

Financial market regulation for sustainable development in the BRICS countries

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WWF Network Offices

ABBREVIATIONS

BCB	Banco Central do Brazil (Brazil's Central Bank)
BASA	Banking Association of South Africa
BIS	Bank for International Settlements
CBN	Central Bank of Nigeria
CBR	Central Bank of Russia
CBRC	China Banking Regulatory Commission
CSR	Corporate Social Responsibility
DFI	Development Finance Institution
ESG	Environmental and Social Governance
ESR	Environmental and Social Risk
E&S	Environmental and Social
FAO	Food and Agriculture Organization
FEBRABAN	Federation of Brazilian Banks
GIZ	Gesellschaft für Internationale Zusammenarbeit
	[German corporation for international collaboration]
GRI	Global Reporting Initiative
IEA	International Energy Agency
IFC	International Finance Corporation
JSE	Johannesburg Stock Exchange
KBA	Kenya Banking Association
KPI	Key Performance Indicator
MoEP	Ministry of Environmental Protection (China)
NBFC	Non-Banking Financial Company
NDRF	Chinese National Development and Reform Commission
NPL	Non-Performing Loans
OECD	Organisation for Economic Cooperation and Development
PBOC	People's Bank of China
RBI	Reserve Bank of India
RIDF	Rural Infrastructure Development Fund (India)
RIRA	Responsible Investment Research Association
SEPA	State Environmental Protection Agency (China)
SOE	State-Owned Enterprise
UN	United Nations
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
WEF	World Economic Forum
WTO	World Trade Organization

EXECUTIVE Sustainable development, meant as economic development **SUMMARY** with consideration for environ-mental and social sustainability, is increasingly becoming a

priority for decision-makers in emerging economies and various regulatory approaches have been explored with varying success. In particular, several emerging markets' policy-makers have introduced or are considering introducing financial market regulation to manage and mitigate environmental and social risk of investments.

The concept of addressing the environmental and social impact of the 'real economy' is not new. From industry-specific regulation (e.g. catalytic converters in combustion engines in cars), to national targets (e.g. for CO₂ emissions) to international commitments (e.g. to keep the global temperature increase below 2°C compared to pre-industrial levels), there are numerous examples of regulation to manage the adverse effects of unsustainable economic activities. What is special and novel about the financial regulatory frameworks is that they also address ecological and social risk (ESR) indirectly, by redirecting credit flows to projects and corporations that provide a net-positive environmental and social impact.

The aim of this report is to analyze the practices to address environmental and social risk in financial regulation prevalent in the BRICS countries. These countries are significant economies on a global scale and have enjoyed a fast economic growth. But they also face important country-specific social and environmental challenges. One of them is how to regulate different parts of their economies to reach the best possible balance between an environment that enables continued economic growth on the one hand, and the preservation of biodiversity and natural resources with reduced pollution and waste on the other.

Not surprisingly, when it comes to the adoption of ESR regulation, the main motivations can differ quite substantially, ranging from primarily environmental and social considerations (e.g. in China) to approaches directed more towards business risk management (e.g. Brazil). The difference among the BRICS countries is relatively large: while Brazil and China are at the forefront of developing financial market regulation to address environmental and social risk, India and especially Russia are still to achieve greater change in this area.

The opportunity for sustainable development provided by credit provision in the BRICS countries is huge: in 2012, their combined credit volumes exceeded US\$13.8 trillion, equivalent to roughly ²/₃ of Western European or North American credit volumes. In the global scene, the BRICS are also joining forces in new multilateral initiatives such as the recently established New Development Bank (known as the BRICS Development Bank), with further opportunities to pursue sustainable finance at a global level.

WWF refers to sustainable finance as financial activity that takes environmental and social concerns into consideration. While acknowledging that the environmental and social aspects of development are equally important, the report, in line with WWF's core mission, focuses primarily on the environment. The content is the result of desk research and interviews conducted with approximately 40 senior representatives from the BRICS' banking and regulatory institutions.

The findings can be summarized as follows:

- In **Brazil**, the Central Bank recently introduced a resolution on mandatory environmental and social policies for all banks under its jurisdiction. The banks, the banking association and public pressure were the driving forces behind the resolution, which outlines a framework of actions the Central Bank expects from banks. The specifics, such as minimum standards and control mechanisms, are being developed as part of an inclusive process by the banking association and the Central Bank.
- In Russia, the Central Bank has not issued any ESG specific regulations and overall both regulators and bankers do not consider environmental and social issues a priority given the current context, or a systemic issue that requires regulation. Rather, financial sector interventions are event-specific (e.g. following droughts). Furthermore, the pressure from interest groups and the general public is limited. In addition to binding regulations, the Central Bank can issue non-binding recommendations beyond current policies and Basel obligations.
- In **India**, information on environmental and social risk was issued by the Central Bank in 2007 as part of a general sustainability advisory. Seven years later there is greater discussion on the subject both within the sector and the media; however, most banks continue to lack the ambition and capacity to conduct thorough environmental and social risk assessments in their financing decisions beyond the minimum legal compliance.
- In **China**, financial market regulation is used to impose strong environmental and social risk controls. Credit volumes to overcapacity, high-consumption industries are restricted and the China Banking Regulatory Commission has issued the Green Credit Guidelines, which establish environmental and social controls in the credit process and direct funding towards green industries. The Commission is working on further specification of these guidelines and the establishment of a monitoring mechanism.
- In **South Africa**, currently no financial sector regulations stipulate that South African banks should include specific environmental standards in their banking operations (in contrast to the Pension Fund regulations which requires that ESG factors are taken into account when making investment decisions, and the Financial Sector Charter, which requires financial institutions to implement certain social and governance policies). Nevertheless, South African banks can be said to demonstrate commitment to environmental and social issues: the four largest local banks have signed up to the Equator Principles and, as a result of being listed on the Johannesburg Stock Exchange (JSE), produce both integrated and sustainability reports. The banks appear to prefer a self-regulatory route to incorporating ESR in their decision-making processes.

The entry point to further shape the debates in the BRICS differ strongly among countries: e.g. building basic awareness in Russia; establishing a compelling case for sustainability in the financial sector in India; promoting a dialog among regulators on ESR mechanisms and their introduction in South Africa; developing guidelines and standards for the implementation of the regulatory framework in Brazil; and refining the risk methodology and control framework for banks in China.

The importance of ESR for financial regulation has been recognized by most of the experts interviewed for this report. Many also expressed the desire for more information exchange between BRICS and other emerging markets, as well as more support to commence or continue the development of national frameworks from international organizations (such as WWF).

The acknowledgement of ESR in some of the BRICS' regulation and the desire to deepen exchange offer opportunities to establish dialog and cooperation, which, considering the size and relevance of such countries, could lead to a global scale-up of the issue.

Given the report's findings, a possible scenario for a global scale-up of ESR based on the experience of BRICS countries could work as follows: at the national level, the association of banks and its members subscribe to ESR standards and the central banks make ESR part of the required disclosures. Publicly available information would allow academics and civil society to increase their awareness of particularly critical ecological or social issues and track these back to the financing activities. Increased transparency would also allow international comparisons and industry league tables.

A complementary approach to national regulation is to implement mandatory ESR control mechanisms at the super-national level as part of a binding cross-country financial sector regulation, e.g. by integrating these into the Basel Accords, an international regulatory framework to regulate, supervize and manage risk of the banking sector. Finally, at the international level, development banks and international funds could increase subsidies to, or alternatively derisking of, ecologically and socially sustainable projects.

Some of the BRICS regulators and regulatory experts interviewed had reservations when it comes to amending banking regulation, but they were not necessarily negative. They pointed out that before anchoring such principles in a Basel-like framework, a compelling fact base and empirical evidence would need to be produced to show the correlation between environmental and social risk and the probability of financial loss or, more broadly, with the systemic stability of the financial system. It was further noted that the systematic collection and storage of credit loss data and credit histories (including ESR parameters) would be important for such evidence, but it is likely that much of the relevant credit history is currently not even being recorded systematically at the bank level.

At the super-national level, there are three main opportunities: first, establish a dialog among the BRICS (and other) regulators and facilitate the exchange of successful practices and empirical evidence or case examples; second, establish a regulatory case that the inclusion of environmental or social risk factors can be beneficial for individual financial institutions and for the resilience of the sector as a whole; third, with increasing standards in terms of ESR reporting and governance, provide more transparency and public awareness on ESR in financing.

INTRODUCTION This study aims to give an overview of the current trends regarding the inclusion of

environmental and social aspects in financial market regulation with a specific focus on banking regulation in the BRICS countries. This report targets relevant decision makers in the finance ndustry and financial market regulators and civil society representatives.

GREEN CREDIT: SMALL VOLUMES, LARGE NEEDS 1.1

Sustainable development, meant as economic development with consideration for environmental and social sustainability, is increasingly becoming a priority for decision-makers in emerging economies. The urgency accorded to the topic is driven by the understanding that sustaining economic growth in the context of severe environmental degradation requires a more proactive and strategic approach towards sustainability than just reactively managing the adverse social and environmental consequences of a given economic activity.

In this regard, the BRICS countries face a particular challenge. In recent years they have been growing fast and they have also been faced with severe environmental and social challenges. While large concerns such as climate change, biodiversity loss and shortage of drinking water apply more or less universally, there are additional country-specific priorities that result from the BRICS' socio-economic history and political setup:

- Brazil, according to the World Bank, has lost approximately 10 per cent of its forest area since 1990. This has had severe consequences for indigenous societies living in the Amazon, besides affecting the vital role that forest plays in the world's biodiversity and climate.
- In Russia, despite the fact that the permafrost, where the impacts of rising average temperatures will be most dramatic, covers the majority of the country, environmental and social issues are not widely discussed and public awareness is low.
- In India, understanding of the links between environmental damage and financial loss is growing. A 2013 assessment by the World Bank¹ estimated the average annual cost of environmental degradation to the economy at about Rs. 3.75 trillion (5.7 per cent of GDP, 2009). Dialog has emerged at an industry level in the last few years driven by civil society, the Indian Banking Association and the increasing internationalization of the sector. However, there is still some distance to go before environmental and social considerations are mainstreamed in the financial sector despite a growing consciousness in society.

http://documents.worldbank.org/curated/en/2013/06/18009327/india-diagnostic-1 assessment-select-environmental-challenges-vol-1-3-analysis-physical-monetary-lossesenvironmental-health-natural-resources

- China, the fastest growing economy among the BRICS and one of the fastest in the world, over the last decade has become infamous for the devastating impact its growth has had in terms of heavily polluted air, water and soil.
- Comparatively, South Africa has had a stronger emphasis on sustainable development. In this context, there has been a focus on ESG legislation and governance. For example, the Companies Act requires companies to have a Social and Ethics Committee and some of the JSE's listing requirements are based on the King Code for Corporate Governance, which constitutes a globally recognized governance standard. However, looking at the intentions of the Black Economic Empowerment Act and the country's high GINI coefficient, it is clear that sustainable development issues will remain an important part of the political discourse.

Despite these differences, the BRICS face comparable issues. One of them is how to regulate different parts of their economies to reach the best possible balance between an environment that enables continued economic growth on the one hand, and the preservation of biodiversity and natural resources with reduced pollution and waste on the other. Several countries have started to develop financial regulations to address these challenges. The opportunity for sustainable development provided by credit provision in the BRICS countries is huge: in 2012, their combined credit volumes exceeded US\$13.8 trillion, roughly two thirds of western European or North American credit volumes.

In the global scene, the BRICS are also joining forces in new multilateral initiatives such as the recently established New Development Bank (known as the BRICS Development Bank), with further opportunities to pursue environmental and social sustainability at a global level.

1.2 OUTLINE OF THE REPORT

This report examines how the BRICS countries are addressing the sustainability challenge through regulatory frameworks for the financial industry. It focuses on one area in particular: the assessment of the Environmental and Social Risk (ESR) of loans, meant as the risk of default in loans or other financial instruments due to environmental or social events. By implementing measures that reduce exposure to such risks (e.g. by introducing consideration of these risks in the standard credit risk process), it is understood that the overall impact of environmental and social activities will be reduced. In addition, adherence to such principles is expected to encourage long-term investments that ensure the sustainability of ecological and social systems.

The report analyzes the features and drivers and the impact to date of different ESR regulations in the BRICS countries. It also discusses the potential to introduce such regulations where they are not yet present. The focus is on two types of mechanism:

• **Regulation to manage credit flow**, restricting the amount of "brown"² loans and / or incentivizing investments into certain sectors. This can be achieved through a combination of voluntary and punitive or restrictive measures. Guidelines going in this direction have been issued, for example, in India, Brazil and China, with varying impact.

² Brown loans are described as loans that do not take ESR into consideration, e.g. financing high-emission power generation such as coal-fired plants or infrastructure in critical habitats that cause environmental degradation and biodiversity loss.

• Inclusion of environmental and social assessment criteria in the standard credit risk process, with amendments to the reporting and governance requirements

The content of the report is the result of desk research and interviews conducted with approximately 40 senior representatives from the BRICS' banking and regulatory institutions. Two case studies from non-BRICS countries (Nigeria and Bangladesh) have been included in the annexes to provide best practices in specific areas of financial regulation in similar economic contexts.

While acknowledging that the environmental and social aspects of development are equally important, the report, in line with WWF's core mission, focuses primarily on the environment – hence the use of expressions such as "green credit" or "green finance". In the context of this report, WWF refers to sustainable finance as financial activity that takes environmental and social concerns into consideration.

