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THE IMPACT OF FINANCIAL SECTOR SUSTAINABILITY REGULATIONS ON BANKS

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Olawuwo Oni is currently a graduate research candidate for a master of environmental studies in sustainability management at the University of Waterloo. His research interest is focused on the effect of sustainability regulations formulated by central banks or major financial sector regulators empowered by the national governments of various countries on banks, including determining if banks have been able to address the principles of the regulations such that they are able to act, operate and conduct business sustainably. His undergraduate background is in the social sciences (geography) with specialization in human geography. Before starting his master's studies, Ola worked with Skye Bank Plc as a money market dealer and team lead for the Treasury Bills sub-unit in the bank's Treasury Department.

EXECUTIVE SUMMARY

This paper analyzes the impact of three financial sector sustainability regulations: the Chinese green credit guidelines, the Nigerian Sustainable Banking Principles (NSBPs) and the Bangladesh Environmental Risk Management (ERM) Guidelines. All three address the connection between financial sector activities and sustainable development, and develop guidelines for sustainable banking policies, strategies, practices, products and services. The analysis of the impact of the sustainability regulations on banks is based on literature research and an empirical analysis of sustainability reports and other data from Chinese, Nigerian and Bangladeshi banks. The results suggest that sustainability reporting and sustainability performance of banks increased in all three countries between 2010 and 2014. However, the data also demonstrate that the compliance with the regulations varies. While compliance in Nigeria is high, with 90 percent of the Nigerian banks complying, it is lower in Bangladesh and in China (30 to 60 percent). The paper concludes that, first, the mandatory guidelines have an impact on the sustainability performance of banks. In all three cases, sustainability performance increased after the introduction of the guidelines. Second, the inclusion of the banking sector into the development of financial sustainability regulations increases the success of the regulation. Third, activities to support the implementation of financial sustainability guidelines and supervising the compliance with the guidelines are crucial for the success of financial sector sustainability regulations. Fourth, financial sector sustainability regulations have a positive impact on both the financial sector's financial performance and stability and sustainability performance. Finally, more research is needed to explore the impact of financial sector sustainability regulations on sustainable development.

INTRODUCTION

In addition to China (the first country to introduce financial sector sustainability regulations), other countries, including Bangladesh, Nigeria, Indonesia and Brazil, have introduced financial sector sustainability regulations. The regulations integrate sustainability issues such as environmental contamination, climate change and social sustainability into financial sector regulations. The regulators argue that addressing sustainability issues increases the positive impact of the banking sector on sustainable development and that the integration increases the financial stability and the financial performance of the banking sector.

This paper analyzes the impact of financial sector sustainability regulations on banks. It is based on the paper by Adeboye Oyegunle and Olaf Weber (2015) that analyzes the content of existing financial sector sustainability regulations; however, it broadens the spectrum of analysis by exploring how banks that are regulated by financial sector sustainability guidelines address them.

The research in this paper focuses on the Chinese green credit guidelines, the NSBPs and the Bangladesh ERM Guidelines. These three guidelines are those that are most established, compared to other guidelines that exist in Mongolia, Brazil and other countries, although they are still very recent. The Chinese guidelines have existed since 2006; the Bangladesh and the Nigerian guidelines were introduced in 2011 and 2012, respectively.

The following section will first describe the three guidelines, and then the analysis of the impact of the guidelines on banks will be presented. Finally, conclusions will be drawn on the impact of the guidelines on banks and areas for further research will be described.

THE CHINESE GREEN CREDIT GUIDELINES

China, the world's second-biggest economy, introduced guidelines and regulations for integrating environmental issues into financial decision making in 2006 (Bai, Faure et al. 2013). The introduction of these guidelines has achieved international recognition (Zadek and Robins 2015) and opened the discussion over whether sustainability issues should be integrated into financial sector regulations. The green credit policy, started in 2006, is overseen by three agencies, the Ministry of Environmental Protection, the People's Bank of China, and the China Banking Regulatory Commission (CBRC) (Aizawa and Chaofei 2010). A central part of the program demands that banks restrict loans to heavily polluting industries and offer adjusted interest rates depending on the environmental performance of the borrowers' sectors (see Annex I for a presentation of the green credit guidelines). For instance, pollution control facilities, borrowers involved in environmental protection and infrastructure, renewable energy, circular economics and environmentally friendly agriculture qualify for loans with lower interest rates (Zhao and Xu 2012). The regulation even asks lenders to limit loans to polluting industries and to withdraw loans that were already provided if environmental controversies or instances of non-compliance occur (Jin and Mengqi 2011). Furthermore, the interest rates for polluting industries have to be higher than for non-polluting borrowers. A consequence of the program has been that, since 2007, Chinese banks have been introducing environmental policies (Chan-Fishel 2007), strategies and assessment systems to evaluate credit clients.

Whether the program has been implemented successfully and has been contributing to environmental improvements as well as to a low carbon economy, however, has been the subject of controversy (Jiguang and Zhiqun 2011, Zhang, Yang and Bi 2011, Hill 2014). Zhao and Xu (2012) report that the Industrial and Commercial Bank of China, for instance, has 68,000 borrowers that are qualified as environmentally friendly clients with a total loan sum of US$760 billion. In order to help banks implement the program and overcome difficulties in assessing environmental information from clients, the CBRC issued green credit guidelines in 2012 (ibid.).

It must be emphasized, however, that not only the CBRC contributed to greener and sustainable banking. Many local and regional governments also introduced regulations to support green banking (Jiguang and Zhiqun 2011), although local governments sometimes still support polluting industries because of economic benefits (Jin and Mengqi 2011).

Although the name of the guidelines suggests they focus on environmental issues, they in fact address both environmental and social aspects of lending. Similar to the Nigerian and Bangladeshi guidelines, they focus on policies and practices that are not easy to monitor. Consequently, in 2013, the CBRC issued a notice on the submission of the green credit statistics form (CBRC 2013) and published key performance indicators, enabling the commission to supervise the compliance with the guidelines in 2014. The key performance indicators can be found in Annex II.

