Environmental risk management in lending – opportunities and implementation aspects for banks

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Abstract
Climate change and increasing pollution worldwide are modifying the way businesses operate through the way legislative systems work and thought the alternation of consumer preferences. Banks as institutions playing key role in the world economy are not exempt from this trend. For them changing circumstances translate especially in changing risk profiles of their clients which requires adaption of the risk management procedures in order for the new risks to be captured. Once this need is acknowledged, there come the questions of how to do it in practice. Existing methodologies of leading international financial institutions come at aid. Enhancing risk management with the addition of environmental risk awareness and monitoring leads to increased awareness in the banks of various opportunities – to improve risk management from within, to know their customers better, to create new services and product which to meet the new needs of beneficiaries.
The current paper is aiming at presenting a high level view of the matters outlined above and at showing that the implementation of environmental risk management in banks could be only beneficial to them.

Key words: *environmental risk management, banks, lending, climate change, pollution.*

1. Introduction

Climate change and pollution are phenomena that have significant impact on all types of activities. At the same tie almost all types of activities impact climate change and the level of pollution. Financial services are not exempt from the process. When assessing the scale to which they can affect, hence – improve

Volume 1, ISBN 978-619-203-015-5

environment, the two aspects of environmental impacts businesses have – direct and indirect - need to be considered and differentiated.

The direct impacts on environment originate from the operation of a company (operational footprint), while the indirect stem from the products and services the company offers. Environmental risk management is key to managing both the direct and the indirect impacts. It is the activity which aims at identifying, assessing and monitoring them. In the case of banks, indirect impacts on environment are more important than the direct ones. Through their central role in the economy as providers of lending to corporations and households, banks play significant role in shaping climate change and pollution. It is primarily the core banking activities where the importance of environmental risk management is becoming increasingly evident. This, however, does not discard the relevance of internal efforts for containing direct negative impact on environment. Data from corporate reports of banks confirm that effects can be achieved and they prove to be positive both in terms of saved costs and resource, and – not less importantly – in terms of improved awareness on environmental issues among staff. As regards the indirect impacts, banks have just recently started acknowledging them and building expertise in the area. Both aspects – those of direct and indirect environmental impacts present the overall picture of the scope and importance of environmental risk management for banks.

2. Environmental risk management in lending

1.1. Definition and scope

In the case of banks, the indirect environmental impact is much more important than the direct one. The indirect impacts stems from the core activities of the bank – lending, trade finance and asset management, more specifically the impacts originating from the business of the clients of the bank. As banks in Europe and in particular in Bulgaria are specialized primarily in lending, this is the main activity where this risk can be felt. The definition of environmental risk in the area of lending hence has basically two main aspects:

1) The risk of a loan becoming non-performing due to fines or bans on the beneficiary which place him in a position to be unable to serve his loan and other obligations

2) The risk of obtaining collateral with heavy environmental issues that make it practically not usable, i.e. the cost of cleaning collateral (EBRD Environmental and Social Risk Management Manual).

Consequently, environmental risk is not a phenomenon that exists separately from the other types of risks a bank is facing. It is closely related to credit, legal, operational and reputational risk.

The most immediate connection is the one between environmental and credit risk. Cursory attitude towards environmental risks translate into credit events leading to losses. Environmental risk is connected to operational risk, too, in terms of not properly defined responsibilities leading to flawed process of scoring and management of the former. Legal and environmental risks are also associated since ignoring legal implications for the bank from the existing environmental legislation can translate into losses. All the above increase reputational risk as a result of associating the image of the bank with the idea of financing activities which pollute or are otherwise harmful to nature.

Three main reasons justify the efforts banks are placing in towards environmental risk management:

1) Legislative developments at local and international level create more and more stringent requirements on industries with respect to the pollution they produce. Fines and restrictions on clients may eat into their profits and even lead to insolvency which inflates credit risk for the financing banks

2) After a loan has proven nonperforming and the bank undertakes the collateral, if it is polluted (for example, in case of soil in a plot of land) or if it does not meet ecological regulatory requirements (in case of a plant or equipment), the bank may find itself in a situation where not only the loan is not recoverable, but the collateral is useless. This will have negative effect on the balance sheet of the institution

3) Donors (international organizations such as the International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD), and others) oftentimes require commitments from banks candidate-beneficiaries that they would exclude certain industries from financing and even that they would develop internal workflow for detecting, scoring and managing environmental risk. In times of crises when resource is expensive, opportunities for receiving cheaper

