental management	-0.07	0.03	<b>0.97</b>
Environmental reporting	0.00	0.08	<b>0.68</b>
Environmental impact improvement	0.26	-0.04	<b>0.51</b>
Governance of bribery and corruption	0.06	<b>0.74</b>	0.06
Governance of codes of ethics	0.03	<b>0.92</b>	0.01
Codes of ethics system	0.06	<b>0.56</b>	0.20
Codes of ethics communicated	-0.03	<b>0.83</b>	0.04
Stakeholder policy	<b>0.58</b>	0.49	-0.04
Stakeholder system	<b>0.93</b>	0.15	-0.07
Stakeholder engagement	<b>0.71</b>	0.13	0.07
Stakeholder reporting	<b>0.80</b>	-0.07	0.10
Equal opportunity policies	0.26	<b>0.57</b>	0.07
Equal opportunity systems and practices	<b>0.75</b>	0.06	0.08
Health and safety system	<b>0.67</b>	0.03	0.19
Job creation & security	<b>0.77</b>	-0.10	0.00
Trade union participation	<b>0.42</b>	-0.28	0.17
Customer & supplier policies	<b>0.46</b>	0.16	0.09
Customer & supplier systems	<b>0.79</b>	0.13	-0.04
Community involvement	<b>0.45</b>	0.33	0.05

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization

Source: Ethical Investment Research Services (EIRIS)

imply that adopting the EP can not be linked to actual less risky performance. A decomposition of financial risk of the EP banks might feature significant differences in size and leverage. This is in line with the general finding in the finance literature which asserts that 'being big' reduces risk (see Fama and French, 1993; Elton et al., 2002). Furthermore, as we lack exact data on banks' CSR performance in project finance, we cannot test whether actual free riding behavior (see Gunningham and Sinclair, 2002) does occur.

In all, we have established that financial institutions that adopted the EP show a significantly higher score on their CSR policies, are significantly larger and carry some extra costs compared to institutions which did not adopt. When we relate this to the hypotheses above, we arrive at a somewhat mixed conclusion. For some characteristics (most profitability and solvency indicators, and financial returns) we find that there is no significant difference between financial institutions that

did and those that did not adopt the EP. In this respect, these results are in line with hypothesis 1 of no differences implying that the socially responsible conduct of the financial institutions who adopted the EP is not priced. However, for other characteristics (almost all CSR indicators and for all size indicators) we do find a significant difference between the two groups. More specifically, the adopters score higher on CSR features, are larger and carry some extra cost. The combination of observing larger banks adopting the EP and observing lower operational profits for these banks suggests that 1.) Adopting the EP is not window-dressing, but exhibits real costs. 2.) For larger banks the benefits– which we think of as being reduced risk, albeit not observable in the financial data– of signing up outweigh these costs.

So far, however, our “analysis” yields more questions than answers and a thorough econometric approach is needed to properly analyze these issues, which is beyond the scope of this chapter. However, our preliminary findings give at least some idea of the direction in which future research should be heading.

### 3.4.2 Event Study

In order to assess the impact of adoption of the EP on financial return, we conduct an event study. The event is the announcement that the bank has adopted the EP. We proceed to perform an event study as suggested by MacKinlay (1997). First, we calculate daily returns of the return index for every signatory party with a quotation on the stock market (see the appendix), as well as the daily returns of corresponding country indices (see the appendix). Using these returns we then estimate normal returns. We use an estimation window of 60 days. The estimation window ranges from 90 days prior to the event till 30 days prior to the event. The choice of the length of the event window is somewhat arbitrary, but generally the results are robust to variation. For these samples we estimated four different factor models, which we describe below. Using a multi-factor market model one assumes that a security’s daily return is correlated with the market index as well as other relevant factors, for example macroeconomic indices. The model specification is linear:

$$R_{i,t} = \alpha + \beta R_{m,t} + \epsilon_t$$

Here  $R_{i,t}$  is the daily return of bank  $i$ ,  $R_{m,t}$  is a vector of daily returns of the underlying factors, and  $\epsilon_t$  is an error term. We estimate this equation using Ordinary Least Squares. For model 1 we use a single-factor approach: the main local market index. For model 2 we estimate a two-factor model in line with Flannery and James (1984).