THE NSBPs

The NSBPs consist of nine principles that cover environmental and social (E&S) risk management, E&S footprint, human rights, women's economic empowerment, financial inclusion, E&S governance, capacity building, collaborative partnerships and reporting. Nigeria's central bank mandated full adoption and implementation of these principles and guidelines by the financial institutions, and offers incentives for compliance. It also requires a quarterly report of progress from all banks, with the expectation that Nigerian banks will have implemented and integrated the principles by December 2015 at the latest.

The guidelines have been developed as voluntary standards by Nigerian banks. The reason for the development of the NSBP was to guarantee access to foreign investments for Nigerian banks, because financial institutions, such as the Netherlands Development Finance Company (FMO), require information about how sustainability is addressed by their investees. Later, the banks asked the Central Bank of Nigeria to regulate the guidelines in order to guarantee enforcement and compliance. This is in contrast to the Chinese and Bangladeshi approach that followed a top-down process and implemented regulations that had to be accepted by banks. While the Nigerian approach was driven by the interests of the banks, the Chinese and Bangladeshi approach focused mainly on the impacts banks could have on environmental and social sustainability in their home country.

The Central Bank of Nigeria's (2012) nine sustainability principles are:

- **Principle 1 — Our Business Activities' Environmental and Social Risk Management:** "We will integrate environmental and social considerations into decision-making processes relating to our Business Activities to avoid, minimise or offset negative impacts."
- **Principle 2 — Our Business Operations' Environmental and Social Footprint:** "We will avoid, minimise or offset the negative impacts of our Business Operations on the environment and local communities in which we operate and, where possible, promote positive impacts."
- **Principle 3 — Human Rights:** "We will respect human rights in our Business Operations and Business Activities."
- **Principle 4 — Women's Economic Empowerment: "**We will promote women's economic empowerment through a gender inclusive workplace culture in our Business Operations and seek to provide products and services designed specifically for women through our Business Activities."
- **Principle 5 — Financial Inclusion: "**We will promote financial inclusion, seeking to provide financial services to individuals and communities that traditionally have had limited or no access to the formal financial sector."
- **Principle 6 — E&S Governance: "**We will implement robust and transparent E&S governance practices in our respective institutions and assess the E&S governance practices of our clients."
- **Principle 7 — Capacity Building: "**We will develop individual institutional and sector capacity necessary to identify, assess and manage the environmental and social risks and opportunities associated with our Business Activities and Business Operations."
- **Principle 8 — Collaborative Partnerships: "**We will collaborate across the sector and leverage international partnerships to accelerate our collective progress and move the sector as one, ensuring our approach is consistent with international standards and Nigerian development needs."
- **Principle 9 — Reporting: "**We will regularly review and report on our progress in meeting these Principles at the individual institution and sector level."

The NSPBs address both social and environmental issues of banking. However, they mainly state that banks will develop policies, practices, and products and services to address the various sustainability issues. In particular, outcomes of the NSBP are not defined. Therefore, it is not easy to enforce the guidelines and to supervise compliance. Consequently, criteria have to be developed that enable the central regulator to enforce the guidelines.

THE BANGLADESHI ERM GUIDELINES

The ERM Guidelines, Bangladesh's environmental and social guideline for banks, were formulated and launched at the end of 2011 by Bangladesh Bank, the country's central bank, with the support of its local banks and other international and local stakeholders. The guidelines are mandatory for Bangladeshi banks. The guidelines also mandate banks to train their staff and raise their awareness on E&S issues, formulate their own E&S risk management framework, introduce sector-specific policies and start reporting on E&S issues.

The policy includes the classification of investments into high-, medium- and low-risk categories and division into sector-specific aspects to complement the general due-diligence guidelines. It also focuses on strengthening the banks' ability to evaluate environmental risks as part of lending and investment activities (Islam and Das 2013).

The guidelines were established as a minimum standard on what banks and other financial institutions should do in terms of environmental risk management. The main goals are to protect the banks' financing from the risks of a deteriorating environment and ensure sustainable banking practices (Bangladesh Bank 2011). In addition, the policy aims at ensuring that a level playing field is maintained in the financial sector in Bangladesh. It also allows that banks and other financial institutions can go beyond the guidelines. It is based on the Environment Conservation Act established by the Department of Environment in 1995, the Environment Conservation Rules from 1997 and the Circular on Environmental Compliance (BRPD Circular. No 12, 1997) by Bangladesh Bank (Sarwar 2012).

The guidelines are structured in three phases. Phase 1, issued in December 2011, asked for the formulation of policies on:

- general environmental policy formulation and governance;
- incorporation of environmental risk in credit risk management;
- initiating in-house environment management;
- introducing green finance;
- creation of climate risk fund;
- introducing green marketing;
- online banking;

- supporting employee training, consumer awareness and green events; and
- reporting green banking practices.

Phase 2 from December 2012 asked for the implementation of:

- sector-specific environmental policies;
- green strategic planning;
- setting up green branches;
- improved in-house environment management;
- formulation of bank-specific environmental risk management plan and guidelines;
- rigorous programs to educate clients; and
- disclosure and reporting of green banking activities.

The final phase, phase 3, from December 2013, asked for policies on:

- designing and introducing innovative products; and
- reporting in standard format with external verification.

Similar to the Chinese green credit policy, the ERM Guidelines focus on green finance. However, they focus on green products and services instead of regulations to reduce loans to polluting industries and to increase lending to green industries.