Volume 1, ISBN 978-619-203-015-5

funds from such institutions in the form of credit lines or other support is welcome by the banks in Bulgaria

The costs and reputational risks associated with environmental risk were behind the drivers for the financial institutions worldwide (banks and insurers) to joint efforts in building knowledge with the aim of managing it. These efforts led to the creation of United Nations Environmental Program Finance Initiative (UNEP FI) back in 1991 when Deutsche Bank, HSBC Holdings, Natwest, Royal Bank of Canada, and Westpac joined forces with United Nations Environmental Program (UNEP) to catalyze the banking industry's awareness of the environmental agenda. Today UNEP FI has more than 200 members from over 40 countries (About UNEP FI. Background. United Nations Environmental Program Finance Initiative). The signatories, among which large international banks, aim at expanding environmental awareness and risk management in their subsidiaries outside of the country of headquarters.

2.2. Determinants of a bank's exposure to environmental risk

The key determinants of environmental risk exposure for a bank can be identified among the following:

- Nature of economic activity of the customer
- Amount of loan
- Term of loan
- Nature of collateral

The above factors can be assigned weights in order to come up with a score quantifying environmental risk within a predefined range. Depending on the score, the risk is being classified as high, medium or low. High risk transactions are regarded with utmost care since they are the ones that bear the highest risk in terms of loss of loan or collateral.

Apart from the quantitative dimensions, environmental risk can further be assessed applying qualitative methods that aim at identifying the capacity which the potential beneficiary of financing has to deal with environmental issues. Such comprise, but are not limited to:

- Financial strength meaning the ability of the beneficiary to deal with severe environmental incidents without this threatening his financial health and therefore his creditworthiness

- Management capacity – the customer may work in an industry sector for which likelihood of pollution is significant (i.e. mining, chemical industry, etc.) however to have built robust system for dealing with environmental problems. This might be a team of employees dedicated to managing environmental risks
- Degree of innovation applied in the workflow of the beneficiary – the activities of his business may in themselves be polluting, but hi may have been incorporating leading technological innovations and know-how in order to curb pollution
- History – whether the beneficiary has been fined for noncompliance with environmental legislation or for caused pollution and if yes, how he has done afterwards (EBRD Environmental and Social Risk Management Manual).

The above are subject to checks that the bank must ensure the credit officers are doing during their on-site visits. On site visits are a necessary step in the evaluation of the environmental creditworthiness of a client and should not be underestimated as part of the process of collecting information for the client. This is due to the fact that they give the possibility for the credit officers to get acquainted face to face with the business nature of their clients and to make, though to a certain extent subjective, assessment of their observations and impressions on site, in the place where business operate.

2.3. Methodologies for environmental risk management in lending

Currently there are two methodologies for environmental risk management in lending which are widely used by the commercial banks especially in Europe, and these are the European Bank for Reconstruction and Development (EBRD) and the International Financial Corporation (IFC) methodologies.

2.3.1. The EBRD methodology for environmental risk management in lending

The EBRD adopted Environmental and Social Policy for the first time in 2003. This policy was subsequently amended and that is how the version of 2008 appeared. Currently (2013Q1) it is undergoing another review. All the reviews are aiming at streamlining the policy and adapting it further to the needs of the institutions (primarily banks) for which it is meant.

Within its Policy, the EBRD has adopted a set of 10 specific Performance Requirements (PRs) that its clients are expected to meet, covering key areas of environmental and social impacts. PRs reflect the EBRD's commitment to promote

Volume 1, ISBN 978-619-203-015-5

European Union (EU) environmental standards as well as the European Principles for the Environment. EBRD expects its clients to assess and manage the environmental and social issues associated with their projects so that projects meet the PRs. Performance Requirements should be read in conjunction with EBRD's Environmental and Social Policy and Procedures (Environmental and Social Policy, 2009). Regarding environmental risk management in particular, the most relevant PRs are PR 1: Environmental and Social Appraisal and Management and PR 3: Pollution Prevention and Abatement.

The Environmental and Social Policy is the core document which outlines the EBRD's commitments toward contributing to the addressing of the existing environmental and social problems in the world, and represents the background on which all the other important documents related to environmental risk management for banks, combined in the so called EBRD Environmental and Social Risk Management Manual, have been developed.

The Policy consists of two larger sections:

1. The first one is devoted to the general framework of the commitments the bank has undertaken and sets out its readiness to stand behind their implementation. Apart from this, the importance of integrating environmental and social considerations into the project cycle is stressed and specific guidelines on how this needs to be done are presented
2. The second section outlines the ten PRs.