2 PROMOTING Environmental and Social Governance Through the Financial Sector

A variety of approaches are currently in use to promote environmental and social governance through the financial sector. This chapter explores drivers behind such approaches, and the as mechanisms in use.

2.1 DRIVERS AND TARGETS

There are different approaches to establishing a regulatory framework for Environmental and Social Risk. European countries have focused on regulating the real economy, developing environmental laws and regulations combined with a more or less diligent assessment and enforcement process. Countries like Brazil and China have chosen to adopt ESG frameworks as part of their financial regulation to address environmental and social concerns of investments. South Africa, on its part, has strong environmental regulation but weak enforcement in certain areas.

The current analysis shows that three main approaches lead to the introduction of such regulations:

- Active promotion of environmental targets regulators assign the banking sector a responsibility to achieve targets such as CO₂ abatement, either through own operations or as an intermediary to provide affordable credit in the overall pursuit of such goals.
- Risk containment regulators aim to restrict banks' exposure to environmental and social risk.
- Inclusion of ESR considerations in bank control and decision mechanisms regulators force banks to manage environmental and social risk by imposing risk controls with respect to bank credit decisions and demanding additional reporting layers.

In particular in emerging market economies, where growth is often strongly driven by financial leverage, credit provision and lending are central to the efforts to address ESR in the financial sector.



At US\$ \approx 13.8 tn total credit volumes in 2012, the opportunity for green credit in the BRICS countries is large and growing fast

Excluding specialized finance

Compound annual growth rate (CAGR) 2

Source: Global Banking Pools, World Development Indicators (World Bank)

The lack of a universally accepted definition of "green finance" and of minimum environmental and social standards for investments makes a direct comparison of sustainable credit volumes impossible. However, estimates inferred from different national approaches show that the percentage of green credits is still very small.

- The China Banking Regulatory Commission (CBRC) has a menu of investments that are considered green. These include, for example, public transport and alternative energy production. On this basis, in 2013, 8.7 per cent of the credits supplied by China's 21 largest banks were "green".
- The Indonesian Financial Services Authority, the regulatory body for the financial sector with responsibility for sustainable finance, estimates that, by its definition, Islamic banks in the country have a green lending portfolio of 2.5 per cent of total assets, and conventional banks of 1.1 per cent. These investments, according to the regulators, are predominantly in the hydropower sector³.

There are currently no targets for green credit in any of the BRICS countries. In an attempt to estimate the level of green credit needed to achieve sustainable development, an example related to climate change has been taken. The World Economic Forum (WEF) estimates an incremental US\$0.7-1 trillion of infrastructure investment per year to match economic growth with a 2°C temperature increase scenario until 2030 (World Economic Forum, 2013). This analysis is based on data prepared by the International Energy Agency (IEA), the Food and Agriculture Organization (FAO), the Organisation for Economic Co-operation and Development (OECD) and the United Nations Environment Programme (UNEP). However, it does not reflect total needs as it does not take into account industries besides infrastructure and even for certain infrastructure investments, there are no "sustainability estimates" available.

2.2 MAKING CHOICES

Three key trade-offs or challenges need to be considered when addressing Environmental and Social Risk concerns through financial regulation:

• The more regulated are conventional sources of credit, the more attractive providers outside the regulated banking system (so-called "shadow banks") become

There is a danger that an additional regulatory burden will encourage the shift of financing activity to a less regulated sector and that shadow banking activities, including the provision of loans and other financial services such as project finance, will not be subject to the same level of regulation⁴. In this regard, the following questions should be considered:

- What is the volume of shadow credit? In which sectors is it most significant? What is the amount of assets under management? How fast is the sector growing?
- What is the current line of thought on extending regulation to cover unregulated assets? For example, in India and South Africa, non-bank financial companies (NBFC) are regulated so they will be included in the scope of ESR regulation.

^{3 (}Financial Services Authority of Indonesia, 2014). No further information on the definition used provided.

⁴ The Bank for International Settlements' (BIS) Financial Stability Board has been discussing additions to the current regulatory framework targeted at the shadow banking sector, but so far, it remains largely unregulated.

• Legacy portfolios⁵ in high-pollution industries and projects with high environmental and social risk

Moving rapidly is important to avoid the lock-in effects of investments with environmental and social risk in the loan books of banks and other regulated lenders. By the same token, the existing portfolios will continue to carry environmental and social risks, which are more difficult to address than in new credit. In addition, if these legacy portfolios have been financed by state-owned financial institutions or shadow banks, their conversion may be even slower.

• Positive incentives – not punishment – for green investments

Besides reducing risks of investments that have a negative impact on the environment, encouraging green investments is another rationale for environmental and social risk regulation. In this regard, regulators need to consider:

- If and how to introduce positive incentives for green investments
- Whether green investments are penalized either explicitly or implicitly under the current regulatory framework. For example, under the Basel Accords sustainable investments are penalized due to their long-term nature, leading to unfavorable credit ratings of recipients and refinancing risk.

2.3 MECHANISMS FOR SUSTAINABLE FINANCE

Four main mechanisms to promote ESR integration in financial regulations are relevant to the BRICS context.

- 1. **International guidelines and collaboration.** Several international organizations, such as the United Nations Environment Programme (UNEP) and the International Finance Corporation (IFC), create standards for environmental and social governance and foster dialog between countries and institutions. Standards can be either cross-sectorial or targeted specifically at the financial sector. The dialog and exchange can be in the context of introducing national regulation or, at an international level, to build relations among regulators.
 - a. **Cross-sectorial agreements**, such as the UN Global Compact, which is derived from international agreements including the Universal Declaration of Human Rights and the Rio Declaration on Environment and Development, and includes 10 principles on human rights, labor, environmental protection and corruption.
 - b. **Sector-specific agreements**, such as the Equator Principles, which provide guidelines and reporting standards for project finance, corporate loans and bridge loans; the IFC Performance Standards and the UNEP's Finance Initiative, which includes the UN Principles for Responsible Investment, and the Principles for Sustainable Insurance.
 - c. **International exchange and coordination.** Several international organizations play a role in fostering dialog between stakeholders internationally. In several countries, for example, the IFC facilitated the discussion and brought external expertise into the creation of the national ESR frameworks. Other examples include:

⁵ Portfolio of loans that banks have issued in the past, possibly not subject to the same credit risk decision criteria.

- i. The IFC Sustainable Banking network, established after the first International Green Credit Forum in 2012, which was hosted in Beijing by the CBRC, the IFC and WWF. The network was created as an informal working group of regulators (financial and environmental) and banking associations and meant to encourage the exchange of best practice, knowledge and technical resources between emerging countries. Meetings are held annually, the last one having taken place in Nigeria in 20146.
- ii. The UNEP FI Global Roundtable, organized every two years since 1994. This is a platform for exchange on sustainable finance for the banking, investment and insurance industries. It is open to all relevant stakeholders, including regulators, industry representatives and associations, development finance institutions and research institutions.
- iii. Other informal initiatives to facilitate dialog, such as the Indian "Sustainability Series", a series of workshops and seminars jointly developed by the UNEP FI, the Responsible Investment Research Association (RIRA), the German development cooperation agency GIZ and India's Yes Bank⁷, and WWF's China-Africa Sustainable Banking Dialog.
- 2. **Development finance institution standards.** Most development finance institutions (DFIs) either adhere to international standards, such as the IFC Sustainability Framework and Performance Standards, or have introduced their own standards and guidelines (see, for example, the Inter-American Development Bank, the World Bank, the Asian Development Bank and the African Development Bank).

In the BRICS context, it will be of particular interest to see how the newly founded BRICS Development Bank will handle environmental and social risk in its financing policies. While there has not been an official statement, the current discussion ranges from doubt about Environmental and Social Governance (ESG) to confidence that the advances made in Brazil, South Africa and China will be reflected in the new bank.

3. National policies and regulation. This can take different forms. Guardrails are set by environmental regulation, which usually provide for environmental assessments of projects, specify protected areas, and define pollution limits, etc. In addition, specific provisions can be targeted at the financial sector, such as restrictions on investment activities in certain areas / sectors and incentives for green investments.

In the last few years, Central Banks and other banking regulators have introduced mandatory environmental and social provisions in risk assessments. Brazil, China and South Africa have been at the forefront of these developments:

⁶ Members include the Central Banks of Bangladesh, Brazil, Lao DPR, Mongolia, Morocco, Nepal, Nigeria, the Philippines, Vietnam; other financial regulators from China, Indonesia and Peru; banking associations from China, Colombia, Mongolia, Thailand; and environmental regulators from China, Mongolia and Vietnam.

⁷ No new information on the initiative has been published recently. The RBI official who supported it left the bank before the end of his term.

- a. Brazil made environmental and social policies mandatory through a Central Bank resolution, which stipulates that banks are to report their implementation to the Central Bank by mid-2015. The banking association, in collaboration with its members, is currently working on minimum standards to flesh out the general requirements of the resolution.
- b. In 2012, China complemented existing guidelines to drive credit flows away from over-capacity and high-pollution sectors with the Green Credit Guidelines. These request banks to increase their investment in green sectors such as recycling, to decrease the environmental footprint of their operations and to insert environmental and social safeguards into their credit processes.
- c. In 2011, South Africa amended the Pension Fund Act; it now requires risks of an environmental, social and governance nature to be taken into account by pension fund trustees when making investment decisions.
- **4. Voluntary commitment of financial institutions.** Most international banks and some national banks have committed to environmental and social standards to better manage their operations (e.g. reducing the carbon footprint) and/or activities (e.g. inserting ESG controls into the credit process). Although the reporting on these standards is voluntary, many banks use the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, which allows a degree of comparison.

Deep dive: Options for national regulation on environmental and social governance

	Description	Benefit	Examples
1. Environmental and social risk criteria in (multi) national standards for capital and liquidity requirements	• Add environmental and social risk criteria to risk weighting to calculate capital and liquidity requirements under Basel III	 Ensure sufficient capital and liquidity holdings to with- stand environmental/social adverse events Incentivize acquisition of assets with low environmental and social risk 	_
2. National guidelines to introduce environmental and social risk management for credit evaluations	 Implement standards with regard to the integration of environ- mental and social management processes into credit provision Monitor and enforce compliance 	• Reduce the risk to financial institutions from environmental and social hazards associated with credits	 Nigeria Sustainable Banking Principles China Green Credit Guidelines Bangladesh Bank ESR guidelines
3. Regulation to manage credit flows away from projects/companies that are potentially harmful	• Define specific areas requiring additional protection (e.g. biomes) or industries with high environ- mental and social risk	• Ensure that projects / companies with high risk of causing adverse environmental and social events do not receive funding	 Brazilian regulations, e.g. on financing activities in the Amazonas biome CBRC restrictions on investments in overcapacity sectors
4. Transparency measures on environmental and so- cial performance of banks to the market	• Set standards with regard to the reporting of mandatory or voluntary environmental and social standards or targets	 Increase transparency on impact of policies Enable financial institutions to use their commitment as a reputational advantage 	• Reporting standards related to environmental and social risk management guidelines in Nigeria, China, Bangladesh
5. Global or country-specific commitments (e.g. carbon reduction)	 Set mandatory targets, such as carbon footprint reduction goals Break down goals to different sectors, including the financial industry Measure and fine non-compliance 	• Reduce carbon footprint of the (inter)national economy	 United Kingdom Energy Efficiency Scheme Chinese Green Credit Guidelines (include reduction of banks' carbon footprint)
6. Education on environmental and social development targets and technical support for implementing regulations	 Provide educational programs on sustainable investment and/or sustainable business practices to banks and other financial institutions Offer technical support 	• Enable banks and other financial institutions to effectively integrate and implement environmental and social risk management standards	• Capability building programs and technical guidance provided by Bangladesh Bank, CBRC, Indonesia Bank and others in the context of introducing ESR norms
7. Support for green credit lines offered through commercial banks	• International development banks or agencies provide credit facilities to local commercial banks for investment in selected areas subject to pre-approved criteria	• Provide funding for underfunded sectors with environmental benefits (e.g. renewable energy)	• Green credit lines offered to South African banks for investments in renewable energy and energy efficiency markets through the French Development Agency
8. Green funds for research and technological development	• Provide funding (e.g. on a competitive basis) for green technologies and / or start-ups	• Advance and promote research and use of green technologies	 United Kingdom Energy Entrepreneurs' Fund Polish EcoFund Foundation
9. Green banks established with government funding	 Invest funds in commercially viable green projects (have other funding sources as well) Provide initial funding with the government, goal for the bank to become self-sustaining Support priority areas (e.g., renewable energy) 	 Generate returns for the government Support underfunded areas 	• United Kingdom Green Investment Bank
10. Tax advantages for green investment • Provide tax incentives for indi- viduals investing in green funds to compensate lower returns • Allow banks to fund green projects at favorable rates		 Ensure favorable lending rates for green enterprises Provide incentives for individuals to invest responsibly 	• Dutch Green Funds Scheme



3 ENVIRONMENTAL AND SOCIAL RISK IN The Brics' Financial Regulation

This chapter analyzes ESR in the BRICS' financial regulation. The analysis is based on a series of interviews with representatives of regulators and banks from each country, and on desk research. Areas for further development have also been identified.