Here, the first factor is the local market index and the second factor is an index of a constant maturity default-free bond. For model 3 we use the return of a world financials index in combination with the return on an index of a constant maturity default-free bond. Finally, in model 4, we estimate a three-factor model, using the return of a local market index, the return on a world financials index, and the return on an index of a constant maturity default-free bond. We assume the error term has an expectation equal to zero and calculate the standard deviation of the error term for statistical inference. It is well-known that there exist particular characteristics associated with daily stock returns, such as (Generalized) Auto-Regressive Conditional Heteroskedasticity ((G)ARCH). However, as S. J. Brown and Warner (1985) show, tests ignoring these characteristics are well-specified and daily returns generally present few difficulties for event studies.

Using the parameters of the fitted model we then calculate abnormal returns, which are defined as the daily returns minus the expected returns based on our model specification. We calculate the abnormal returns for the period of 10 days prior to the event until 10 days after the event. Again, this choice is arbitrary, yet conventional. We average the abnormal returns of all EP banks around the event date. These data are in table 3.3. Since the abnormal returns have expectation zero and standard deviation equal to the standard deviation of the error term, we can test whether abnormal returns around the event date are significantly different from zero. According to Kothari and Warner (2006), any cross-correlation due to the fact that banks adopt on the same date is accounted for when estimating a factor model. For this purpose, we calculate the cumulative abnormal returns (CAR), for different event windows.

The CARs are depicted in Figure 3.1 a)- d) and are associated with our models 1, 2, 3, and 4, respectively. The graphs all display a period of 10 days prior the event until 10 days after the event. The graphs also show 10% significance boundaries. Moreover, table 3.4 presents CARs and associated t-statistics and probability values for our models for several event windows. For example [-1, 1] means that the cumulative abnormal returns have been calculated for the period of one day before the event till one day after the event. From our figures it becomes clear that EP adoption, on average, does not result in abnormal returns that are significantly higher or lower than what is to be expected. Table 3.4 confirms this for several event windows. Also, we show additional robustness checks in the form of testing for the subsample of the initial banks (model 4a) that together announced the adoption of the EP on June 4th 2003, as well as for the sample of the latest 15 adopters (model

Table 3.3. Abnormal Returns for event study after the effect of adopting the Equator Principles