As set out in the Policy, the appraisal done by the EBRD over specific projects incorporates three key elements:

1. the environmental and social impacts and issues associated with the proposed project;
2. the capacity and commitment of the client to address these impacts and issues in accordance with this Policy; and
3. the role of third parties in achieving compliance with this Policy (Environmental and Social Policy, 2009).

It is important to mention that there are a number of activities which EBRD has identified and for which it is not granting finance. These activities are listed in the so called Exclusion List. Common for all these activities is the high environmental and social risk associated with them. They fall under one of six categories as presented in the list:

1. The production of or trade in any product or activity deemed illegal under host country (that is, national) laws or regulations, or international conventions and agreements, or subject to international phase out or bans
2. Production or use of or trade in unbonded asbestos fibers or asbestos-containing products
3. Activities prohibited by host country legislation or international conventions relating to the protection of biodiversity resources or cultural heritage
4. Driftnet fishing in the marine environment using nets in excess of 2.5 kilometers in length
5. Shipment of oil or other hazardous substances in tankers which do not comply with International Maritime Organization (IMO) requirements
4. Trade in goods without required export or import licenses or other evidence of authorization of transit from the relevant countries of export, import and, if applicable, transit (Environmental and Social Policy, 2009).

Examples are the production of, or trade, in ozone depleting substances subject to international phase- out, shipment of oil or other hazardous substances in tankers which do not comply with International Maritime Organization (IMO) requirements.

1. Apart from the Exclusion List there are the so called projects category A. They are generally projects which imply high environmental and social risk and require additional special care to ensure that this risk is controlled. These projects are not rejected from financing. They need to be kept under strict review and subsequent controls in order not to allow for unwanted consequences. These projects fall within 28 categories and as defined by the EBRD are “greenfield” or major extension or transformation-conversion projects in the categories listed below. The list is indicative and the types of projects it contains are examples. The categorization of each project will depend on the nature and extent of any actual or potential adverse environmental or social impacts, as determined by the specifics of its design, operation, and location” (Environmental and Social Policy, 2009).

Examples are:

- number 1 in the list, “Crude oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day, also,
- number 8: Pipelines, terminals and associated facilities for the large-scale transport of gas, oil and chemicals”,

Volume 1, ISBN 978-619-203-015-5

- number 10: “Waste-processing and disposal installations for the incineration, chemical treatment or landfill of hazardous, toxic or dangerous wastes”, etc.

This categorization is very useful for banks as they can directly apply it rather than looking for answers to inquires how to differentiate the projects in terms of their hazard to nature and society – activity not inherent to them and very costly if assigned to external consultancy. That is why the information captured in the Policy is very useful for banks; they can directly draw from it.

Apart form he Exclusion List the so called Referral List has been designed listing hazardous industries whose financing is allowed but only upon EBRD’s consent for this.

As stated above, the Manual has been developed based on the Policy. The Manual comprises a set of documents presenting the practical side of the implementation of the Policy. It has been created as a kind of tutorial for bank employees who can both use it to learn the basics of environmental and social risk management, and as a source of consultation on various issues arising in the process.

The Manual is divided in three parts – one is related to lending, the other to investment and the third one – to other transactions.

The section devoted to lending is divided in three parts as well – one for corporate lending, one for micro and small business loans (below the threshold of USD 100 000) and the last one – to retail banking. Separate methodologies have been developed for environmental and social risk management in these three aspects of the core banking activities.

As regards corporate lending, the methodology applied is mostly visible from the initial environmental and social risk rating process. This process is captured in a designated form which outlines four steps to be taken to produce the rating (EBRD Environmental and social risk management procedures: Corporate lending, www.ebrd.org)

1. The industry type is defined. Depending on the industry type decision is taken whether the loan application can be considered or not. In case the type of industry falls in the Exclusion List, financing is denied. The next step is to check if the type of industry is mentioned in the Referral List and if so, then the consent of the EBRD is needed prior to proceeding with further evaluation. If the industry is not on the Referral List, then the loan officer needs to check its environmental and social risk according to the EBRD Environmental and Social Categorization List.

This list encompasses almost all types of industries and states the levels of environmental and of social risk (low, medium or high) that the specific industry has. In the Environmental and Social Risk Rating Guide (the Guide), the weight recommended for the industry type is 40%.