3.1 BRAZIL

In 2004 the Brazilian Central Bank (Banco Central do Brasil, BCB) published Resolution 4.327, mandating all banks to develop environmental and social policies for their activities. The resolution includes both voluntary and compulsory mechanisms, building on voluntary commitments previously adopted by banks in the Green Protocol of 1995. The impact of the resolution is yet to be understood, as it will depend on the minimum standards currently being defined in cooperation with the Federation of Brazilian Banks (Federação Brasileira de Bancos, FEBRABAN).

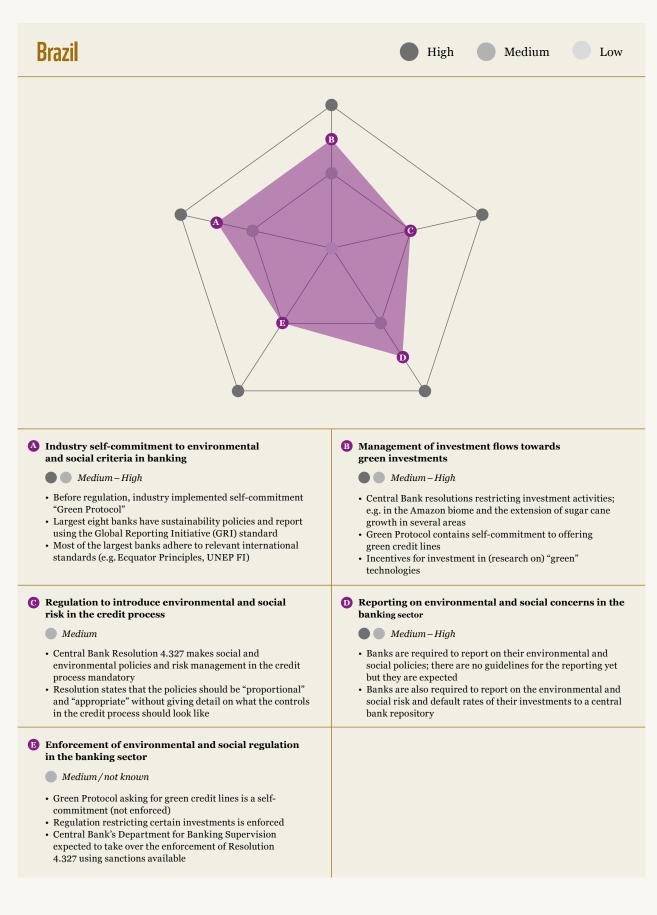
3.1.1 Current situation⁸

The environmental and social governance in the Brazilian financial sector results from a mix of civil society action, voluntary commitments and formal regulation. There is a strong historical track record of banks' involvement in environmental and social governance and financial regulators adopting social and environmental targets.

In 1995, the first Green Protocol, a declaration of intent by public banks for increased attention to environmental and social concerns in credit decisions, was introduced. The protocol was broadened to include private financial institutions, which adopted it together with FEBRABAN in 2009. The principles laid out in the Green Protocol include:

- Provision of credit lines and programs that promote quality of life and environmental sustainability
- · Environmental impact analysis in asset management and project risk analysis
- · Conscious consumption of natural resources in the banks' operations
- · Information and engagement activities for interested associates
- Cooperation and integration with other signatories to the protocol.

⁸ References taken from the press release and original texts of the resolutions, as published by FEBRABAN (FEBRABAN, 2012), BCB (Banco Central do Brasil, 2014).



page 20 | Environmental and social risk in the BRICS' financial regulation

A set of compulsory regulations has been adopted by BCB since 2008 to pursue specific sustainability targets. These resolutions are a result of concerns identified in existing environmental regulations and have been adopted to complement them. The most important resolutions are:

Resolution	Year	Scope
3.545	2008	Environmental compliance requirements for agricultural finance in the Amazon biome
3.813	2009	Conditions for credit serving the expansion of sugar cane production in specified areas
3.840	2010	Program for greenhouse gas emission reduction in agriculture under the Brazilian Development Bank (Banco Nacional do Desenvolvimento, BNDES)
3.876	2010	Ban of financial companies that enforce working conditions comparable to slave labor
4.327	2014	Mandatory environmental and social policies and governance for banks

Both the private sector and regulators were keen to address these issues. Resolution 4.327 regulates environmental and social risk assessments in the credit process and requires banks to have environmental and social policies in place. It defines environmental and social risk as the possibility of loss resulting from social or environmental damage. It requires all financial institutions and other entities under the control of BCB to establish social and environmental policies that are relevant and "proportionate to their activities", i.e. corresponding to the type and scope of the bank's business. Although this has not been specified yet by BCB, it is assumed that the requirements for small banks will be less strict than for large ones; for example, in terms of ESR governance structure. While large banks are required to manage ESR at board level, a senior manager is sufficient for small ones.

The preparation of the resolution was and remains an inclusive process involving BCB, FEBRABAN and the Brazilian banks, which have had the opportunity to provide input.

- Banks are required to introduce policies to influence activities of a socio-environmental nature. They should manage environmental and social risk through:
 - Systems and procedures to identify, qualify, evaluate, monitor and mitigate risk
 - A data registry on effective losses due to environmental and social damage
 - Impact assessments before new forms of products and services
 - Policies ensuring environmental and social risk compliance with national regulation.
- Banks are required to build governance structures at board or senior management level, with one director responsible for social and environmental policies. Regulators consider this aspect a key success of the resolution.
- Banks must report to BCB on the policies and governance structures they have established. They must also regularly report on the environmental and social risks and the default rates associated with their credit portfolio.

BCB's department for banking supervision will enforce the resolution. Minimum standards and sanctions were not set out in the resolution, but are currently being articulated by BCB in collaboration with FEBRABAN and the Brazilian banks. The goal is to have banks self-determine the standards as far as possible. Standards will then be adjusted over the years.

Drivers and rationales for the resolution were:

- From a regulatory standpoint, the main driver is risk mitigation. Most Brazilian regulators consider environmental and social risks as systemic risks that could affect the financial stability and solvency of financial institutions. Greater transparency will also help manage ESR-related defaults.
- Banks hope that, by establishing minimum standards, the resolution will level the playing field.
- Adherence to minimum standards will make banks less vulnerable to civil society action.

3.1.2 Areas for development

Most regulators and Brazilian bank representatives interviewed for this report were satisfied with the inclusive process that led to the resolution and with its provisions. While many large banks consider themselves advanced with respect to social and environmental policies, the mandatory governance introduced by the resolution is seen as a major step forward, putting environmental and social risk considerations firmly on the banks' management structure. Areas for further development include:

- Definition of minimum standards, guidelines and technical support. Banks are currently awaiting further specifications. These will be in the form of BCB's response to the submission of first reports and self-regulation standard currently developed by FEBRABAN. Based on minimum standards developed by FEBRABAN, there will be a need to develop more targeted guidelines and risk models (e.g. sector-specific) and related training. Large banks feel that in terms of environmental and social risk management and reporting, they already comply with minimum standards and are confident that the resolution will offer regulatory backing to their policies, further protecting them from legal action. Some banks, however, fear that the standard may actually lead to a larger number of lawsuits; e.g. by NGOs. This could happen if the standards are not clearly formulated or the resulting requirements exceed the banks' capacity to implement them. Some regulators said that the development of the resolution should continue after the first standards are introduced, and anticipated the need for targeted training. Experience from other countries (e.g. Nigeria) and support from NGOs could be useful in this regard.
- Establishment of a common metric to measure and report environmental and social risk and creation of a database. There is no universal standard to measure and report environmental and social risk. The information reported to BCB as a result of the resolution will be based on the individual system of each bank and will therefore be of limited use for system-wide analyses. In the short term, a universally agreed standard would help small banks that do not have their own models and large banks that outsource the assessment. In the long term, standardized metrics would enable the establishment of an information base for a systematic analysis of the correlation between environmental and social risk and credit risk. The starting point could be the identification of best practices in the current reports.

• Assessment of the impact of the resolution: The impact of the resolution is not clear at this point. Because of its generic nature, banks doubt that any actual impact will be generated unless BCB actively monitors and enforces compliance. At present there are no details on potential enforcement mechanisms such as assessment criteria or sanctions. A potential entry point could be establishing publication requirements for environmental and social risks and credit risk associated with them. Brazil could also benefit from dialog with regulators that have addressed these issues; e.g. from China and Nigeria.

3.2 RUSSIA

In Russia some banks, including the largest two (Sberbank and VTB), have published voluntary environmental and social commitments and started reporting against them using the Global Reporting Initiative (GRI) standards. Besides these initiatives, however, social and environmental risk assessment plays a limited role in the financial sector.

3.2.1 Current situation

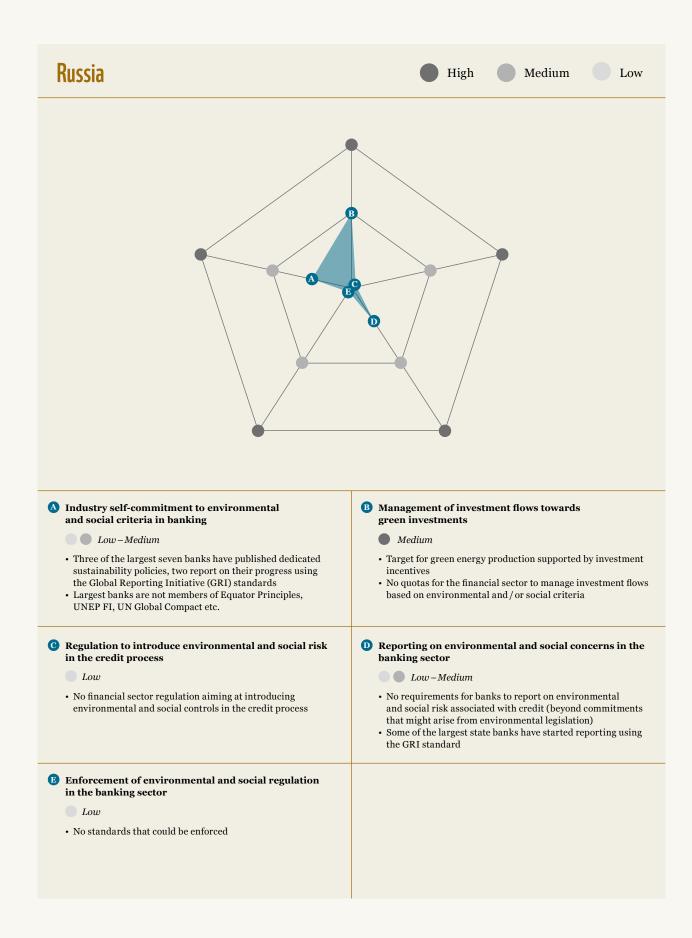
Regulation to promote environmental and social goals through the financial sector is currently limited. ESR and green credit are partially or indirectly addressed by:

- Principles of economic and social responsibility, which are neither quantified nor mandatory in the context of the Russian regulatory framework. The principles also fall short as associated standards are insufficiently defined.
- Reporting requirements, which have been introduced for reporting on economic and social performance. These, however, have been deprioritized. Major companies publish environmental sustainability reports, but standards are not fixed and the impact measurement is not sufficiently articulated.

As opposed to other BRICS countries, most of Russia's largest banks do not have environmental and social risk policies publicly available on their websites and on which they report. None of the largest banks is a signatory to the Equator Principles and only the State Corporation Bank for Development and Foreign Economic Affairs Vnesheconombank (the Russian development bank) is a member of the UNEP-FI and a signatory to the UN Global Compact

The interviews confirmed that for both financial institutions and regulators, ESR is not at the forefront and does not play a relevant role in the credit approval process. Contrary to other BRICS, economical, societal and ecological pressures are not perceived as acute or systemic enough for regulators to conceive immediate actions. When interventions do occur, they are mostly in response to natural disasters such as droughts. Furthermore, ecological and social issues are less strongly anchored in societal debates in Russia, and advocacy groups are far less powerful than in other BRICS countries. Fines for violations of ecological guidelines are among the lowest compared to other large economies. Banks would perceive any further regulation as an additional burden to their core business and an increase of their costs.

There is a role, however, for ESR principles in cross-border banking operations. Also, the European Bank of Reconstruction and Development requires Russian banks to respect ESR principles, but Russian banks tend not to have the appetite to adopt such principles



beyond the EBRD context. The situation could change, however, with Russia's financial institutions becoming increasingly dependent on Chinese funding, which is subject to ESR constraints. As a result, regulators are generally open and interested to explore this area and potentially enter into dialog with counterparts in other BRICS countries.

3.2.2 Areas for development

Most regulators and bank representatives interviewed for this report recognize that Russia is falling behind on ESR largely because of the lack of internal public demand for environmental safeguards. With international sanctions enforced against the country, the Russian financial sector is lacking liquidity, and any toughening of credit policies would be perceived as unfounded and not helpful to Russia's economic recovery. Areas for further development include:

- Establishment of a common metric to measure and report environmental and social risk and creation of a database. There is no mandatory requirement or standard to measure and report environmental and social risk to CBR at present. The start of pilot ESR reporting and impact assessment without any financial consequences to the credit policies in the early stages will help banks introduce a common methodology and enable the creation of a database on environmental and social risk losses. As for other countries, this would form the basis for establishing relevant ESR impact analyses and allow Russia to catch up with other BRICS countries.
- Development of a business case to show the impact of environmental and social risks on credit risks. Most banks are reluctant to absorb any cost related to ESR assessments without a clear economic case or regulatory requirement. They are unwilling to take action without prompting by CBR, and CBR does not see a case for mandatory ESR controls beyond the current laws and regulations. Most regulators, on the other hand, do not see a case for addressing environmental and social risk. A database will help make such a case. Developing an overview of relevant regulations in other BRICS countries and relevant to the Russian situation will also help.
- Creation of a Russia-specific case of action using the example of current infrastructural investment. As it develops a number of mega infrastructural projects, such as the construction of the Sabetta port in the peninsula of Yamal, the government could play a frontrunner role in requiring measurement and reporting on environmental and social risks of projects based on country-specific challenges.
- **Development of public awareness on environmental and social risks,** which is partly lacking due to the absence of publicly available information. Broader awareness of ESR is critical for promoting responsible finance and, once again, the experience of other BRICS countries could help generate more demand.