THE IMPACT OF THE CHINESE GREEN CREDIT GUIDELINES

The impact of the Chinese green credit guidelines on Chinese banks is the subject of controversy. There are reports that criticize Chinese banks for not considering criticism of stakeholders in international projects financed by Chinese banks (Hill 2014). Another issue seems to be the implementation of the guidelines. While big Chinese banks such as Industrial and Commercial Bank of China and Bank of Communications present success stories with regard to the implementation of the guidelines, other banks, because of a lack of awareness, do not see the urgency to implement them because they do not realize the connection to financial indicators and financial success (Jiguang and Zhiqun 2011). Furthermore, resistance from some regions and provinces that rely on polluting industries prevents the implementation of the guidelines in these areas (ibid.). Finally, the lack of environmental information provided by the Ministry of Environmental Protection seems to be a major implementation problem (Zhang, Yang and Bi 2011). Without the necessary information, banks are not able to assess the environmental risks of their borrowers, and consequently cannot implement the guidelines effectively.

While the implementation of the guidelines may not be perfect, our analysis suggests significant progress in the sustainability performance of Chinese banks over the last few years that may be caused by the guidelines, which are mandatory. Forty-six banks and credit unions that published any financial and non-financial information that was publicly accessible for the years 2009 to 2013 were analyzed. Nearly half of the banks (n = 21) were located in China's industrialized east and 13 banks operated on a national level.

Annual financial and non-financial reports were analyzed to assess the banks' environmental, social and economic sustainability performance. With regard to environmental and social policies, practices, processes, and products and services, the indicators below were used (see Table 1).

The indicators focus on the common banking products and services such as loans, mortgages, funds, indices, asset management, bonds, microfinance, project finance, savings and investment banking. Furthermore, they address sustainability policies and sustainability management, including management systems.

Table 1: Environmental and Social Indicators

Environmental Indicators	Social Indicators
environmental policy	social policy
environmental management system	social management system
internal environmental management	internal social management
environmental credit risk assessment	social credit risk assessment
green loans	social loans
green mortgages	social mortgages
green funds	social funds
green indices	social indices
green asset management services	social asset management services
green bonds	social bonds
green microfinance	social microfinance
green project finance	social project finance
green savings products	social savings products
green investment banking	social investment banking
other green products and services	other social products and services

Source: Authors.

The environmental and social performance of the banks was calculated by assigning the value "1" in cases where the respective environmental or social policy, product, service or process was implemented. Otherwise, the value "0" was assigned. As the next step, the sum of the environmental and social criteria respectively was calculated. The sum was divided by the maximum achievable points to create a standardized value for the bank's environmental and social performance. The sustainability score was calculated by finding the average of the environmental and the social score.

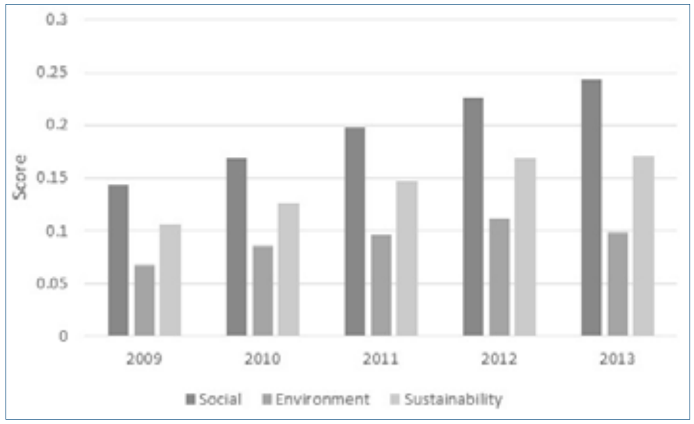
The development of the social, environmental and sustainability score is presented in Figure 1. A statistical test (multifactor ANOVA) indicated a significant difference for the environmental, social and sustainability score of the banks over time. Thus, it may be concluded that the sustainability performance of Chinese banks has improved during the time the green credit policy has been in place. While the analysis did not explore the causality between the green credit policy and the sustainability of Chinese banks, it can be assumed that the regulation had a certain impact on banks' sustainability policies and practices.

This assumption was tested using a regression analysis that applies a time lag on the dependent variable in order to test for Granger causality. The results suggest a bidirectional causality (Jaccard and Turrisi 2003, Fischer and Sawczyn 2013) between sustainability performance and financial indicators. Although the regression coefficient for corporate sustainability in year x (independent variable) and both total assets and financial returns in year $x + 1$ (dependent variables) is slightly higher than for financial indicators in year x and corporate sustainability in year $x + 1$, both regressions are significant and their r^2 is similar, indicating a bidirectional causality.

In contrast to a study by Fischer and Sawczyn (2013) suggesting that corporate financial performance influences the corporate sustainability performance of German firms, we found a bidirectional causality between corporate sustainability and financial indicators that is in line with Waddock and Graves (1997). It seems that both corporate sustainability and financial performance interact and are influenced by the same driver. This interpretation is in line with institutional theory (DiMaggio and Powell 1983). The Chinese green credit policy appears to influence both the corporate sustainability and financial success of Chinese banks, as it was intended to do.

It must be recognized, however, that despite the green credit guidelines, Chinese banks did only score up to 0.25, suggesting that only a quarter of the sustainable banking criteria have been reported on.

Figure 1: Development of the Social, Environmental and Sustainability Score over Time



Source: Authors.

The main argument for integrating sustainability into financial sector regulations is that addressing sustainability issues increases the financial stability and financial success of the banking sector. Therefore, the data for the Chinese banks in the sample has been analyzed with regard to the correlation between financial indicators and the sustainability performance of banks. The result is presented in Table 2.

Table 2: Correlation between Sustainability Score, Total Assets, Net Profits, Return on Assets (ROA), Return on Equity (ROE) and Non-performing Loan Ratio

Financial Indicator	*r*
Total assets	0.6231**
Net profits	0.5635**
ROA	0.1643*
ROE	0.1449*
Non-performing loan ratio	-0.0392

Source: Authors.
Notes: ** indicates p < .0001, * indicates p < .05

The results presented in Table 1 suggest that the financial indicators of the banks in the sample, with the exception of the non-performing loan ratio, are significantly and positively correlated with the sustainability performance. It seems that bigger banks, in terms of total assets, demonstrate a better sustainability performance than smaller banks and that banks with higher net profits, ROA and ROE perform better with regard to sustainability. Interestingly, there is no significant correlation between sustainability performance and the non-performing loan ratio.