day	Model 1		Model 2		Model 3		Model 4		Model 4a		Model 4b	
	AR	<i>t-stat.</i>	AR	<i>t-stat.</i>	AR	<i>t-stat.</i>	AR	<i>t-stat.</i>	AR	<i>t-stat.</i>	AR	<i>t-stat.</i>
-10	0.07	(1.10)	0.04	(0.69)	0.02	(0.19)	0.04	(0.64)	0.02	(0.52)	-0.02	(-0.44)
-9	-0.09	(-1.37)	-0.09	(-1.44)	-0.07	(-0.88)	-0.09	(-1.50)	-0.05	(-1.59)	-0.02	(-0.61)
-8	-0.03	(-0.43)	-0.04	(-0.62)	-0.09	(-1.15)	-0.05	(-0.83)	0.00	(0.09)	-0.02	(-0.60)
-7	-0.05	(-0.77)	-0.05	(-0.86)	-0.03	(-0.34)	-0.05	(-0.87)	-0.01	(-0.23)	-0.04	(-1.04)
-6	0.05	(0.83)	0.05	(0.83)	-0.06	(-0.74)	0.04	(0.70)	0.00	(0.12)	0.05	(1.32)
-5	0.05	(0.78)	0.06	(0.89)	0.03	(0.41)	0.05	(0.79)	0.04	(1.17)	0.00	(0.05)
-4	0.06	(1.01)	0.07	(1.04)	0.05	(0.67)	0.06	(0.94)	0.01	(0.43)	0.03	(0.80)
-3	-0.07	(-1.15)	-0.05	(-0.82)	-0.19**	(-2.37)	-0.07	(-1.13)	-0.04	(-1.27)	0.00	(0.06)
-2	-0.01	(-0.11)	0.01	(0.12)	-0.03	(-0.35)	0.01	(0.16)	-0.02	(-0.71)	0.05	(1.29)
-1	-0.12*	(-1.93)	-0.14**	(-2.16)	-0.15*	(-1.87)	-0.15**	(-2.43)	-0.02	(-0.69)	-0.07*	(-1.85)
0	0.04	(0.62)	0.04	(0.71)	0.06	(0.79)	0.03	(0.52)	-0.02	(-0.60)	0.02	(0.60)
1	0.10	(1.56)	0.10	(1.52)	0.09	(1.10)	0.09	(1.49)	-0.02	(-0.61)	0.03	(0.84)
2	0.01	(0.17)	0.02	(0.24)	0.11	(1.32)	0.02	(0.33)	-0.01	(-0.38)	0.03	(0.88)
3	0.23***	(3.67)	0.25***	(3.91)	0.23***	(2.84)	0.26***	(4.10)	0.01	(0.30)	0.21***	(5.43)
4	-0.10	(-1.50)	-0.09	(-1.49)	-0.09	(-1.15)	-0.09	(-1.44)	0.01	(0.43)	-0.04	(-0.90)
5	0.05	(0.75)	0.04	(0.63)	-0.01	(-0.11)	0.03	(0.48)	0.03	(0.79)	0.00	(0.06)
6	-0.03	(-0.42)	0.01	(0.19)	0.06	(0.73)	0.01	(0.22)	-0.04	(-1.17)	0.02	(0.49)
7	-0.05	(-0.83)	-0.06	(-0.92)	-0.13	(-1.59)	-0.07	(-1.15)	0.01	(0.29)	-0.02	(-0.58)
8	-0.03	(-0.45)	-0.01	(-0.20)	-0.13	(-1.59)	-0.01	(-0.20)	-0.03	(-0.79)	-0.02	(-0.62)
9	-0.05	(-0.76)	-0.05	(-0.77)	-0.07	(-0.86)	-0.06	(-0.93)	-0.03	(-0.98)	-0.05	(-1.34)
10	-0.15**	(-2.37)	-0.13**	(-2.10)	-0.14*	(-1.73)	-0.12*	(-1.93)	-0.01	(-0.19)	-0.06	(-1.56)

AR = Abnormal Returns, *t-stat.* = Student's t-statistic, AR values calculated using factor models:  $R_i = \alpha + \beta R_m + \epsilon$ , where  $R_i$  is bank  $i$ 's return and  $R_m$  a vector of market indices that serve as proxies for the underlying factors. For the factors we have used a model with a single local financial index for model 1, a two-factor model using a local index and an index of constant maturity default-free bonds for model 2, a two-factor model using a "financials" index and an index of constant maturity default-free bonds for model 3, and a three-factor model using a local index, a "financials" index, and an index of constant maturity default-free bonds for model 4. Model 4a relates to the initial adopters; 4b to the latest 15. Estimation window = [-90,-30]. For a list of the indices used see Appendix II. \*, \*\*, \*\*\*, significant at the 10%,5%,1% level respectively (two-tailed).

Source: Datastream.

4b).

Apparently, the news of banks adopting the EP is "no news" to the stock market. We give four possible interpretations. First, it could literally be no news, in the sense that adoption is a formality and these banks already conducted their business in line with the EP. Second, shareholders might feel that although the adoption is a good signal, factual information and transparency of projects is still lacking and hence they do not see this as valuable or, for that matter, credible information. Third, shareholders might think that there is no relation between good moral standards and good business. Fourth, project finance is just a small part of the ban-

Table 3.4. Event study results after the effect of adopting the Equator Principles on stock market returns