3.3 INDIA

In India, currently no financial sector regulation is explicitly directed at creating environmental and social safeguards within banks' activities. Several departments and ministries have a direct or indirect influence on the finance sector, including the Ministry of Finance and Ministry of Corporate Affairs.

Regulatory frameworks are provided through the Reserve Bank of India (RBI), which is the Central Bank, and Securities Exchange Board of India (SEBI), which governs the Indian stock exchanges. The most prominent examples of regulatory intervention with direct effects on the financial sector are Priority Sector Lending: SEBI mandates that top 100 listed companies (by market cap) undertake annual business responsibility reporting, and mandatory Corporate Social Responsibility under the Companies Act.

The RBI has chosen to address the topic through information and recommendations for banks, which, according to various interview partners, regulatory experts, bankers and banks, has served to highlight issues without compelling banks to take action.

3.3.1 Current situation⁹

While there is no regulation directed at inserting environmental and social concerns into the credit process, the Reserve Bank of India in 2007 issued an advisory notification to all commercial banks describing the concept of environmental and social risk and outlining possible mitigation measures:

- The notification provides a general overview of the concept of Corporate Social Responsibility (CSR), non-financial reporting and sustainable development, including a brief discussion of the respective concepts' relevance to banks, touching on the financial sector's role in providing financing for green projects (e.g. wind, solar) and on introducing environmental and social risk assessments into the banks' operations and activities.
- The notification contains an overview of international agreements considered relevant by RBI, which includes UNEP FI guidelines, the Equator Principles, the IFC Performance Standards and the GRI reporting standards.
- The document also includes a "plan of action" for banks, which reiterates the importance of an awareness of the social and environmental impact of any business activity. It also restates that financial institutions can have an impact not only through their own operations, but also through their financing activities, specialized products and environmental and social controls.

⁹ Information based on the original text of the notification on sustainability and non-financial reporting issued to banks (Reserve Bank of India, 2007), the priority sector guidelines as published by the Reserve Bank of India (Reserve Bank of India, 2014) and the Companies Act as published by the Ministry of Law and Justice (Ministry of Law and Justice (Legislative Department), 2013).

Most experts spoken to (both in the industry and the government) stressed the need for the RBI to take a lead in pushing the banks to apply ESR criteria to their credit approval processes. Concerns over loss of competitive advantage and cost were key reasons why most commentators suggested a level playing field supported by common, mandatory standards.

Most pointed out that Indian banks today tend to adopt a "checklist or tick-the-box approach" when it comes to environmental and social risks: checking for compliance against minimum legal requirements without following any comprehensive risk analysis or mitigation effort. Two key reasons were identified for the relatively low commitment to management of environmental and social goals:

- Many banks view the performance of ESR due diligence as an added cost in their credit appraisal process and a task that requires resources beyond the scope of what they perceive as their role as financiers; i.e. determining the character, capacity and collateral of the borrower.
- Large projects often involve a number of institutions in their financing, either in the form of a consortium or a shared contract, which, to a certain degree, dilutes ambition on social and environmental concerns and, given the level of existing complexity, drives behavior towards compliance rather than best practice.

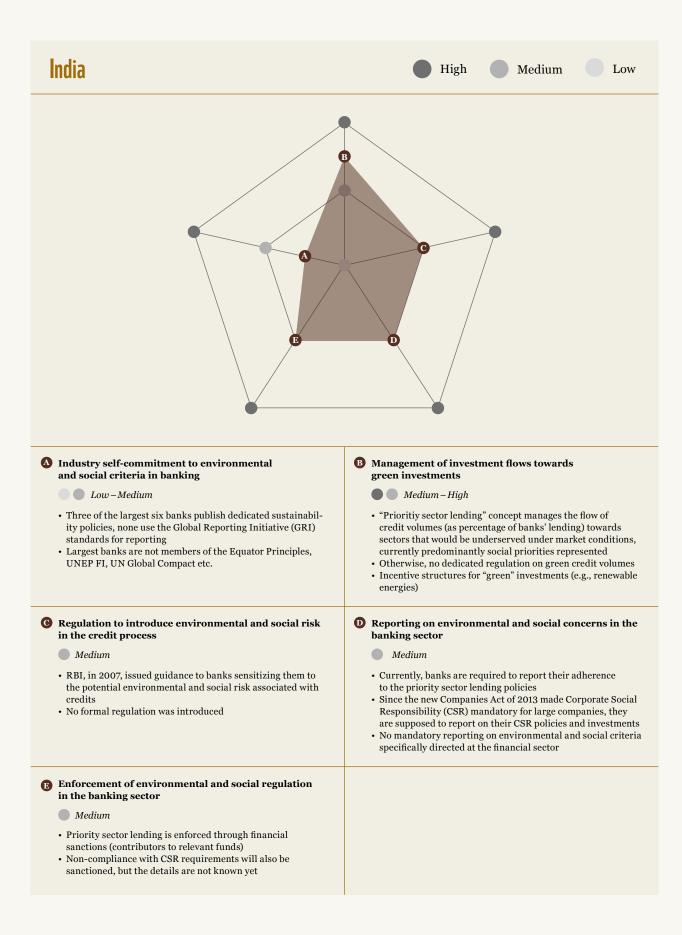
Some existing regulatory frameworks touch on aspects related to environmental and social goals and in some cases offer a way to progress the ESR agenda in India.

Priority Sector Lending (PSL). Managed by the Reserve Bank of India (RBI) and dating back to the 1960s, in reference to the agrarian orientation of the Indian economy, describes quotas for banks' lending to sectors that would be underserved under market conditions. The rationale is usually social concerns, with priority sectors/groups including small farmers (for agricultural activities), micro and small entrepreneurs, housing loans for the poor, student loans and loans to other low-income groups (beneficiaries of other social programs).

RBI issues directives for the interest rates that should be used for the lending in question. The bank also defines the percentage of banks' total lending (up to 40 per cent of Adjusted Net Bank Credit) that needs to be allocated to the priority sectors and which depends on whether the bank in question is Indian or foreign and on its size.

Compliance is monitored and enforced by RBI. Sanctions in the case of non-compliance include financial contributions; e.g. to the Rural Infrastructure Development Fund (RIDF) and Small Industries Development Bank of India (SIDBI).

Within PSL there is no formal definition of a "high-pollution" sector or "green" investments in India (or management of investment flows away from these) comparable to, for example, the work CBRC is doing in China.



SEBI and the National Voluntary Guidelines (NVGs) on Social, Environmental and Economic Responsibilities of Business. The NVGs contain comprehensive principles to be adopted by companies as part of their business practices and a structured business responsibility reporting (BRR) format requiring certain specified disclosures, demonstrating the steps taken by companies to implement the said principles. In August 2012, SEBI issued a circular reiterating that BR Reports must be included as a part of the Annual Report. This was made mandatory for top 100 listed entities based on market capitalization at BSE and NSE as on 31 March 2012.¹⁰

The guidelines encourage companies that are already reporting to provide details of the framework under which their reports were prepared; for example, the Global Reporting Initiative. Reporting entities must report on their current and planned status of adoption of all nine principles of the National Voluntary Guidelines. The guidelines follow an "apply or explain" principle that aims at encouraging companies to disclose wherever they comply with any of the nine principles and explain why if they do not.

Mandatory corporate social responsibility was introduced as part of the new Companies Act. The provisions entered into force in April 2014. Since then, companies operating in India over a certain turnover, net worth or net profit¹¹ need to spend 2 per cent of their average net profits of the last three years in pursuance of their Corporate Social Responsibility (CSR) policy or else provide satisfactory grounds for failing to do so and transfer the remaining amount to the Prime Minister's relief fund. Companies not meeting the mandated spending for two consecutive years could be subject to fines. Companies meeting the criteria also need to set up a CSR committee, made up of those of its board members who are in charge of formulating the CSR policy, monitoring its implementation and reporting on it. While the measure serves to raise awareness of managing sustainability-related issues at a senior level within industry and sensitize the market to social and environmental concerns, it does not directly motivate change at the core of banking practices.

3.3.2 Areas for development

Findings from interviews with Indian regulatory and private sector experts pointed to areas for progress on ESR management in the industry. A number of these involve broadening and deepening existing arrangements. A few key areas are discussed below: 1. **Clear and transparent guidelines for project approvals.** A complex set of regulatory frameworks between federal and state governments was identified by many interviewees as a source of delay in the commencement of commercial operations of large projects. This constitutes a considerable burden for financing banks as many projects have been stalled indefinitely due to delay of project clearances by one or other government bodies even after large investments have been undertaken. Strong, uniform frameworks for identifying, analyzing and mitigating environmental, social and governance risks, implemented across the sector, would help to address this issue.

¹⁰ http://www.sebi.gov.in/cms/sebi_data/attachdocs/1344915990072.pdf

¹¹ INR 10 billion, 5 billion and 50 million, respectively

- 2. Voluntary action versus regulation. Some banks have seen the value in voluntary action on ESR management and have well-established systems in place to tackle areas identified as key to their business (e.g. commodities finance). Many others remain reluctant to take on what is seen as a process requiring extra time, resources and money, and which they believe may threaten their commercial position in a highly competitive market. Banks require a level playing field, which can be achieved only through sector-wide regulation and the leadership of actors like the Indian Bankers' Association. The RBI is seen as a key player in this. What was most clear from the banks interviewed is a need for an industry-wide minimum standard to establish a baseline for action in the sector with the RBI being a key stakeholder in this process.
- 2. **Research and policy.** Feedback from the industry indicated that a study using empirical data from Indian cases showed a strong correlation between environmental and social factors on the one hand, and credit risks and rising NPAs on the other would help inform the evolution of ESR frameworks in the local market. The RBI's "Central Repository of Information on Large Credits" could be used as a basis on which to develop a better understanding of the reasons why assets failed to perform and build a case for internal and industry action. Further cooperation from a handful of banks would also be needed to help this study. Its results would not only help inform banks on the environmental and social factors behind past and existing bad loans but also point to ways to identify and assess risks for new financing decisions.
- 3. **Reporting and disclosure.** The introduction of mandatory reporting by SEBI on principles established under the National Voluntary Guidelines for top 100 companies including 18 banks represents a first step for disclosure on a range of environmental and social issues. A logical next step is the deepening and broadening of this initiative to drive ever-higher levels of transparency. One potential option is the development of a financial sector-focused supplement to this initiative, in order to drive greater detail on factors most pertinent to the industry.

3.4 CHINA

Unlike other BRICS countries, China has a semi-state-owned banking system. Since China's accession to the World Trade Organisation (WTO) in 2001, the central government has carried out gradual yet significant reforms in the banking sector. The Green Credit Guidelines, the regulation on credit-related ESR, was introduced by the China Banking Regulatory Commission (CBRC) in 2012. A detailed account of the history and inception of the guidelines in the context of the overall reform agenda is in the annexes.

3.4.1 Current situation¹²

The Chinese banking regulation addresses social and environmental targets through a combination of recommendations and restrictions. Together, these form a relatively strong framework for ESR management. The recommendations are based on the Green Credit Policy and Guidelines and proceeding notes promoting environmental and social criteria in the financial sector. Further restrictions apply to investments in high-pollution, high-emission and overcapacity sectors according to lists and definitions published and regularly updated by the National Development and Reform Commission (NDRC) and the Ministry of Industry and Information Technology (MIIT), and enforced by the State Council. The focus here is on two main pillars.

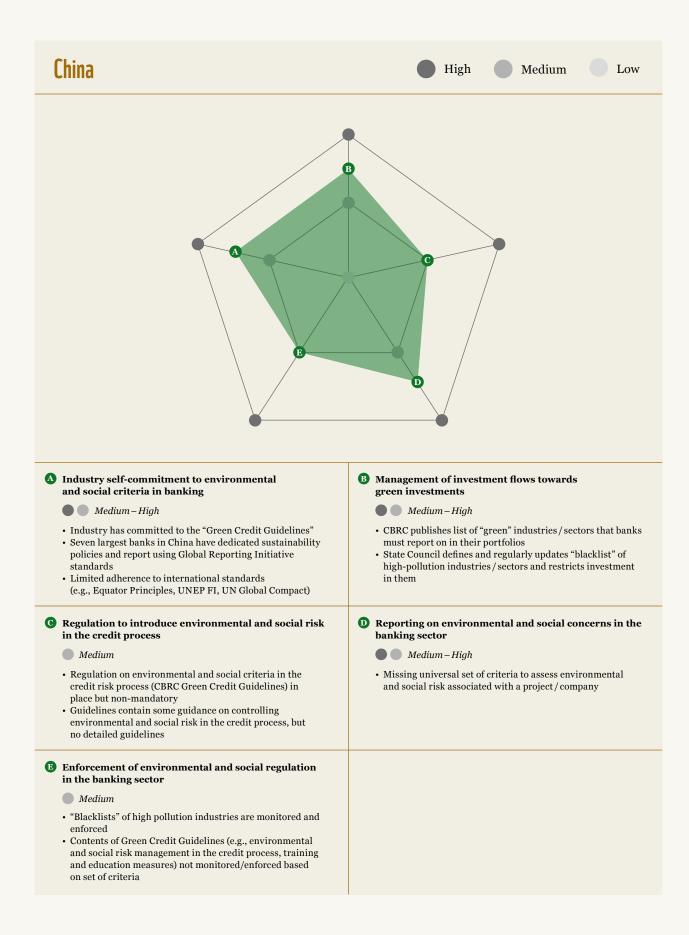
A. Green Credit Policy and Guidelines

The CBRC Green Credit Guidelines of 2012 represent the culmination of efforts taken by a variety of actors over the last 20 years to influence the environmental (and social) aspects of economic development through the financial sector. Institutions contributing to these efforts include the People's Bank of China, the Ministry of Environmental Protection (formerly State Environmental Protection Agency, SEPA) and the CBRC. Prior notices and guidelines had prepared the ground, advising banks to include environmental and social criteria in credit decisions, demanding a minimum standard of environmental and social impact assessments and starting the collaboration between government agencies (information sharing between the MoEP and the CBRC)¹³.