THE IMPACT OF THE NSBPs

As mentioned above, the NSBPs, introduced in 2012, consist of nine principles. In order to understand whether the introduction of the NSBPs had an impact on the sustainability performance of Nigerian banks, annual reports, environmental reports, corporate social responsibility reports and sustainability reports of the 10 biggest Nigerian banks were analyzed with regards to total assets. In total, there are 34 banks in Nigeria. The analyzed banks are presented in Table 3. The banks in the sample had US$97 billion in total assets in 2014. This represents 79.4 percent of the total assets of Nigerian banks in 2014.

Table 3: Nigerian Banks in the Sample

Bank	2014 Total Assets (US$ million)
First Bank of Nigeria	24,740.33
Zenith Bank	22,486.61
United Bank for Africa	16,542.35
Guarantee Trust Bank	14,107.04
Access Bank	12,600.96
Diamond Bank	11,575.59
Ecobank	10,616.30
Skye Bank	8,509.65
Fidelity Bank	7,107.93
First City Monument Bank	7,002.18
Total	135,288.95

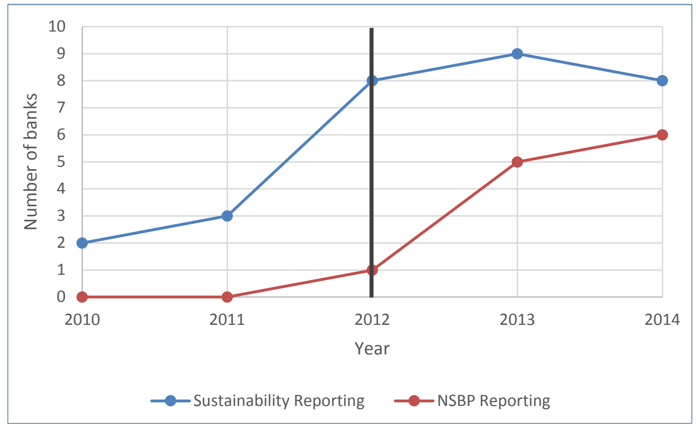
Source: Authors; data taken from banks' websites.

Reports between 2010 and 2014 were analyzed for whether the banks address the nine NSBP criteria. The value "1" was assigned if a criterion was addressed; otherwise, the value "0" was given. For each year, the total sum for the banks in the sample addressing all nine criteria was calculated and divided by nine in order to calculate the fulfillment of the NSBP. Furthermore, we checked whether a bank published a sustainability report, corporate social responsibility (CSR) report or a similar non-financial report. The general results of the analysis are presented in Figure 2.

The results suggest a significant change in sustainability reporting after the introduction of the NSBPs in 2013. While both types of reporting were rather an exception before 2012, the number of banks reporting in accordance with the NSBPs increased to five and six in 2013 and 2014, respectively. Interestingly, the number of banks issuing sustainability reports had already increased in 2012 and seems to have reached a plateau since then.

A more detailed analysis focused on how the different NSBP criteria have been addressed in Nigerian banks' reports since 2010. The results of the analysis are presented

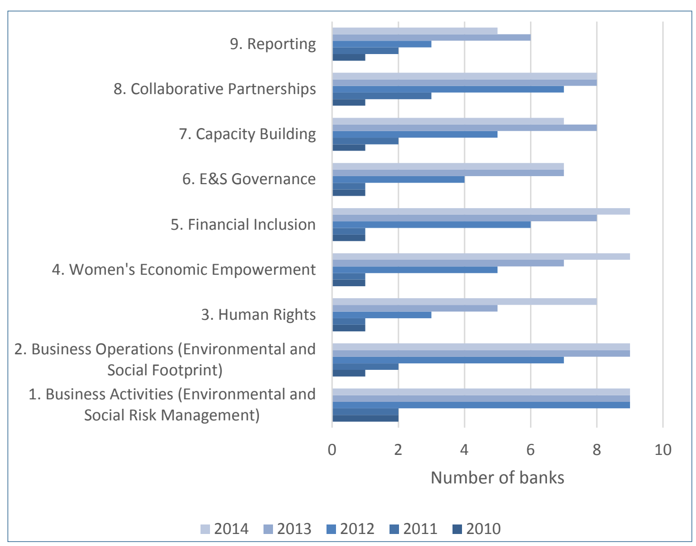
Figure 2: Sustainability Reporting and NSBP Reporting of the 10 Biggest Nigerian Banks



Source: Authors.

in Figure 3. Again, there was an increase in addressing the respective NSBP criteria in annual reports and sustainability reports. The criteria that were most frequently addressed are financial inclusion, women's economic empowerment, environmental and social footprint of business operations, and environmental and social risk management in business activities. Generally, the data suggests that the NSBPs have an impact on Nigerian banks and that the criteria listed in the guidelines are addressed appropriately. However, the analysis also demonstrates that not all banks fulfill the NSBPs' criteria. Hence, it will be interesting how the compliance with the guidelines will be enforced and what will be done to support the banks in adopting the criteria.

Figure 3: Reporting about NSBP Criteria between 2010 and 2014



Source: Authors.