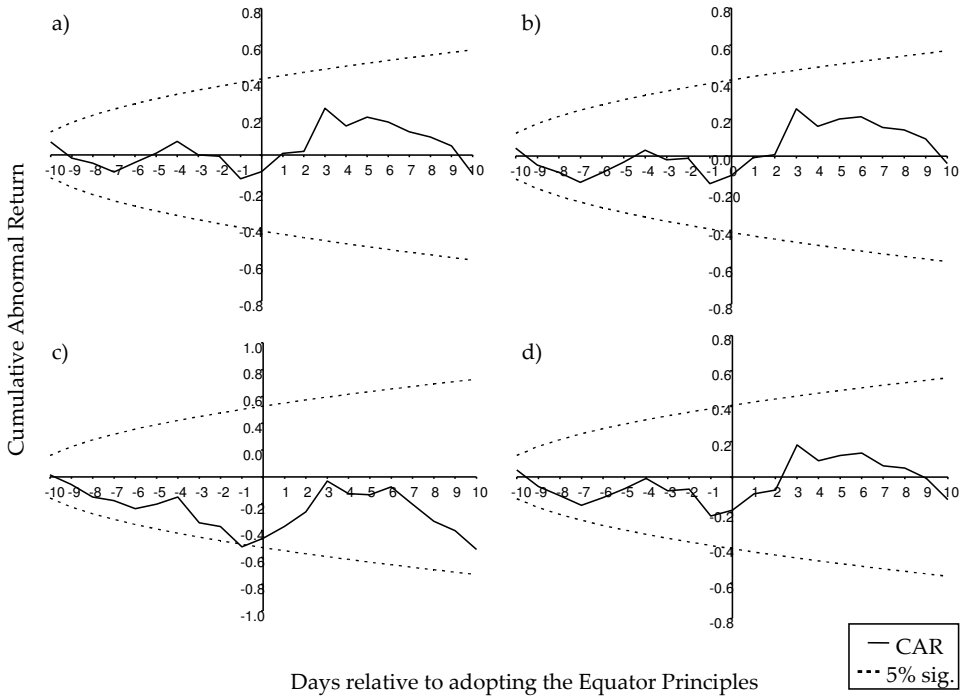
Event Window	Model 1	Model 2	Model 3	Model 4	Model 4a	Model 4b
	CAR	CAR	CAR	CAR	CAR	CAR
	( <i>t</i> -statistic)	( <i>t</i> -statistic)	( <i>t</i> -statistic)	( <i>t</i> -statistic)	( <i>t</i> -statistic)	( <i>t</i> -statistic)
[0]	0.04 (0.619)	0.045 (0.707)	0.064 (0.785)	0.033 (0.523)	-0.02 (-0.603)	0.023 (0.597)
[-1,1]	0.016 (0.14)	0.004 (0.036)	0.002 (0.011)	-0.026 (-1.311)	-0.064 (-1.095)	-0.016 (-0.234)
[-2,2]	0.019 (0.136)	0.027 (0.191)	0.081 (0.446)	0.004 (0.031)	-0.1 (-1.336)	0.069 (0.789)
[-5,5]	0.247 (1.164)	0.29 (1.38)	0.103 (0.384)	0.238 (1.15)	0.016 (0.178)	0.224 (1.604)
[-10,10]	-0.102 (-0.35)	-0.04 (-0.137)	-0.542 (-1.458)	-0.128 (-0.446)	-0.17 (-1.108)	0.089 (0.498)

CAR = Cumulative Abnormal Returns, *t*-stat. = Student's *t*-statistic, CAR values calculated using factor models:  $R_i = \alpha + \beta R_m + \epsilon$ , where  $R_i$  is bank  $i$ 's return and  $R_m$  a vector of market indices that serve as proxies for the underlying factors. For the factors we have used a model with a single local financial index for model 1, a two-factor model using a local index and an index of constant maturity default-free bonds for model 2, a two-factor model using a "financials" index and an index of constant maturity default-free bonds for model 3, and a three-factor model using a local index, a "financials" index, and an index of constant maturity default-free bonds for model 4. Model 4a relates to the initial adopters; 4b to the latest 15. Estimation window = [-90,-30]. Source: Datastream.

king business. Then, the net economic impact of EP adoption is likely to be very limited. If project finance constitutes 2% of a banks business, and adopting the Equator Principles reduces the value of that business by 20%, the banks' stock market value will drop by 0.4%, which is a return well within their daily fluctuations on the stock exchange.