Compared to policy documents that had been issued previously by CBRC, the Green Credit Guidelines are a step change in scope and specificity.

¹² Sources used for the chapter include the original text of the Green Credit Guidelines (China Banking Regulatory Commission, 2012) as well as several secondary sources on the Green Credit Policy (International Finance Corporation, 2013), (Banktrack, Friends of the Earth US, 2008) and guidance received in interviews

¹³ A detailed overview of the development is provided by the Report on the Green Credit Footprint of Chinese Banks, published by Green Watershed, an NGO based in Kunming, and Banktrack (Green Watershed, 2013).



- They contain three specific areas of improvement for banks:
 - Identifying and mitigating the environmental and social risk associated with the bank's activities through dedicated governance structures to be put in place in every bank regulated by CBRC
 - Actively promoting the achievement of environmental and social targets providing access to finance for a specified list of "green" industries. According to a new taxonomy issued by CBRC, these include green agriculture, environmental reconstruction, renewable energies, green transportation and energy-saving equipment.
 - Managing the environmental and social footprint of their operations through more detailed guidelines and targeted training, enabling banks to implement them.

CBRC suggestions for mitigating ESR in the credit process		
Due diligence	 Perform due diligence on potential clients according to a set of criteria developed by the bank, adapted to the client risk profile (sector and region) If necessary, seek support from external institutions 	
Client compliance	 Develop checklists and guidelines for social and environmental compliance in different sectors Have clients attest their compliance 	
Credit approval management	 Define social and environmental compliance thresholds for credit provision Ensure clients either meet the standards or are refused credit 	
Introduce clauses to increase clients' social and environ- mental compliance	 Urge clients to improve social and environmental risk management For high-risk clients, demand an ESG report as well as specific improvements of their ESG Stipulation that the bank can supervise client's ESG and enforce remedies in the case of non-compliance 	
Credit disbursement management	 Bank should make credit appropriation subject to social and environmental compliance All stages of projects should be subject to social and envi- ronmental impact assessments – planning, implementation, management of the project 	
Post-loan management	 Develop post-loan supervisory mechanisms, monitor the risk faced by the client Establish internal reporting and accountability systems for major environmental and social risk faced by the client 	
Social and environmental risk in overseas projects	 Ensure that project sponsors abide by relevant laws and regulations of the jurisdiction Publicly confirm that project sponsors will follow international standards 	

- For the management of the environmental and social risk associated especially with credit provision, the guidelines contain specific actions (see box) to be taken along with the credit assessment and provision process.
- The development and implementation of the relevant policies is explicitly considered as the board's and / or senior management's responsibility.
- Banks are requested to report on their efforts to comply with the guidelines as well as on the impact achieved through their implementation, with the explicit goal of submitting reports to regulators and markets.
- The guidelines apply to domestic and overseas activities of Chinese banks.

CBRC has been working to further specify the Green Credit Policy and Guidelines:

- The taxonomy of green industries, specified only in 2013, will allow a more detailed and comparable reporting on banks' activities in the relevant sectors
- By the end of 2014, CBRC is planning to issue Energy Efficiency Credit Guidelines to help banks identify and evaluate the energy efficiency of projects and companies and make this information part of the credit decision process
- A set of green credit key performance indicators (KPIs) has been tested by selected leading banks and issued in June 2014 to be rolled out in the banking sector. The KPIs contain 87 qualitative and 17 quantitative metrics that banks will have to report on annually. Based on the reports, CBRC will classify banks into five performance groups in terms of environmental and social performance, and will conduct an inspection and rating of their involvement in green credit based on the KPIs starting this year.

The reception of the Green Credit Guidelines has been mixed. While they had been met with enthusiasm at their publication and are generally known to Chinese banks, there are some doubts about the impact of these measures on daily operations:

- In interviews conducted for this report, it has been noted that while bank risk managers are aware of them, the Green Credit Guidelines are not yet formally implemented in most banks' credit risk processes.
- CBRC is aware that banks' awareness and performance with regard to environmental and social standards vary. A number of major banks, such as China Development Bank, China Merchants Bank, Shanghai Pudong Development Bank, Minsheng Bank, the Industrial Bank and the Bank of Beijing, have shown avid support for green credit and developed innovative financial products; e.g. using carbon rights and emission rights as loan collaterals. Others, such as Jiangsu Bank and Nanjing Bank, have hired consultants to evaluate their sustainable lending infrastructure.
- Based on the "green" industry taxonomy, CBRC reports that by the second quarter of 2014, the 21 banks surveyed had a "green" loan balance of CNY 5.2 trillion, 8.7 per cent of their total outstanding loans. CBRC does not provide a specific target, but continues to monitor this development.

B. Investment quotas and blacklists

The other form of regulation consists of directives issued to banks by the State Council restricting investment in high energy-consuming, heavily polluting and / or overcapacity sectors. These directives, issued in the context of the government's environmental policy and targets, are mainly top-down. The sectors are defined by the Ministry of Environmental Protection and are regularly updated based on developments.

The list is not public. Bank representatives, however, point to a wide selection of industries that currently fall or have fallen under these restrictions, including thermal power and metal processing, paper making, textile and wind power equipment sectors.

Generally, the restrictions are promptly and universally implemented by banks given that they are unequivocal and backed by the State Council's authority.

3.4.2 Areas for development

Even though the development and implementation of the green credit guidelines and the restrictions to loans in high-energy, high-pollution and overcapacity industries have so far been considered a success, there are still areas to address. These include:

- An overall small percentage of green loans. Loans and credit provided to industries considered to have a positive impact on sustainable development, such as recycling, renewable energies etc., still constitute a small share of overall lending in China. Based on interviews conducted for this report, the development of a coordinated incentive system for green credit along the whole value chain (for example, adjust risk weighting for green credits to reduce their impact on banks' capital requirements, introduce a quota for green loans, create subsidies for green investments) could help. It will also be useful to nurture and develop local champions in green credit; i.e. working with banks that have introduced innovative policies (e.g. China Industrial Bank, China Development Bank) to get an understanding of their measures and the rationale behind it, and extending the experience to others via CBRC.
- Implementation hurdles of the environmental and social governance structure in banks. A number of banks have not yet taken essential steps towards the implementation of the guidelines. Two main reasons for this are a lack of attention by banks' senior leadership and a lack of qualified employees to implement the guidelines. In this regard, CBRC could provide clear implementation steps and timelines, including the setup of the internal ESR governance structure; eg:
 - The development of the relevant board-level governance
 - The setup of dedicated teams to monitor implementation of the guidelines in the credit provision process (for example, hired from consultancies, other financial institutions).
- **Legacy portfolios, particularly in large, state-owned banks.** While the guidelines and restrictions forbid new investments in certain sectors, large state-owned banks in particular still hold major legacy portfolios consisting mostly of other SOEs. It will be key to work with banks to quantify legacy portfolios and define how they should be treated under ESR guidelines, eventually absorbing them over time. This could be included in the current efforts to develop a consistent reporting system on environmental and social reporting. Triggering a discussion on the questions related to shadow banking will also help the regulator to develop a plan to direct credit capacity away from high-pollution sectors and towards green investments.

3.5 SOUTH AFRICA

The South African regulators interviewed for the report recognize the importance of environmental and social risk for the financial sector. Although no specific regulations exist yet on environmental and social risk, a comparable provision is targeted at pension funds (not fully implemented due to regulators' lack of capacity) as well as a relatively high commitment from the private sector. Interviews revealed that the South African Reserve Bank's own Financial Stability Review has always considered environmental risks. However, progress in this area is hampered by the lack of international best practice and a global standard.

3.5.1 Current situation¹⁴

In its white paper on the National Climate Change Response of 2011, the government of South Africa recognizes the financial sector's responsibility in environmental and social governance and explicitly "acknowledges and supports initiatives by the South African banks to integrate environmental considerations into the decision-making frameworks"¹⁵.

South African banks have been active in attempting to address environmental and social issues both independently and through the Banking Association of South Africa (BASA). Of the largest seven South African banks, five have published sustainability strategies and reports on impacts using international standards, including integrated reporting. Two of the banks are members of the UN Global Compact, and the four largest banks by market share have directly or indirectly signed the Equator Principles or even more far-reaching agreements such as the Natural Capital Declaration.

According to some banks representatives, these efforts result from a desire to effectively manage the exposure to environmental and social risk and reputation, and also to good corporate citizenship. They also need to implement what they expect of their clients. Most banks meet monthly in a "Sustainable Banking Forum" to discuss environmental and regulatory issues.

However, currently no financial sector regulations oblige South African banks to include environmental risk standards in their operations and activities, or to manage their credit flows away from high-pollution sectors and towards green investments.

¹⁴ Sources include the government's white paper on the national climate change response (Government of the Republic of South Africa, 2011) and the amended Regulation 28 to the South African Pension Funds Act (National Treasury Republic of South Africa, 2011).

^{15 (}Government of the Republic of South Africa, 2011)

According to the interviews conducted with banks, this is justified for the following reasons:

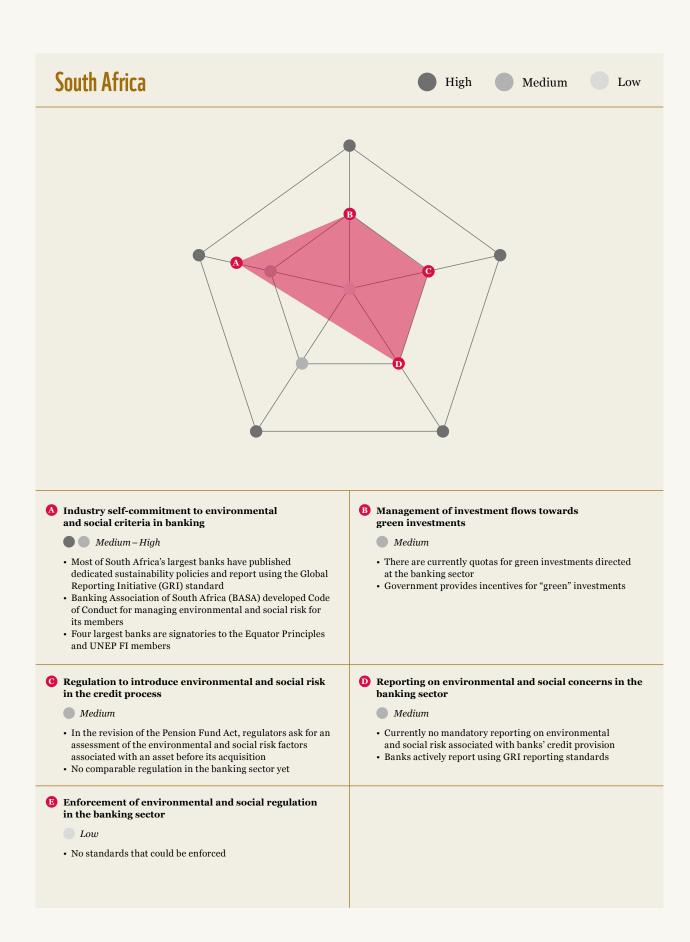
- The South African banking sector is already heavily regulated, resulting in resistance from bankers to additional ESR regulation.
- Some bankers note that environmental and social risk should be covered by the regulation in the respective sector rather than adding a layer of regulation in the financial sector. They fear this may lead to a "check the box" mentality rather than the conscious management of environmental and social risk. Banks would likely also have to rely on scientists who are fully conversant with the relevant issues.
- There is already some level of engagement with ESR by the four largest banks who prefer to follow a self-regulatory route with respect to ESR.
- The understanding of ESR is constantly evolving and rules-based regulations, particular in relation to industry sectors, could easily lag behind best practice. Regulation would require regulators to understand the ESR issues first.
- Unlike other types of risk, quantifying environmental risks is a challenge.

While there is no bank-specific regulation, in an amendment to Regulation 28 of the South African Pension Funds Act, the preamble specifies that every fund and its board, in adding an asset to the fund or assessing the current assets, should take into account factors "which may materially affect the sustainable long-term performance of the asset including, but not limited to, those of an environmental, social and governance character"¹⁶.