THE IMPACT OF THE BANGLADESH ERM GUIDELINES

Unlike the Chinese and Nigerian guidelines, the Bangladeshi guidelines include a green refinance scheme that is provided for financing projects addressing environmental issues and climate change. The total amount of the scheme has been US$25 million. These funds enable Bangladeshi banks to lend to green projects and enterprises. Islam and Das (2013) found that US$10 million was been used to finance projects such as solar systems, biogas plants and effluent treatment plants in 2012. However, reporting of environmental, social and sustainability performance has been underdeveloped in the Bangladeshi financial sector (Khan, Halabi and Martin 2009). For instance, only about half of the indicators listed by the Global Reporting Initiative framework — a global standard for sustainability reporting — have been addressed by Bangladeshi banks (Khan et al. 2011). Because of this lack of transparency, many sustainability projects of Bangladeshi banks are not disclosed and, consequently, are not considered by stakeholders and regulators (Kamruzzaman 2012).

In addition to a lack of transparency in reporting, there is no focus on the consequences of corporate environmental and social performance and they are not well understood by stakeholders. While banks mainly follow an outside-in approach (Porter and Kramer 2006) that centres on the business case of sustainability, an inside-out approach that addresses societal and environmental issues is needed to ensure sustainable development in Bangladesh (Sarker 2012). Furthermore, capacity building among stakeholders and banks about the connection between banking on the one hand, and environmental and societal issues on the other hand, is needed.

Based on these findings, Sarwar (2012) concludes that first steps, such as financing green activities that focus on renewable energy, and the reduction of contamination, have already been taken. What is missing is a general awareness about the impact of banking on the environment and society, as well as about the connection between environmental and social performance on the one side and financial performance on the other side. Sarwar (2012) asks for the development of laws and regulations and an improvement of enforcement mechanisms in addition to creating a higher societal awareness about environmental and sustainable finance in Bangladesh.

In addition to the literature analysis, the 10 biggest Bangladeshi banks were analyzed with regard to their fulfillment of the ERM guidelines. As mentioned above, the guidelines were introduced in three phases:

- Phase 1: Policy development
- Phase 2: Implementation
- Phase 3: Product development and standardized reporting

In addition to the three phases of development, the guidelines address CSR issues and financial inclusion.

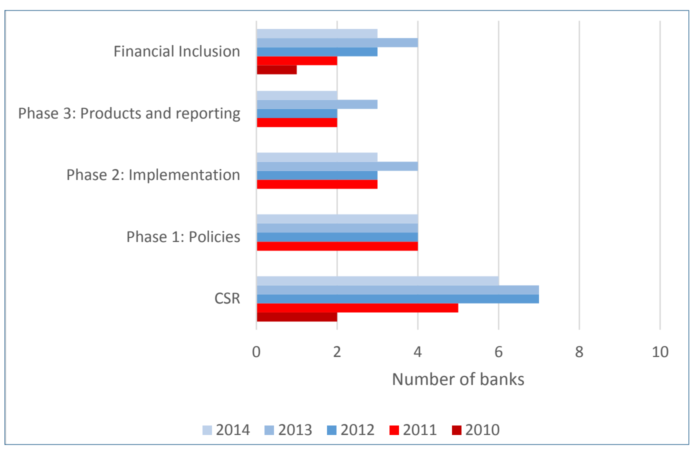
The sample consisted of the 10 biggest banks in Bangladesh with respect to their total assets:

- Sonali Bank Limited
- Islami Bank Bangladesh Ltd
- Janata Bank Limited
- Agrani Bank Limited
- Rupali Bank Limited
- United Commercial Bank Limited
- National Bank Limited
- Prime Bank Ltd
- AB Bank Limited
- Pubali Bank Limited

The value "1" was assigned if a criterion of the ERM guidelines had been addressed; otherwise, the value "0" was assigned. In 2010, none of the banks in the sample addressed all five ERM criteria. In 2011 and 2012, only one bank addressed all the criteria while three banks addressed all criteria in 2013 and two in 2014.

The results with regard to the analysis of the fulfillment of the respective criteria per year are presented in Figure 4.

Figure 4: Reporting about ERM Criteria between 2010 and 2014



Source: Authors.
Note: Reporting before the implementation of the ERM guideline in red, reporting after the implementation of the ERM guideline in blue.

The data presented in Figure 4 suggests that general CSR criteria were addressed by seven of the 10 banks in 2012 and 2013. Overall, there is a similar development as in the Nigerian case. The increase in reporting, however, is not as strong as in Nigeria. In particular, reporting about products and policies did not increase over time, although Phase 1 of the ERM guidelines had been introduced by the end of 2011.

Generally, it can be stated that the ERM guidelines had an effect on Bangladeshi banks with regard to their sustainability performance. The effect, however, does not seem as strong as in the Nigerian case. This result is in line with other studies on the sustainability performance of Bangladeshi banks — for instance, Khan, Halabi and Martin (2009) — stating that sustainability performance and sustainability reporting is still underdeveloped in the Bangladesh's financial sector.

CONCLUSIONS

This paper analyzed the impact of three mandatory financial guidelines: the Chinese green credit guidelines, the NSBPs and the Bangladesh ERM Guidelines. All three guidelines address the connection between the banking sector and sustainable development, and claim that sustainability performance and financial performance are positively correlated. All three guidelines are relatively new; the Nigerian and the Bangladeshi guidelines were introduced in 2012, while the Chinese guidelines have existed since 2006. However, implementation guidelines of the latter were issued in 2012.

Generally, it can be stated that the mandatory guidelines have an impact on the sustainability performance of banks. In all three cases, sustainability performance increased after the introduction of the guidelines. Finance is channelled into green projects and sustainability strategies have been developed in the financial sector of China, Nigeria and Bangladesh. However, in order to analyze causality, a comparative study between different countries with and without mandatory guidelines is planned.

Although the guidelines seem to have an effect on the sustainability performance of the financial sector, there are differences with regard to the adoption of the criteria in the three countries. In Nigeria, the ratio of adoption has been about 80 to 90 percent since the introduction of the guidelines, while the rate has been about 30 percent in China, and between 40 and 70 percent in Bangladesh. A reason for these differences could be that the Nigerian guideline was developed by the banking sector itself and later transferred to the central bank in order to guarantee compliance and enforcement. In contrast to Nigeria, the Chinese and the Bangladeshi guidelines were developed by the financial regulator. The higher adoption rate in Nigeria suggests that the inclusion of the banking sector into the development of financial sustainability regulations increases the success of the regulation.