When the event studies are done for subsets of larger banks, smaller banks, and banks at the individual level, we do not observe any significant effect. The press releases surrounding the dates of the initial adoptions suggest a combination of the first two arguments made above, and economic rationale hints in the direction of the fourth argument made. Whatever the 'true' relation of financial performance and EP adoption might be, our results suggest that on a systematic basis there is no significant response to the news item itself. As such, the event study is congruent with hypothesis 1 which asserts that the feature of EP adoption is not priced in the financial markets. Even if it is priced, apparently this effect is negligible in practice.

Figure 3.1. Event study after the announcement effect of adopting the Equator Principles



CAR = Cumulative Abnormal Returns, CAR values calculated using factor models:  $R_i = \alpha + \beta R_m + \epsilon$ , where  $R_i$  is bank  $i$ 's return and  $R_m$  a vector of market indices that serve as proxies for the underlying factors. For the factors we have used a model with a single local financial index for model 1, a two-factor model using a local index and an index of constant maturity default-free bonds for model 2, a two-factor model using a "financials" index and an index of constant maturity default-free bonds for model 3, and a three-factor model using a local index, a "financials" index, and an index of constant maturity default-free bonds for model 4. Estimation window = [-90,-30].

Source: Datastream.

### 3.5 Conclusion

On a voluntary basis, about 40 financial institutions have adopted the Equator Principles. In adopting these Principles, the banks seek to ensure that the projects they finance are developed in a manner that is socially responsible and reflects sound environmental management practices. The Equator Principles apply to project finance of projects with a total cost of at least US\$ 10 million, predominantly in developing countries. The adopters were being accused by non-governmental organizations for window-dressing or greenwashing as the Equator Principles would not go far



enough in the direction of sustainable development and as the transparency of the projects is rather poor. The Principles is an example of self-regulation (see Carrao and Siniscalco, 1998) and result in stricter rules and policies than is required by traditional law. The Principles fill gaps that are left by traditional law (see Shelton, 2000). In this chapter, we investigated whether the institutions that adopted the Equator Principles are different from non-adopters. To this extent, we investigate their policies regarding social responsibility, their main firm characteristics, and their operational and financial market performance.

We find that the corporate social responsibility policies of the financial institutions parties that adopted the Equator Principles are rated significantly higher than those of financial institutions that did not sign up. Furthermore, the former are bigger. This confirms our notion that CSR behavior is especially displayed by banks that are in the spotlight. We could not relate the reduced risk to a decrease in signatories' reputation risk because of lack of data. Most financial and firm characteristics do not show significant differences between the two groups, although we do find some indirect evidence that signing up to the Principles is associated with higher costs, which would confirm the ideas of C. Wright and Rwabizambuga (2006). The combination of observing larger banks adopting the EP and observing lower operational profits for these banks suggests that adopting the EP is not window-dressing but exhibits some real costs. For larger banks the benefits - which we think of as being reduced risk, albeit not observable in the financial data - of signing up outweigh these costs. Several event studies showed that shareholders did not react negatively to signing up; implying that shareholders expected that adhering to the Equator Principles does not significantly affect shareholder value. The reason could be that for large banks, project finance is just a small part of their total business, or it reflects that there is no direct trade-off between CSR and stock returns.

Overall, the evidence leads us to conclude that there really are some distinctive features between the banks that did adopt the Equator Principles and those that did not. Especially, the social responsibility of the former is rated higher and they are considerably large than the non-adopters. Probably given the small size of project finance in total banking business, we do not find a significant impact on the adopters' stock market value when they announce adoption. We argue that adoption is undertaken by banks that pay a lot of attention to CSR policies and conduct. By adopting the Equator Principles, they can signal this to the public, as the adoption of the principles receives a lot of media attention. Adoption comes at some costs, but it also improves the adopters' reputation and, as such, positively impacts on

the risk profile of the adopter. In order to assess whether the Equator Principles really result in the intended goals we need to have reliable data about the projects and their characteristics, which calls for international accounting standards with respect to environmental, social, and ethical performance. This is also necessary in order to assess whether free riding actually does occur. Further research after the Equator Principles especially would need to address these issues.