However, there have been several hurdles involved in implementing this standard:

- The new regulation has not yet been fully implemented by every pension fund, primarily due to capacity constraints and a lack of training in the new requirements of the Act
- The large number of pension funds makes it difficult for the regulator to have effective oversight of compliance
- Small pension funds may not have the means and capabilities to implement environmental and social controls
- The Financial Services Board (the regulatory body) itself faces resource constraints

^{16 (}National Treasury Republic of South Africa, 2011)



and is currently undergoing restructuring.

3.5.2 Areas for development

- Increase the reporting requirements related to environmental and social risk required of banks. This would constitute a first step towards creating greater transparency to allow decision-makers to improve the links between ESR and micro or macro-prudential regulation on the impact of environmental and social risk for banks and the wider economy, and also create pressure on banks to manage it.
- Trigger the development of a coordinated incentive system for green credits along the whole value chain for example, adjust risk weightings for green credits to reduce their impact on banks' capital requirements, work to introduce a quota for green loans, create subsidies for green investments. Importantly, the interviews suggest that the incentives in the South African context would work, whereas penalties would be less effective.

4 RECOMMENDATIONS FOR FURTHER DEVELOPMENT

The introduction of environmental and social risk management in the financial regulation of the BRICS has taken country-specific routes and is likely to continue in this direction. The analysis of ESR regulation in the BRICS suggests that both the degree to

which environmental and social goals are pursued through the financial sector and the focus of the related activities differ quite significantly.

Brazil and China have the strongest regulation on ESR in the financial sector, in particular with regard to the inclusion of environmental and social criteria in the credit process, monitoring and industry's self-commitment. India has a system to manage credit and investments towards social goals, but not towards environmental goals, and the Central Bank's recommendation on managing environmental and social risk is meant to provide guidance rather than exercise control. South Africa's banks are relatively active, but there is little in the form of regulation. In Russia, efforts to manage environmental and social risk in the financial sector are still limited.

A snapshot of current strengths and weaknesses of ESR in the BRICS' financial regulation is provided in the table below.

	Industry self-commit- ment	Management of investment flows towards green invest- ments	Regulation to introduce ESR into credit process	Reporting on ESG in banking sector	Enforcement of ES regu- lation in the banking sector
Brazil					
Russia					
India					
China					
South Africa					



Given the report findings, a possible scenario for a global scale-up of ESR based on the experience of BRICS countries could work as follows: at the national level, the association of banks and its members subscribe to ESR standards and the Central Banks make ESR part of the required disclosures.

The underpinning of the concept, i.e. the fact base and analysis to prove the link between ESR and financial risk for banks and the broader economy, will provide a strong business case. Several regulators have already implemented ESR without this data in place as they acknowledge the inherent environmental and social risk for financial activities or they have been prompted by competitiveness considerations, regulatory measures in other sectors or reputational goals. Concerns have been expressed about the availability and quality of data, and an initial focus on stratified samples or case studies could be a solution.

Publicly available information would allow academics and civil society to increase the awareness about particularly critical ecological or social issues and track these back to the financing activities. Increased transparency would also allow international comparisons and industry league tables, and elevate the topic to organizations like the Bank for International Settlement (BIS) and the Basel Accords.

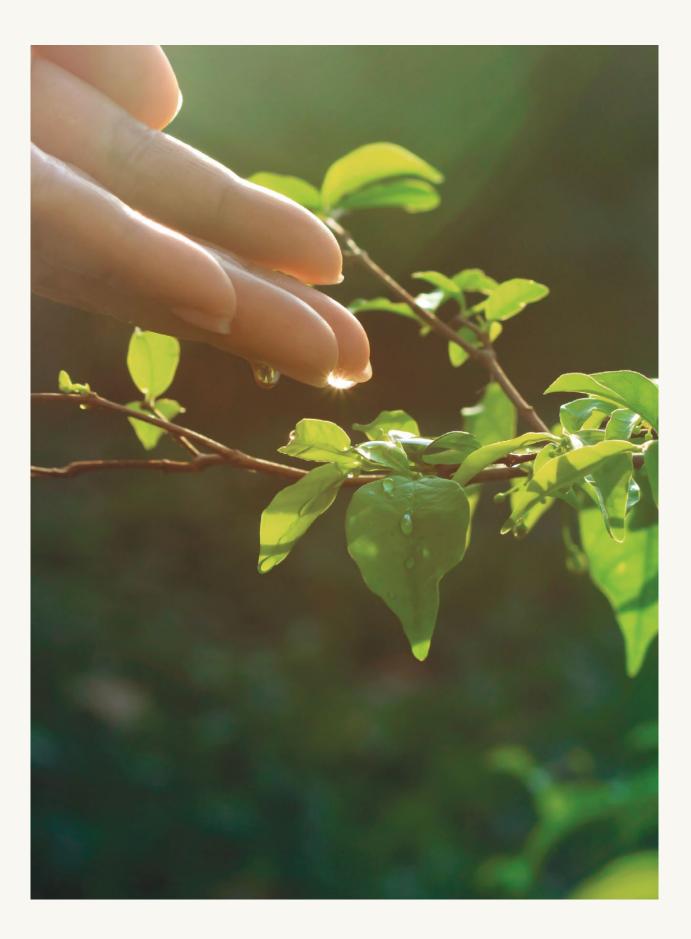
In addition to national regulation, a complementary approach to implement top-down ESR control mechanisms may be through international regulatory frameworks, such as the Basel Accords by the BIS. This would lead to a considerable scale-up of efforts by also addressing the financial markets of countries in which ESR is not considered a regulatory priority.

Some of the BRICS regulators and regulatory experts interviewed for this report have reservations in this regard, but they were not necessarily negative. Much like representatives of the BIS, they pointed out that before anchoring such principles in a Basel-like framework, a compelling fact base and empirical evidence would need to be produced to show that there is a correlation between environmental and social risk and the probability of financial loss or, more broadly, with the systemic stability of the financial system. It was further pointed out that the systematic collection and storage of credit loss data and credit histories (including ESR parameters) would be important in building such evidence, but it is likely that much of the relevant credit history is currently not even being recorded systematically at the bank level.

Overall, the cooperation of regulators, banking associations, banks and financial institutions is critical to success. If the inclusion of ESR in the credit risk process is perceived as an additional burden on the banking business, workarounds and national exception would not be unlikely at the implementation level.

To sum up, three main areas of activities can be further intensified:

- 1. National dialog increasing cooperation at a national level among country regulators, banking associations, banks and financial institutions.
- 2. ESR fundamentals developing the ESR fundamentals and presenting them to the Bank of International Settlements, the Basel Accords and national regulators with a view to incorporating these principles into the respective frameworks
 - a. Establish the regulatory case to include ESR into risk analysis of capital weightings
 - b. Introduce reporting guidelines on ESR as part of the Basel provisions for reputational risk and disclosure requirements, regardless of whether there is empirical evidence of a link between ESR and financial risk and stability.
 - c. Develop alternative approaches to establish the required empirical evidence: for example, use advanced pricing techniques as employed by insurers or reinsurers that include non-financial (e.g. environmental) risks to price credit risk insurance, establishing a case library or working with stratified samples.
- 3. International dialog facilitate a multinational exchange on ESR frameworks and practices in financial regulation among BRICS countries (and beyond)
 - a. Establish a BRICS-wide dialog on environmental and social risk in financial institutions. Regulators interviewed for this report were open towards the idea of establishing a more active information exchange among BRICS countries (and beyond) on ESR practices, so the next step could be to define the scope and participants of such a dialog. An effective way would be to start an exchange at the regulatory level. ESR champions would also play a role working through the G20, the IMF, the World Bank and the newly-created BRICS Development Bank.
 - b. Establish ESR standards via the global financing institutions such as the IMF or the BRICS Development Bank, the natural starting point for leveling the playing field. The latter has not yet developed environmental and social standards for financing decision-making. In interviews with some BRICS regulators, it emerged that this could be a relevant starting point for common standards to be extended to other BRICS financial institutions.
 - c. An effective measure would be to table environmental and social risk as an agenda point in one of the discussion groups at the next BRICS summit.



ANNEXES

4.1 METHODOLOGY FOR THE ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISK FRAMEWORKS IN THE BRICS' FINANCIAL SECTOR

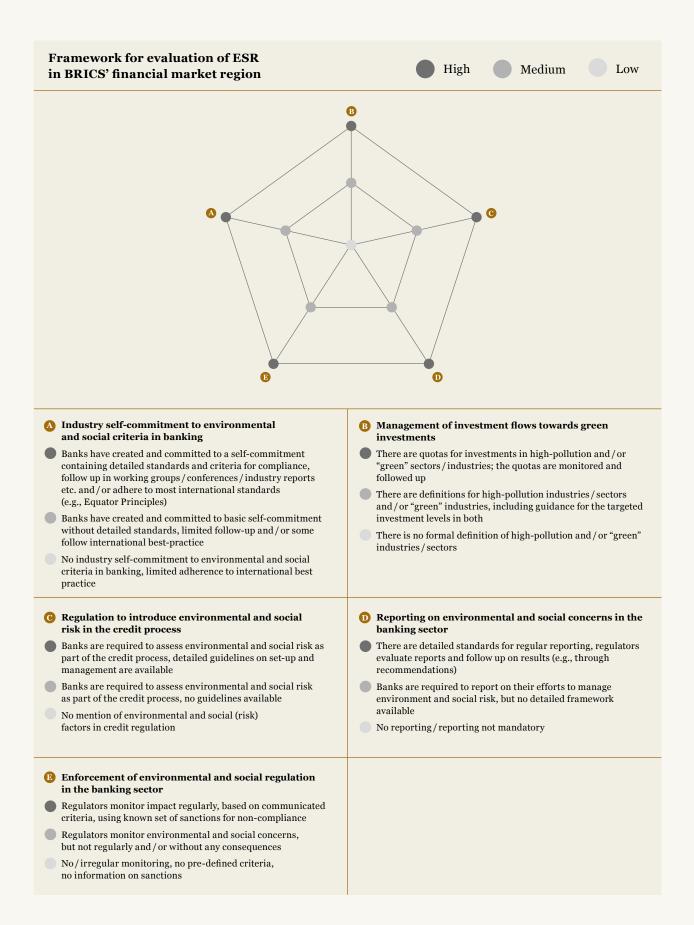
Five indicators along three dimensions have been used as a framework for the assessment of ESR in the BRICS' financial sector:

Dimension 1 – level of (self-) commitment. Describes the degree to which the largest banks of a country are subject to restrictions or adopt standards to mitigate the environmental and social footprint of their operations and activities. The commitment may be in the form of bank-specific sustainability policies, policies introduced and promoted by the country's banking association and through the formal adoption of international standards (e.g., the Equator Principles). This assessment is based on an overview of the countries' largest banks by assets that have dedicated sustainability strategies (published online), publish regular sustainability reports and are members of the UN Global Compact, UNEP Finance Initiative and/or signatories of the Equator Principles. On a second level, this dimension considers whether the country's banking association has issued a sustainability policy. Indicator:

a) Industry self-commitment on environmental and social criteria in banking.

- Dimension 2 regulation including environmental and social considerations in the credit process. Provides an overview of the measures adopted by a country to reduce ESR, manage credit flows towards green investments and away from high-pollution industries and sectors. This may be achieved top-down through quotas (maximum quotas for investments in industries or polluting sectors or minimum quotas for green investments) or bottom-up through control processes to continually assess the environmental and social risk associated with an investment. Indicators:
 - b) Management of investment flows towards green investments (through formal definitions and quotas)
 - c) Regulation introducing environmental and social risk into the credit process.
- Dimension 3 enforcement of regulation¹⁷. Indicates the degree of enforcement of regulation, both through monitoring/transparency measures and through direct measures and sanctions from the regulator. Both are considered most effective when based on minimum criteria and publicly available targets.
 Indicators:
 - d) Reporting on environmental and social concerns in the banking sector
 - e) Enforcement of environmental and social regulation in the banking sector.

¹⁷ According to a survey conducted by the IFC on private sector financial institutions in nine emerging markets and developing countries (Bangladesh, Brazil, Colombia, Indonesia, Nigeria, Peru, Philippines, Thailand and Vietnam), the absence of enforcement of environmental and social regulation by national regulators is the top barrier to effective ESG in financial institutions (International Finance Corporation (IFC), 2014).



The framework is applicable to ESR only in financial regulation and does not apply to the country's environmental and social regulation overall. Also, it does not reflect whether the economic development in these countries is environmentally or socially sustainable.

The financial sector regulations researched in this report need to be assessed in the relevant context, taking into account the:

- Different levels of specificity and enforcement of environmental legislation: Where specific (inter)national standards for environmental and social performance are established, observed and rigorously enforced, the effect achieved through additional financial sector controls may be smaller than in other cases. This does not mean, however, that the financial sector does not play an important role in promoting environmental and social goals, only that the mechanisms are different (they could include, for example, the active promotion of conservation finance).
- **Civil society activism and pressure.** The degree of enforcement of the relevant regulation depends not only on government action, but also on the role and influence of civil society.
- **Regulation.** Specific regulatory measures directed at banks are an additional tool, especially in contexts where government action is not sufficient to adequately manage the environmental and social impact of private sector activities.