The fact that some of the banks in the sample did not follow the regulations points to the problems of implementation and enforcement of the regulations. A number of authors have reported on issues with the implementation of the Chinese regulations (Jiguang and Zhiqun 2011; Zhang, Yang and Bi 2011, Hill 2014). Consequently, the Chinese central bank has issued guidelines enabling banks to implement the regulations. Furthermore, key performance indicators have been developed in order to supervise the compliance of Chinese banks. Both activities — supporting the implementation of financial sustainability guidelines and supervising the compliance with the guidelines — are crucial for their success. Traditionally, banks do not have the capacity to address environmental and societal criteria in their risk management and business strategies and practices. Consequently, they need support in the form of guidelines and training programs. It seems that the Chinese regulator has addressed this problem. Since the Bangladeshi and the Nigerian guidelines are relatively new, it will be interesting to see how their implementation will be addressed and compliance enforced.

Furthermore, it can be concluded that bigger banks are better able to implement sustainability guidelines and to perform well with regard to sustainability. The Chinese case suggests a strong correlation between total assets and sustainability performance. Bigger banks seem to have the capacity to implement sustainability policies and practices, and to report about the results of the implementation. Therefore, financial regulators have to make sure that smaller banks will also be enabled to implement sustainability guidelines and regulations.

The analysis of the Chinese green credit guidelines also suggests a positive correlation between financial sector sustainability performance and financial performance. This result supports the hypothesis that financial sector sustainability regulations have a positive impact on both the financial sector's financial performance and stability and sustainability performance, although more research is needed to analyze the connection in more detail. In particular, comparative research with countries without financial sector sustainability regulations may create more in-depth understanding of the impact of the regulations.

Finally, the results of the Bangladesh case suggest that green lending and investing have increased, but more in-depth research is needed to explore the impact of financial sector sustainability regulations on sustainable development. It is still unclear whether the guidelines increase financial flows to green and socially responsible enterprises and projects.

ANNEX I: THE GREEN CREDIT GUIDELINES

Chapter 1: General Provisions

Article 1 For the purpose of encouraging banking institutions to develop green credit, these Guidelines are formulated pursuant to the Law of the People's Republic of China on Banking Regulation and Supervision and the Law of the People's Republic of China on Commercial Banks.

Article 2 Banking Institutions mentioned herein include policy banks, commercial banks, rural cooperative banks and rural credit cooperatives lawfully incorporated within the territory of the People's Republic of China.

Article 3 Banking institutions shall promote green credit from a strategic height, increase the support to green, low-carbon and recycling economy, fend off environmental and social risks, and improve their own environmental and social performance, thus optimizing their credit structure, improving the quality of services, and facilitating the transformation of development mode.

Article 4 Banking institutions shall effectively identify, measure, monitor and control environmental and social risks associated with their credit activities, establish environmental and social risk management system, and improve relevant credit policies and process management.

The environmental and social risks mentioned herein refer to the hazards and risks on the environment and society that may be brought about by the construction, production and operating activities of banking institutions' clients and key affiliated parties thereof, including environmental and social issues related to energy consumption, pollution, land, health, safety, resettlement of people, ecological protection, climate change, etc.

Article 5 The CBRC is responsible for, in accordance with applicable laws, regulating and supervising banking institutions' green credit business and their environmental and social risk management.

Chapter 2: Organization and Management

Article 6 The board of directors or supervisory board of a banking institution shall build and promote green credit concepts concerning energy saving, environmental protection and sustainable development, be committed to giving play to the functions of facilitating holistic, coordinated and sustainable economic and social development, and establish a sustainable development model that will benefit the society at the same time.

Article 7 The board of directors or supervisory board of a banking institution is responsible for developing green credit development strategy, approving the green credit objectives developed by and the green credit report submitted by senior management, and monitoring and assessing the implementation of green credit development strategy.

Article 8 The senior management of a banking institution shall, pursuant to the resolutions of the board of directors or supervisory board, develop the green credit objectives, have in place relevant mechanisms and processes, define clearly the roles and responsibilities, conduct internal checks and appraisal, annually provide report to the board of directors or supervisory board on the development of green credit, and timely submit relevant reports to competent supervisory authorities.

Article 9 The senior management of a banking institution shall assign a senior officer and a department and configure them with necessary resources to organize and manage green credit activities. Where necessary, a cross-departmental green credit committee can be set up to coordinate relevant activities.

Chapter 3: Policy, System and Capacity Building

Article 10 Banking institutions shall, as per national environmental protection laws and regulations, industrial policies, sector entry policies, and other applicable regulations, establish and constantly improve the policies, systems and processes for environmental and social risk management and identify the directions and priority areas for green credit support. As for industries falling within the national "restricted" category and industries associated with major environmental and social risks, they shall customize credit granting guidelines, adopt differentiated and dynamic credit granting policies, and implement the risk exposure management system.

Article 11 Banking institutions shall develop client environmental and social risk assessment criteria, dynamically assess and classify client environmental and social risks, and consider the results as important basis for credit rating, access, management and exit. They shall adopt differentiated risks management measures concerning loan investigation, review and inspection, loan pricing, and economic capital allocation.

Banking institutions shall prepare a list of clients currently faced with major environmental and social risks, and require these clients to take risk mitigation actions, including developing and having in place major risk action plans, establishing sufficient, effective stakeholder communication mechanisms, and finding a third party to share such risks.

Article 12 Banking institutions shall establish working mechanisms conducive to green credit innovation to boost innovation of green credit processes, products and services while effectively curbing risks and ensuring commercial viability.