### 3.A Appendix

Table 3.A.1. List of private banks, their country of charter, and adoption date of the Equator Principles (list closed at 7/10/2006)

Bank	Country	Date of adoption
ABN AMRO Bank, N.V. <sup>ab</sup>	Netherlands	June 4, 2003
Banco Bradesco <sup>b</sup>	Brazil	September 8, 2004
Banco do Brasil	Brazil	March 3, 2005
Banco Espirito Santo (BES) <sup>b</sup>	Portugal	August 16, 2005
Banco Ita BBA <sup>b</sup>	Brazil	August 12, 2004
Bank of America <sup>b</sup>	US	April 15, 2004
Bank of Tokyo Mitsubishi (BTM)	Japan	December 22, 2005
Barclays plc <sup>ab</sup>	UK	June 4, 2003
BBVA Bank <sup>b</sup>	Spain	May 18, 2004
BMO Financial Group	Canada	September 15, 2005
Caja Navarra	Spain	January 9, 2006
Calyon <sup>a</sup>	France	June 4, 2003
CIBC Bank <sup>b</sup>	Canada	December 3, 2003
Citigroup Inc. <sup>ab</sup>	US	June 4, 2003
Credit Suisse Group <sup>ab</sup>	Switzerland	June 4, 2003
Dexia Group <sup>b</sup>	Belgium	September 18, 2003
Dresdner Bank	Germany	August 18, 2003
Ekspert Kredit Fonden	Denmark	May 14, 2004
FvO	Netherlands	October 19, 2005
Fortis <sup>b</sup>	Netherlands	February 17, 2006
HSBC Group <sup>b</sup>	UK	September 4, 2003
HVB Group <sup>a</sup>	Germany	June 4, 2003
ING Group <sup>b</sup>	Netherlands	June 23, 2003
JPMorgan Chase <sup>b</sup>	US	April 25, 2005
KBC Bank <sup>b</sup>	Belgium	January 27, 2004
Manulife	Canada	May 11, 2005
MCC Bank	Italy	July 29, 2003
Millenium BCP	Portugal	January 2, 2006
Mizuho Corporate Bank <sup>b</sup>	Japan	October 27, 2003
NedBank <sup>b</sup>	South-Africa	November 10, 2005
Rabobank Group <sup>a</sup>	Netherlands	June 4, 2003
Royal Bank of Canada <sup>b</sup>	Canada	July 21, 2003
Scotiabank <sup>b</sup>	Canada	January 18, 2005
Standard Chartered Bank <sup>b</sup>	UK	October 8, 2003
Sumitomi Mitsui Banking Corp. (SMBC) <sup>b</sup>	Japan	February 23, 2006
The Royal Bank of Scotland <sup>ab</sup>	UK	June 4, 2003
Unibanco <sup>b</sup>	Brazil	June 1, 2004
Wells Fargo <sup>b</sup>	US	July 11, 2005
WestLB AG <sup>a</sup>	Germany	June 4, 2003
Westpac Banking Corporation <sup>ab</sup>	Australia	June 4, 2003

a. belongs to the ten banks that announced on June 4, 2003 that they were adopting the Principles.

b. institutions about which we had all data and that were used in our analyses.