4.2 CHINA'S REFORMS AND GREEN BANKING

Big four, joint stock, and city commercial banks remain the top players in China's banking sector



1 Others include policy banks, rural commercial banks, urban credit cooperatives, rural credit cooperatives, finance companies etc

2 Foreign banks include incorporated WOFEs / JVs and branch status foreign banks

3 Bank of Communication is categorized as joint stock bank

Source: Almanac of China's Finance and Banking; PBOC; CBRC

Deep-dive: China's banking sector reform and regulatory overview

Following the inception of the "reform and opening up" policy in 1978, China began to transform its 100 per cent state-owned banking system. In the early 1980s, while the People's Bank of China (PBOC) was designated as the official Central Bank, four state-owned banks were established to specialize in different sectors of the economy and conduct commercial banking operations. These banks were also known as the Big Four: Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Agricultural Bank of China (ABC) and Bank of China (BoC). Throughout the 1990s, these banks accumulated vast amounts of non-performing loans (NPLs) by lending to underperforming state-owned enterprises (SOEs). By the end of 2000, the total amount of NPLs in the Chinese banking system was as high as CNY 3.7 trillion (approximately US\$450 billion), with the extremely high NPL ratio of 37 per cent. Coupled with China's accession to the WTO in 2001, banking sector reform became a high priority on the state leadership's agenda.

The reform effort was three-fold:

- 1. The Big Four were revitalized. A massive amount of new capital was poured into these banks, and their NPLs were removed from the balance sheet and transferred to special asset management vehicles. Starting from a clean sheet, the four banks consequently received significant new funding from foreign strategic investors such as Goldman Sachs, Bank of America and the Royal Bank of Scotland, and since 2005 have successfully completed their Initial Public Offerings (IPO). The ABC was the last of the Big Four to go public in 2010, marking an important milestone in China's banking reform. Despite these transformations, the Big Four have been steadily losing market share against other players. Their collective market share in banking assets has declined from ~60 per cent in 2002 to ~40 per cent in 2013.
- 2. The rise of Joint Stock Banks (JSBs) and City Commercial Banks (CCBs) has redefined China's banking landscape. Since the establishment of the first national JSB in Shanghai in 1987, a total of 14 JSBs have been created. More market and commercially-oriented than the Big Four, these banks have grown much faster, accounting for over 20 per cent of total banking assets in 2013. Similarly, since 1998, the local credit unions (there were over 5,200 urban credit unions and **thousands** of rural credit unions in China in 1994) have been transformed into city commercial and rural commercial banks since 1998. With strong government backing and almost 100 per cent government ownership, these banks aim to support the regional economy and local government projects. Since 2005, some leading CCBs have started to diversify their shareholders base, inviting Chinese and international investors to take minority stakes. Since 2008, most CCBs have begun to extend business beyond their home region. Growing faster than the market average, the number of CCBs has increased to over 140, accounting for over 10 per cent of total banking assets in 2013.

3. The establishment of the China Banking Regulatory Commission (CBRC) in 2003 marked a new era. Unlike most other countries where the Central Bank is the sole banking regulator, China has now a dual-regulator structure for the banking sector. The PBOC is in charge of issuing monetary policies, setting and maintaining bank reserve requirements and overseeing the overall flow of money and payments in the economy. CBRC is responsible for executive level oversight, such as setting and updating capital rules and risk management guidelines, allocating and issuing annual loan quotas and issuing specific governance, risk management and compliance requirements for banks and non-bank credit intermediaries alike.

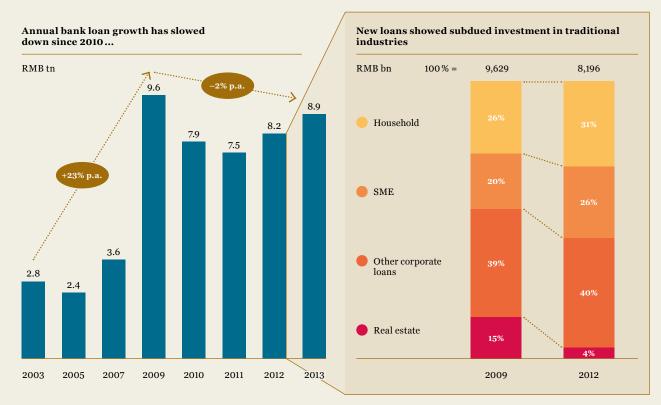
This shows two important attributes of China's banking system:

- Until recently, all the domestic banks including the Big Four, JSBs and CCBs were to some extent state-owned. All their chairmen and presidents have to be appointed directly by China's Communist Party and be properly certified by CBRC.
- Despite the increasing market orientation of the banks, the Chinese regulators (PBOC, CBRC) have a strong influence on the way banks are run, even as regards operational aspects. For instance, CBRC issues annual credit quota and industry guidelines that banks must follow strictly. CBRC is also responsible for setting and measuring key performance indicators (KPIs) for all banks' presidents.

It is also worth mentioning the development of wholly-owned foreign enterprise (WOFE) banks. Since the WTO accession, the Chinese government has adopted a phase-in approach, opening up the banking sector to foreign banks. A total of 39 foreign banks have been established since then. However, due to restrictions in business scope and a late-comer disadvantage, most of them have struggled to gain a stable foothold in China. In 2013, foreign banks accounted for less than 2 per cent of the market share.

Introduction of the Green Credit Policy

In an effort to revitalize the domestic economy and prevent a hard landing after the 2007/08 global financial crisis, in 2009 the Chinese government announced a stimulus package of CNY 4 trillion, in the form of incremental bank loans. Following this policy, Chinese banks obtained and utilized a higher-than-usual loan quota and cumulatively issued CNY 10 trillion new loans in a single year. Though originally designed to boost domestic consumption, the majority of these loans actually went into industries such as infrastructure, real estate and heavy industries. Many of these, already overheated, created new capacity incongruent with the weakening market demand. In addition, these new investments were directed to "high energy consumption and high pollution" enterprises, such as coal mines, thermal power plants, cement factories, iron and steel mills, and heavy chemicals producers. By end of 2009, the total amount of loans from major financial institutions to the so-called "two-high" enterprises (high energy consumption and high pollution) exceeded CNY 2 trillion. Environmental contamination problems became more acute in many regions, resulting in sharp criticism from the public and civil society organizations.



Banks' lending priorities are influenced by policy objectives, and a shift away from traditional industries such as real estate

Source: CBRC

Realizing the severe impact of the stimulus package, the state leadership prioritized the treatment of environmental damage and the absorption of excessive industrial capacity in the economic reform agenda of the 12th Five-Year Plan (2011-2015). The State Council published "Guidelines for Conserving Energy and Minimizing Emission and Pollution" in 2012, setting out targets for reducing energy consumption in specific industries. The guidelines also established restrictions on continued or new investments and financing for high-energy consumption and high-pollution enterprises, with the long-term goal of shifting the industrial structure away from dated technologies and high-pollution industries.

In the same year, the Chinese Banking Regulatory Commission published the Green Credit Guidelines echoing the State Council's guideline. The purpose is to steer credit away from "two-high" industries and move towards environmentally friendly industries without overcapacity. The guidelines received widespread acclaim as one of the first documents to codify banks' contribution to a socially and environmentally sustainable business environment. They have become a foundation for all future regulation in the green credit space.

Two years into its implementation, the true impact of the Green Credit Guidelines is yet to fully manifest. However, some leading indicators show that an adjustment is indeed taking place. While almost 55 per cent of new bank loans were invested in real estate and other "two high" industries in 2009, less than 45 per cent of new loans were directed to these sectors in 2012. Most of the remaining part went to either "green" or environmentally neutral sectors.

4.3 NON-BRICS EXPERIENCE: NIGERIA AND BANGLADESH

In addition to the BRICS, other countries are adopting national regulation directed at the financial sector to further environmental and social goals. Among them, Nigeria and Bangladesh offer some of the most advanced examples of regulatory frameworks in this area, with best practices that can be replicated elsewhere.

4.4 NIGERIA

Development and rationale

Sustainable banking principles were formulated in a joint effort between banks and the Central Bank of Nigeria (CBN). CBN mandated a "Strategic Sustainability Working Group" from the banking sector to define principles that would be relevant for the Nigerian context. The working group operated under the auspices of the CBN's Bankers Sub-Committee on Economic Development and Sustainability and in collaboration with the Entrepreneurial Development Bank (the Dutch Development Bank, FMO), the IFC independent advisors. CBN published the agreed principles in a circular stating that they apply to "banks, discount houses and development finance institutions in Nigeria" (Central Bank of Nigeria (CNB), 2012). They came into force on 12 July 2012 with reporting due by June 2014.

In addition to considerations of ESR in credit risk, reputational risk and legal risk, a major driver for CBN to adopt the sustainable banking principles is the willingness to attract more foreign investment to boost an economy still at the early stages of development. This is a major difference compared to countries such as Brazil or China.

The principles also reflect the developing context of Nigeria and, rather than focusing only on the negative effects of economic growth on the environment, they are used to promote social goals, such as inclusion and women's economic empowerment.

Provisions and implementation

The content of the Sustainable Banking Principles is detailed in four documents, including the principles themselves, the guidance notes, sector-specific guidelines for the power, agriculture and oil and gas sectors, and the reporting template.

The nine principles of Nigeria's sustainable banking

- 1. Integrating environmental and social considerations in decision making for all business activities
- 2. Minimizing and offsetting the negative social and environmental impacts of operations and having a positive impact on communities wherever possible
- 3. Respecting human rights in all operations and activities
- 4. Promoting women's empowerment in operations (including equality in the workplace) and activities (introducing products and services designed for women)
- 5. Promoting financial inclusion for underserved individuals and communities
- 6. Implementing governance structures, assessing clients' environmental and social governance
- 7. Committing to ongoing capacity building in environmental and social governance
- 8. Building and leveraging sector-wide international collaborations and partnerships
- 9. Reviewing implementation progress regularly on a bank and sector-level.

The guidance notes provide detailed explanations of the meaning and rationale for each principle and direction for their implementation (milestones, deliverables and timelines or examples of ESR classifications). Further guidance is provided for three key economic sectors. This includes:

- · Environmental and social risk description
- Banking requirements for financing activities
- Specific client monitoring, reporting requirements and additional frameworks for categorizing investment risks
- Overview of domestic laws and regulation in the sector
- Summary of relevant international standards to be observed.

The implementation of the sustainable Banking Principles is mandatory for all banks and financial institutions. Implementation is supported through training programs and a steering committee that oversees the process and provides guidance to the banks. The ESG monitoring requirements for banks also include yearly external audits. Mandatory governance requirements include a sustainable banking commitment statement, environmental and social policies and procedures, and a sustainable banking reporting framework. Banks had to start reporting on their progress towards implementation in 2014 using the templates provided, which contain:

- A one-off report on the bank's sustainability policy, governance and capability building; a description of sustainable banking practices in all core processes and information on reporting frameworks and procedures;
- Annual reports including example metrics per principle for example, for Principle 3 (human rights), the number and value of transactions screened in observance of human rights, or for Principle 5 (financial inclusion), the number of new products targeted at the financially and socially vulnerable.

Although the principles state that compliance will be enforced, no information on sanctions is available yet.

4.5 BANGLADESH

Development and rationale

In 2011, Bangladesh Bank (BB), the country's Central Bank, published guidelines on environmental risk management elaborated in collaboration with banks and the banking association. The foreword provides the rationale and urgency of the document, particularly in relation to the severe consequences economic development is having on the countries' land, water and air. As one of the countries most severely impacted by climate change, the document argues, the Bangladeshi banks also face above-average exposure to financial risk resulting from a deteriorating environment. Containing such risks is therefore the main focus of the guidelines, while the positive impact that ESR management can bring is mentioned, but not highlighted as a priority (Bangladesh Bank, 2011).

The Central Bank led the development of the guidelines. A central team of BB employees, led by the deputy governor, was supported by IFC. There was a consultation process with banks and the results were used to assess the challenges banks are facing. BB also organized trainings and workshops to help banks understand and implement the guidelines.

Provisions and implementation

The guidelines are sector-specific and mandate banks and financial institutions to perform an environmental risk rating for each loan, and an environmental due diligence using checklists. They contain:

- A definition of environmental risk, its potential sources and different forms (direct risk resulting from control over an asset, indirect risk resulting from decreased financial flows from destroyed assets, reputational risk), as well as an overview of how to implement ESR controls
- An overview of the organizational requirements for environmental risk management (integration of environmental risk management into the credit process, required roles, authorities and processes along the process)
- Technical guidance on how to implement the guidelines and perform the required environmental risk assessments. This part is complemented by annexes with check-lists to be used in financing decisions.

The implementation of environmental risk assessments follows six steps:

- 1. Integrating environmental risk in credit financing and portfolio management ensure environmental risk assessments are performed for every financing decision, and, where the risk is high, introduce additional precautions. Banks should regularly check the exposure of their portfolio and take action to counterbalance risk using both the categorization included in the guidelines and the one from the Department of Environment.
- 2. Adapting the processing and approval process separate procedures for each risk class apply, including a mandatory approval by the board or senior management for high-risk credits.
- 3. Ensuring environmental standards are met in credit administration.
- 4. Following up on environmental risk management for high-risk credits, banks should regularly check whether the environmental standards are met and follow up with recommendations to the borrowers.
- 5. Establishing a database of non-performing loans banks are asked to create databases detailing all loans that have (partially) failed for environmental reasons.
- 6. Reporting on the implementation of the guidelines as part of their annual reporting the guidelines explicitly call for a minimum standard, aiming at leveling the playing field for all banks. They are not meant to cover every aspect of sustainability but ensure that banks accord environmental risk management a minimum level of attention.