Article 13 Banking institutions shall give priority to their own environmental and social performance, set up appropriate systems, step up the publicity and education on green credit concepts, standardize their operational behaviors, promote green office, and improve the level of intensive management.

Article 14 Banking institutions shall strengthen green credit capacity building, establish and improve green credit labeling and statistics system, improve relevant credit management systems, enhance green credit training, develop and employ related professionals. Where necessary, they can hire an eligible, independent third party to assess environmental and social risks or acquire related professional services by means of outsourcing.

Chapter 4: Process Management

Article 15 Banking institutions shall strengthen due diligence in credit granting. The scope of due diligence on environmental and social risks shall be defined according to the characteristics of the sector and region in which the client and its project is located, so as to ensure the due diligence is complete, thorough and detailed. Where necessary, the banking institutions can seek for support from an eligible, independent third party and competent authorities.

Article 16 Banking institutions shall examine the compliance of clients to whom credit will be granted. As for environmental and social performance, compliance checklist and compliance risk checklist shall be developed according to the characteristics of different sectors, so as to ensure compliance, effectiveness and completeness of the documents submitted by the clients, and make sure they have paid enough attention to related risk points, performed effective dynamic control, and satisfied the requirements on substantial compliance.

Article 17 Banking institutions shall strengthen credit approval management, and define reasonable level of credit granting authority and approval process according to the nature and severity of environmental and social risks faced by the clients. Credits may not be granted to clients whose environmental and social performance fails to meet compliance requirements.

Article 18 Banking institutions shall, by improving contract clauses, urge their clients to strengthen environmental and social risk management. As for clients involving major environmental and social risks, the contract shall provide for clauses that require them to submit environmental and social risk report, state and avow that they will strengthen environmental and social risk management, and promise that they are willing to be supervised by the lender; the contract shall also provide for clauses concerning the remedies banking institutions can resort to in the event of default on environmental and social risks made by the clients.

Article 19 Banking institutions shall enhance credit funds disbursement management and regard how well clients have managed environmental and social risks as important basis for credit funds disbursement. As for projects to which credit is granted, all stages, including design, preparation, construction, completion, operation and shutdown shall be subjected to environmental and social risk assessment. Where major risks or hazards are identified, credit funds appropriation can be suspended or even terminated.

Article 20 Banking institutions shall strengthen post-loan management. As for clients involving potential major environmental and social risks, relevant and pertinent post-loan management actions shall be developed and implemented. They shall watch closely the impact of national policies on the clients' operation, step up dynamic analysis, and make timely adjustment to asset risk classification, reserve provisioning and loss write-off. They shall establish and improve internal reporting system and accountability system concerning major environmental and social risks faced by the clients. Where major environmental or social risk event occurs to the client, the banking institution concerned shall timely take relevant risk responses and report to competent supervisory authorities on potential impact of said event on itself.

Article 21 Banking institutions shall strengthen the environmental and social risk management for overseas projects to which credit will be granted and make sure project sponsors abide by applicable laws and regulations on environmental protection, land, health, safety, etc. of the country or jurisdiction where the project is located. The banking institutions shall make promise in public that appropriate international practices or international norms will be followed as far as such overseas projects are concerned, so as to ensure alignment with good international practices.

Chapter 5: Internal Controls and Information Disclosure

Article 22 Banking institutions shall incorporate green credit implementation into the scope of internal compliance examination, and regularly organize and carry out internal auditing on green credit. Where major deficiencies are identified, investigation shall be conducted to determine whom to be held accountable as per applicable regulations.

Article 23 Banking institutions shall establish effective green credit appraisal and evaluation system and reward and penalty system, and have in place incentive and disciplinary measures, so as to ensure sustained and effective offering of green credit.

Article 24 Banking institutions shall make public their green credit strategies and policies, and fully disclose developments of their green credit business. As for credit involving major environmental and social risks, the banking institutions shall disclose relevant information according to laws and regulations, and be subjected to the oversight by the market and stakeholders. Where necessary, an eligible, independent third party can be hired to assess or audit the activities of banking institutions in performing their environmental and social responsibilities.

Chapter 6: Monitoring and Examination

Article 25 Banking supervisory authorities at all levels shall strengthen the coordination with competent authorities, establish and improve information sharing mechanism, improve information services, and remind banking institutions of related environmental and social risks.

Article 26 Banking supervisory authorities at all levels shall strengthen off-site surveillance, improve off-site supervisory indicator system, enhance the monitoring and analysis of environmental and social risks faced by banking institutions, timely guide them to strengthen risk management and adjust credit orientation.

Banking institutions shall, pursuant to the provisions hereof, perform overall green credit evaluation at least once every two year, and submit the self-evaluation report to competent banking supervisory authorities.

Article 27 When organizing and conducting on-site examination, banking supervisory authorities shall take into full account the environmental and social risks faced by banking institutions, and make clear the scope and requirements of examination. As for regions or banking institutions involving prominent environmental and social risks, ad hoc examination shall be conducted and urge said institutions to improve in light of examination results.

Article 28 Banking supervisory authorities shall provide more guidance to banking institutions on green credit self-evaluation, and, in conjunction with the results of off-site surveillance and on-site examination, holistically assess the green credit performance of banking institutions, and treat the assessment results, as per applicable laws and regulations, as important basis for supervisory rating, institution licensing, business licensing, and senior officer performance evaluation.

Chapter 7: Supplementary Provisions

Article 29 These Guidelines become effective as of the date of promulgation. Village banks, lending firms, rural mutual cooperatives and non-banking financial institutions shall enforce actions in reference to these Guidelines.

Article 30 These Guidelines are subject to interpretations by the CBRC.

Source: CBRC (2012).