2. The size of the loan needs to be taken into account. The Guide recommends the split of the loans into three sizes – up to USD 200 000 are considered low risk loans, between EUSD 200 000 and USD 1 000 000 – medium risk ones, and all the loan above USD 1 000 000 – high risk ones. This rule draws from one of the main principles in risk management – the bigger the exposure, the bigger the risk. Although these are the recommended levels for each of the three categories by the EBRD, each bank should review its portfolio and adjust the thresholds depending on its specificities.

3. Defining the risk related to the term of the loan. It is essential to define the appropriate levels for each financial institution. The EBRD recommends in its manual the following division among the various terms: when the loan expires in less than 6 months, it should be considered implying low environmental and social risk, when it expires between 6 months and 2 years the risk should be considered as medium, and when it is longer than 2 years – high. It could be claimed that, and the practice of financial institutions in Bulgaria show, that these thresholds are rather too strict in view of the specificities of the corporate portfolios. Practice shows that there is a small number of corporate loans which term is less than 6 months, so it is recommended by the author the lower threshold to be lifted to at least 1 year, in view of the fact, too, that normally this is the term at which loans are reviewed. The second category – between 6 months and 2 years is too narrow in the view of the author, since it practically captures only very short term exposures. The recommendation is to widen this category of medium risk to be between 1 and 5 years and any loan above 5 years to be considered implying high environmental and social risk following the basic rule that the longer the term, the higher the risk.

4. Clarifying the collateral type and its relation to environmental and social risk. Here again the EBRD is recommending that all collateral types are split in three categories assigned low, medium or high environmental risk each of them. Thus low risk are considered cash and in general any liquid investments such as cash, guarantees. Medium risk are considered land with no industrial history or adjacent industry, fixed assets, non-liquid current assets such as stock, and high - land with

Volume 1, ISBN 978-619-203-015-5

industrial history, contamination or adjacent. Practice reveals that this simple split among collateral types is not similarly easy in practice due to the large number of collaterals banks accept. Another difficulty met in practice is the correct identification of the risk level when there is a combination of several collateral types.

This brief review shows that the methodology put forward by the EBRD is very practical but it requires each bank to review it and to adapt it to its particular specificities so that relevance of efforts is ensured. For example, if no adaptation is done regarding the risks assigned depending on the term of the loan, this might lead to, apart from spread of unneeded efforts to deal with short term exposures, also to the skewing of the risk profile to the directing on having too many high and medium environmental and social risk loans.

2.3.2. IFC methodology for environmental risk management in lending

Similarly to the EBRD, the IFC has developed its own Risk Management System Manual which comprehensively deals with various issues related to the practicalities of the application of risk management procedures in financial operations. The ESRP Manual applies to the full range of IFC's investment activities, such as direct lending to private enterprises including corporate and project finance; lending to financial intermediaries (FIs); equity/shareholding in companies, financial institutions, and other entities; structured finance products such as guarantees and securitizations; municipal finance; and E&S due diligence of Advisory Services (AS) projects. The ESRP Manual also describes the methodology to implement IFC's institutional disclosure requirements in accordance with the AIP (IFC Environmental and Social Review Procedures Manual, www.ifc.org).

Similarly to the EBRD, the IFC has adopted eight performance standards which define in detail what the financial institutions should do with respect the environmental and social risks they face.

What is typical for the methodology of IFC is the split of the projects to be financed in three categories depending on their environmental and social risks:

- Category A: Projects with potential significant adverse social or environmental impacts that are diverse, irreversible, or unprecedented.
- Category B: Projects with potential limited adverse social or environmental impacts that are few in number, site-specific, largely reversible, and readily addressed through mitigation measures.

- Category C: Projects with minimal or no adverse social or environmental impacts.

These categories basically correspond to the three categories identified by the EBRD – high, medium and low environmental risks. Apart from these categories, the IFC supports an Exclusion List, precluding finance for industries falling within its scope.

3. Monitoring of environmental risk in lending

Once the environmental risks are identified and the deal (loan, trade finance, asset management related) is approved by the approval authority of the bank, monitoring of the environmental risks need to take place until termination of the relation of the client with the bank. This is necessary since during the life of the deal environmental risks might materialize and the bank might be exposed as a result. Disregarding the importance of monitoring environmental risks carries in itself risks of potential loss. The bank therefore needs to ensure that it has a robust mechanism in place for the purpose. The practice and the recommendation of international organizations such as the EBRD which have developed methodology for managing this type of risks is on site checks of the beneficiary to take place occasionally. The easiest and most practical way to ensure this is done is the loan officers or relationship managers responsible for the respective deal to fill in a questionnaire related to environmental risk whenever they do on site visits of their clients. In such a way, no additional time for visits is needed and timely collection of valuable information is ensured.