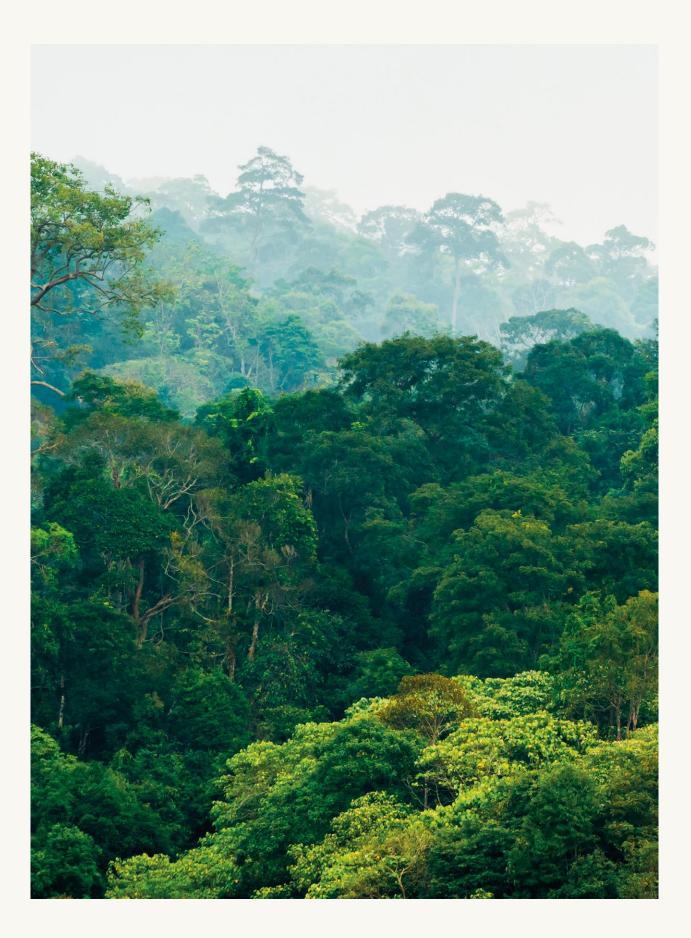
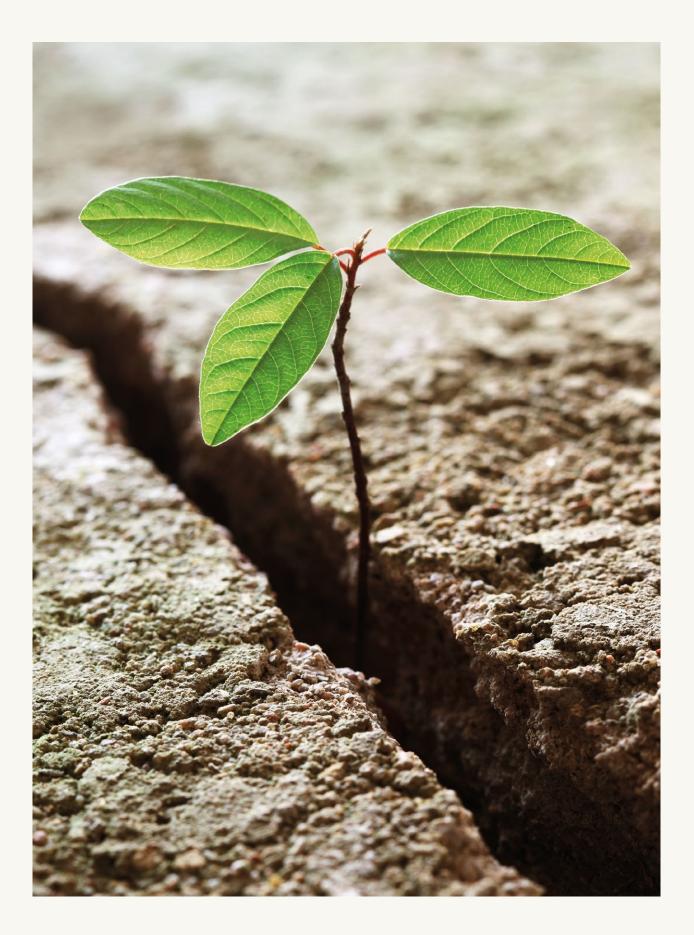


TABLE: Comparison of ESR in financial regulation in the BRICS and other countries

Country	Rationale / definition of ESR	Main content	
Brazil	Possibility of loss resulting from social or environmental damage	 Introduce policies to shape "action" of social-environmental nature (no further definition) Introduce ESR controls in the credit process 	
Russia	Currently no financial sector ESR framework in	n place	
India	Currently no financial sector ESR framework in place		
China	Hazards and risks for the environment and society brought about by clients' activities, including energy consumption, pollution, land, health, etc.)	 Banks should "promote green credit from a strategic height" and therefore strengthen green credit capacities (labeling, statistics, etc.) Develop specific credit guidelines for high-risk industries Apply ESR assessment to all clients, identify risk and ask them to change their practices ESR should be considered every step of credit process (guidelines contain detailed process management provisions) Banks should improve their own environmental and social performance (green office, standardization, education on green credit) CBRC has published statistical system and key performance indicators for the Green Credit Guidelines. 	
South Africa	Currently no financial sector ESR framework in	n place (banking sector self-commitment)	
Nigeria	The potential E&S issues associated with a client or engagement that may imply exposure to risk and accordingly may need to be taken into account when making business and risk management decisions	 General provision for banks to include environmental and social concerns in all business activities, minimize negative impacts and have a positive impact where possible Re-affirmation of respect for human rights in all operations and activities Promotion of women's empowerment and social inclusion Adequate governance structure, ongoing capability building, leveraging national and international collaborations and regularly reviewing implementation process In addition, CBN published sector-specific principles for power, agriculture, oil and gas 	
Bangladesh	Environmental risk is a facilitating element of credit risk arising from environmental issues. These can be due to environmental impacts caused by and/or due to the prevailing environmental conditions. These increase risks as they bring an element of uncertainty or possibility of loss in the context of a financing transaction.	 Organizational requirements for environmental risk management: Integration of environmental risk management into the credit process, required roles, authorities, processes Technical guidance on performing adequate environmental risk assessments Checklist for environmental risk assessments 	
Indonesia	Currently no financial sector ESR framework in	place (Financial Services Authority working on draft regulation)	

Governance requirements	Monitoring and reporting	Enforcement
 Governance structure reporting to Board with one director designated as responsible for environmental and social policy Board or senior management need to revise policy every five years 	 ESR losses in credit monitored through data registries Banks need to report their PSRA and governance structures to BCB which can ask for additional information / actions 	Measures and sanctions not yet defined
 Board of directors to formulate concepts, strategy, and approve objectives Senior management responsible for development of objectives, resource allocation, and structures 	 Implementation should be part of internal compliance audit and may be supported by external auditing Banks should establish appraisal and evaluation systems and make developments public Based on a "green" credit taxonomy developed by CBRC, volumes need to be monitored and reported to CBRC 	• Regulators can, to a certain degree, enforce through supervision (on-site visits), reports published on banks
 Transparent environmental and social governance to be established under the oversight of the board Principles also call for environmental and social practices (codes of conduct, standards, etc.) to be developed for all operations and activities Implementation of environmental and social factors in performance management Internal and, where necessary, external audits Improved transparency 	 Detailed reporting templates for ESR strategy and regular reporting on implementation of principles provided Yearly external audits of environ- mental and social policies and measures 	 Compliance mandatory for all banks, discount houses and development finance institutions No publicly available information on enforcement and sanctions
 All banks and FIs required to pass resolution of the board or appropriate top & senior management committee on the adoption of guidelines and principles Annual internal audits to check for adequate implementation of environmental risk management Guidelines explicitly do not ask for separate environmental risk management structure "as environmental risk management is a part of the credit risk management" 	 Bank and financial institutions required to have reporting system on environmental risk management Annual reporting as part of the annual report 	 Guidelines apply to all banks and financial institutions No publicly available information on enforcement and sanctions



BIBLIOGRAPHY

- Ministry of Law and Justice (Legislative Department). (2013, August 30). *The Companies Act, 2013: Indiacode*. Retrieved June 15, 2014, from Indiacode website: http:// indiacode.nic.in/acts-in-pdf/182013.pdf
- Banco Central do Brasil. (2014). *Normas do CMN e do BC: Banco Central do Brasil.* Retrieved June 20, 2014, from Banco Central do Brasil website: http://www.bcb. gov.br/?NORMASBC
- Bangladesh Bank. (2011). Environmental Risk Management (ERM) Guidelines for Banks and Financial Institutions in Bangladesh. Dhaka: Bangladesh Bank.
- Bank for International Settlements Basel Committee on Banking Supervision. (2014, April 1). *Progress Report on Implementation of the Basel Regulatory Framework*. Retrieved June 25, 2014, from Bank for International Settlements website: http:// www.bis.org/publ/bcbs281.pdf
- Banktrack. (2003, January). Collevecchio Declaration The role and responsibility of financial institutions. Retrieved June 25, 2014, from Banktrack: http://www. banktrack.org/download/collevechio_declaration/030401_collevecchio_declaration_with_signatories.pdf
- Banktrack, Friends of the Earth US. (2008, November). *The Green Evolution Environmental Policies and Practice in China's Banking Sector*. Retrieved June 2, 2014, from Banktrack website: http://www.banktrack.org/download/the_green_evolution_environmental_policies_and_practice_in_the_chinese_banking_sector/green_evolution_2008_foe_final.pdf
- Central Bank of Nigeria (CNB). (2012). *Nigerian Sustainable Banking Principles*. Abuja: CNB.
- China Banking Regulatory Commission. (2012, February 24). Notice of the CBRC on Issuing the Green Credit Guidelines. Retrieved June 3, 2014, from China Banking Regulatory Commission website: http://www.cbrc.gov.cn/EngdocView.do?docID=-3CE646AB629B46B9B533B1D8D9FF8C4A
- FEBRABAN. (2012). FEBRABAN and the Brazilian Banking sector support the United Nations Conference on Sustainable Development (Rio + 20). Retrieved June 5, 2014, from FEBRABAN website: http://www.febraban.org.br/7Rof7SWg6qmyvwJcFwF7I0aSDf9jyV/sitefebraban/FEBRABAN%20and%20the%20Brazilian%20Banking%20sector%20support%20the%20United%20Nations%20 Conference%20on%20Environment%20and%20Sustainable%20Development_ TRANSLATION.pdf
- Financial Services Authroity of Indonesia. (2014, June). Outlook of clean energy financing in Indonesia. Retrieved August 25, 2014, from Policy and Development of Sustainable Finance in Indonesia: http://indoebtke-conex.com/assets/files/ Mini%20Hydro%20by%20ICED/2.%20Mulya%20Siregar%20OJK-USAID%20 Sustainable%20Finance%2006062014.pdf

- Government of the Republic of South Africa. (2011). *National Climate Change Response* – *White Paper*. Pretoria: Government of the Republic of South Africa.
- Green Watershed. (2013, November 10). *Green Credit Footprint of Chinese Banks* (2008-2012). Retrieved 6 19, 2014, from Banktrack Website: http://www.bank-track.org/show/news/new_report_measures_green_credit_footprint_of_chinese_banks
- International Finance Corporation (IFC). (2014). Moving Forward with Environmental and Social Risk Management,. Washington, D.C.: International Finance Corporation (IFC).
- International Finance Corporation. (2013). *Greening banks Highlights of 2012 International Green Credit Forum*. Retrieved June 2, 2014, from International Finance Corporation website: http://www.ifc.org/wps/wcm/connect/topics_ext_content/ ifc_external_corporate_site/ifc+sustainability/publications/publications_ report_greeningbanks
- International Finance Corporation Sustainable Banking Network. (2014). 2nd International Sustainable Banking Forum. Washington: International Finance Corporation.
- Kehati Biodiversity Conservation Trust Fund. (2013). *SRI KEHATI Index*. Retrieved September 10, 2014, from KEHATI website: http://www.kehati.or.id/en/indekssri-kehati-2.html
- National Treasury Republic of South Africa. (2011, March 4). Pension Funds Act, 1956, Amendment of the Regulation 28 of Regulations made under Section 36. Pretoria: Government Gazette.
- Reserve Bank of India. (2007, December 20). CorporateSocial Responsibility, Sustainable Development and Non-Financial Reporting – Role of Banks. Retrieved June 15, 2014, from Reserve Bank of India website: http://rbidocs.rbi.org.in/rdocs/ notification/PDFs/82186.pdf
- Reserve Bank of India. (2014, February 1). *FAQ Priority Sector Lending: Reserve Bank of India website*. Retrieved June 20, 2014, from Reserve Bank of India website: http://www.rbi.org.in/Scripts/FAQView.aspx?Id=87
- United Nations Environment Programme Finance Initiative (UNEP FI). (2013, April 23). YES BANK – GIZ – UNEP FI Sustainability Series – Introductory Training Workshop Agenda. Retrieved June 15, 2014, from UNEP FI website: http://www. unepfi.org/fileadmin/events/2013/mumbai/mumbai_agenda.pdf
- World Economic Forum. (2013). *The Green Investment Report: The ways and means to unlock private finance for green growth*. Geneva: World Economic Forum.
- World Wide Fund for Nature (WWF)/Credit Suisse. (2011). *Transition to a Low Carbon Economy: the role of banks*. Zurich: Credit Suisse.

WWF NETWORK OFFICES

WWF Offices

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