Table 3.A.2. List of indices and interest rates used in the event studies in section 3.4.2

Country	Index Used	Interest Rate used
Australia	ASX ALL ORDINARIES	AUSTRALIA BENCHMARK BOND 10 YR
Belgium	BEL 20	BELGIUM BENCHMARK BOND 10 YR
Brazil	BRAZIL BOVESPA	BRAZIL CDI - MIDDLE RATE
Canada	S&P / TSX COMPOSITE INDEX	CANADA BENCHMARK BOND 10 YR
Japan	TOPIX	JAPAN BENCHMARK BOND -RYLD.10 YR
Netherlands	AEX INDEX (AEX)	NETHERLAND BENCHMARK BOND 10 YR
Portugal	PORTUGAL PSI-20	PORTUGAL BENCHMARK BOND 10 YR
South-Africa	FTSE/JSE ALL SHARE	SOUTH AFRICAN LONGEST DATED
Spain	IBEX 35	SPAIN BENCHMARK BOND 10 YR
Switzerland	SWISS MARKET	SWITZERLAND BNCHMRK. BOND 10 YR
UK	FTSE ALL SHARE	UK BENCHMARK BOND 10 YR
US	S&P 500 COMPOSITE	US TREAS.BENCHMARK BOND 30 YR
World	MSCI WORLD FINANCIALS	

Source: Datastream.

Table 3.A.3. List of included banks and their country of charter for the descriptive statistics and tests for equality of means in section 3.4.1

Bank	Country	Bank	Country
Citigroup	USA	Prudential Financial	USA
J P Morgan Chase & Co.	USA	Lloyds TSB Group	UK
HSBC Holdings	UK	Uni Credito Italiano	Italy
Bank of America	USA	US Bancorp	USA
The Royal Bank of Scotland Group	UK	National Australia Bank	Australia
Mitsubishi Tokyo Financial Group	Japan	Nomura Holdings	Japan
Mizuho Financial Group	Japan	Com.wealth Bank of Australia	Australia
Credit Agricole	France	Suntrust Banks	USA
ING Groep	Netherlands	San Paolo-IMI	Italy
Wells Fargo	USA	Nordea	Sweden
Sumitomo Mitsui Financial Group	Japan	Lehman Bros	USA
Credit Suisse Group	Switzerland	Commerzbank	Germany
Barclays	UK	Resona Holdings	Japan
Banco Bilbao Vizcaya Argentaria	Spain	ANZ Bank	Australia
UFJ Holdings	Japan	National City	USA
Fortis	Belgium	Toronto-Dominion	Canada
Bayerische Hypo- und Vereinsbank	Germany	BB&T	USA
ABN-Amro Holding	Netherlands	Danske Bank	Denmark
Royal Bank of Canada	Canada	Bank of Montreal	Canada
KBC Groupe	Belgium	DBS Group Holdings	Singapore
Dexia	Belgium	Banca Monte dei Paschi di Siena	Italy
Bank of Nova Scotia	Canada	Capitalia	Italy
Canadian Imperial Bank	Canada	Bank of New York	USA
Westpac Banking Corporation	Australia	Bank Austria Creditanstalt	Austria
Standard Chartered	UK	Old Mutual	UK
Sumitomo Trust & Banking	Japan	Fifth Third Bancorp	USA
Banco Comercial Portugues	Portugal	BOC Hong Kong (Holdings)	Hong Kong
Mitsui Trust Holdings	Japan	Takefuji	Japan
Mizuho Trust and Banking	Japan	North Fork Bancorporation	USA
Banco Espirito Santo	Portugal	United Overseas Bank	Singapore
Manulife Financial	Canada	Acom	Japan
Banco Santander Central Hispano	Spain	PNC Financial Services Group	USA
Wachovia	USA	Shinsei Bank	Japan
BNP Paribas	France	Skandinaviska Enskilda Banken	Sweden
Deutsche Bank	Germany	Golden West Financial	USA
UBS	Switzerland	Banca Nazionale del Lavoro	Italy
HBOS	UK	Keycorp	USA
Merrill Lynch	USA	Natexis Banques Populaires	France
Société Générale	France	Banche Popolari Unite	Italy
Morgan Stanley	USA	Mediobanca	Italy
Goldman Sachs Group	USA	CIT Group	USA
Banca Intesa	Italy	Promise Company	Japan
Macquarie Bank	Australia	Shizuoka Bank	Japan
Industr. & Commerc. Bank of China	Hong Kong		