The application of environmental risk management means excluding heavily polluting industries from financing. Exclusion lists have been developed by the IFC, the EBRD and other organizations. These lists include industries such as production or trade in or use of unbounded asbestos fibers or asbestos-containing products (except for the purchase and use of bonded asbestos cement sheeting where the asbestos content is below 20%); production or trade in products containing Polychlorinated Biphenyls (PCBs); production or trade in ozone depleting substances subject to international phase out; production or trade in pharmaceuticals, pesticides/herbicides and other hazardous substances subject to international phase-outs or bans (EBRD Environmental and Social Risk

Volume 1, ISBN 978-619-203-015-5

Management Manual), production or trade in radioactive materials with certain exceptions, and others (The IFC Exclusion List, International Finance Corporation).
Exclusion of specific industries and the application of strict rules for compliance with legislative requirements regarding environment goes hand in hand with opportunities for the banks for additional lending activities with the aim of providing support to corporations to improve their existing facilities in order to meet legislative requirements in the area of tackling climate change and environmental protection.
Once most financial institutions start applying the environmental criteria in their lending, trade finance and asset management activities, firms will be forced to be compliant in order to have access to funds. This will lead to spreading the environmental awareness and its materialization in sound environmental policies in the corporate world. In this scenario, banks have key role for encouraging the multiplier effects for the whole society.

4. Conclusion

Environmental risk management leads to mitigation of credit, operational, legal and reputational risks and ultimately contributes positively to the preservation of nature. Its importance is growing due to the acceleration of climate change and pollution and the responding actions for their prevention in terms of legislation and societal involvement. Commercial banks cannot afford to stay aside from these processes. They are urged to adapt their credit risk management procedures with the adoption of environmental risk management procedures by donors and by pressure from legislators and society.
Apart from creating additional workload for the business units in the banks who need to collect the risk data and monitor risks in time, numerous opportunities lay ahead. The banks which succeed to take advantage of them will be the ones to gain new markets and profits.

Acknowledgements

This document was supported by project BG051PO001-3.3.06-00530053 „Increasing the quality of education and research in the area of business engineering for the establishment of economy based on knowledge /innovation/ and finance” implemented within the Operational programme “Human Resources” funded by the European Social Fund.

The current document has been created with the support of the European Social Fund. VUZF bears the whole responsibility for the content of the current document and it can under no circumstances be considered as an official position of the European Union or the Ministry of Education and Science.

References

1. About UNEP FI. Background. United Nations Environmental Program Finance Initiative, viewed 10 April 2012, < http://www.unepfi.org/about/background/index.html>
2. All advertising materials of UniCredit Bulbank will be printed on recycled paper. UniCredit Bulbank Media Center, 2011, viewed 8 April 2012, <http://www.unicreditbulbank.bg/en/Media_Centre/News/2011/EN_NEWS_04_10_2011>
3. Corporate Social Responsibility and Sustainable Development Report, Eurobank EFG Bulgaria AD, 2010, viewed 15 March, 2012, pp. 64-65, <http://www.postbank.bg/TransformationService.asmx/XHTML?strXML=/bg-BG/about/Sponsorship/09CSRreport/#>
4. Distribution of Banks by Group as at 29 February 2012, Bulgarian National Bank, viewed 16 April 2012, <http://www.bnb.bg/BankSupervision/BSCreditInstitution/BSCIFinansReports/BSCIFRBankingSystem/BS_201202_EN>
5. EBRD Environmental and Social Risk Management Manual, European Bank for Reconstruction and Development, viewed 7 April 2012, <http://www.ebrd.com/environment/e-manual/a10lhfr.html>
6. National Statistical Institute, viewed 14 April 2012, < www.nsi.bg>
7. The IFC Exclusion List, International Finance Corporation, viewed 3 April 2012, <http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/IFC+Exclusion+List/>
8. EBRD Environmental and Social Policy.www.ebrd.org.
9. EBRD Environmental and social risk management procedures: Corporate lending, www.ebrd.org
10. EBRD Environmental and Social Management Procedures for Small & Micro Loans, www.ebrd.org

11. EBRD Retail Banking Procedures, www.ebrd.org
12. IFC Environmental and Social Review Procedures Manual, www.ifc.org