ANNEX II: KEY PERFORMANCE INDICATORS OF GREEN CREDIT IMPLEMENTATION

1. Borrower's statement and warranties of environmental and social risks. For example:
1.1 Announce and guarantee that borrower's internal documents on environmental and social risk management meet compliance requirements and are well implemented.
1.2 Announce and guarantee that borrower has not been involved in any significant lawsuits concerning environmental and social risks.
2. Restricted clause requiring borrower to be subject to lenders' supervision and strengthen environmental and social risk management. For example:
2.1 Make commitment that behaviours and performance related to the environmental and social risk meet compliance requirements.
2.2 Make commitment that it establishes internal management system of environmental and social risk and will define the responsibilities, duties and penalty of borrowers' related to people.
2.3 Make commitment to establish and improve emergency mechanism and measures in response to the environmental and social risk accidents.
2.4 Make commitment to establish dedicated department or appoint dedicated professionals to be responsible for environmental and social risk issues.
2.5 Make commitment to cooperate with the lenders or a qualified third party to conduct environment and social risk assessment and examination.
2.6 Make commitment to offer appropriate feedback or take other necessary action to the public or other stakeholders who are critically suspicious over borrowers' environmental and social risk management.
2.7 Make commitment to urge borrowers to strengthen management to their relevant stakeholders and fend off borrowers' risks generated by stakeholders' environmental and social performance.
2.8 Make commitment that the borrower implements measures to manage other environmental and social risks lender considers necessary.
3. Identify borrower's reporting requirements of the environmental and social risks. For example, borrower shall report to lender relevant information timely and sufficiently.
3.1 All kinds of permission, review and approval related to the environmental and social risk management during the process of start-up, construction and shutdown.
3.2 Borrower's assessment and examination of environmental and social risks conducted by related regulators or other authorized agencies.
3.3 The corresponding construction and operation of environmental infrastructure.
3.4 Pollutant emission and meeting standard.
3.5 The safety and health of the employees.
3.6 The communities' significant claim and protest against the lender.
3.7 Significant environmental and social loss claim requirements.
3.8 Other significant issues relevant to environmental and social risks.

4. Define the violation accidents of managing environmental and social risks, for example: 4.1 The borrowers fail to implement relevant statements, warranty, commitment on environmental and social risk management. 4.2 The borrowers were awarded penalty by relevant government agencies for poor management of environmental and social risks. 4.3 The borrowers were criticized by the public or media for poor management of environmental and social risks. 4.4 Other accidents violating environmental and social risk management clause agreed upon by the institution and the borrowers, including crossing agreement violation.
5. Stipulate institution's measures taken against borrowers who violate the contract clause(s), for example: 5.1 Revoke commitment already made to grant credit. 5.2 Suspend loan disbursement until the borrowers take remedy measures satisfied institution's requirements. 5.3 Recall loans disbursed before pre-determined time. 5.4 Exercise the right on relevant collaterals when the loans can not be paid back. 5.5 Other penalty measures agreed upon by the institution and the borrowers.

Source: CBRC (2014).

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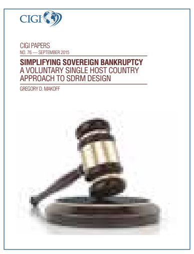
One of the most important and topical discussions within the global multilateral arena is the challenge of meeting the world's climate finance needs in order to reduce carbon emissions to sustainable levels and support adaptation strategies. The mobilization of finance is key in supporting the transition away from traditional high-carbon or business-as-usual economic pathways toward low-carbon, climate-resilient economic systems. A conference, Global Sustainability, Climate Change and Finance Policy, organized by the Centre for International Governance Innovation and the South African Institute for International Affairs and held in Johannesburg from July 1 to July 3, considered aspects of the debate.



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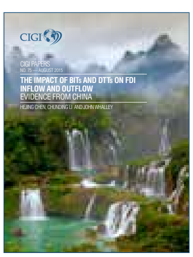

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This paper examines the impact of both China's bilateral investment treaties (BITs) and double tax treaties simultaneously on China's bilateral foreign direct investment (FDI) inflows and outflows. Using China's bilateral FDI flow data from 1985 to 2010, the authors find that the cumulative number of BITs China signed has a positive (although not always statistically significant), but minor, impact on both China's FDI inflows and outflows.

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Banking union involves the transfer of authority over banking policy from the national to the European level. This paper describes the rationale for banking union, four key pieces of legislation that constitute its legal foundation and two mechanism that form its key pillars. The ultimate test of whether banking union has worked, the paper concludes, is whether it will succeed in reversing the fragmentation in Europe's financial system and breaking the vicious circle between banks and sovereigns.

The Environmental Goods Agreement: A Piece of the Puzzle

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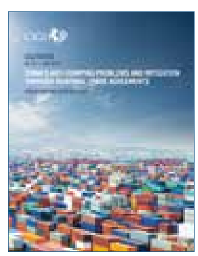
Can a trade agreement help achieve environmental goals? The answer to this question has traditionally been mixed, even skeptical. The Environmental Goods Agreement has the potential to produce a more positive outcome. This paper explores this potential, reviewing key aspects of the trade-environment relationship. Prevailing perceptions tend not to count trade agreements as key contributors to the achievement of environmental goals. The paper then looks at the potential contribution of tariff reduction to environmental objectives, and then examines critical challenges to the completion of EGA negotiations. It concludes that the EGA is an important piece of a complex environmental governance puzzle.



China's Anti-dumping Problems and Mitigation through Regional Trade Agreements

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Yanlin Sun and John Whalley

China has become the world's largest economy affected by anti-dumping (AD) actions, and while the most effective way to improve AD disciplines is at the regional level, existing research does not deal with how a country can modify AD regimes through its regional trade agreements (RTAs). This paper seeks to fill in this gap by examining opportunities for China's RTAs. It begins by highlighting the severity of China's AD problems, notes the high concentration of AD actions taken by the top four and top eight AD initiators against China, and argues that AD issues should be given more weight in China's RTA strategies.

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The Centre for International Governance Innovation is an independent, non-partisan think tank on international governance. Led by experienced practitioners and distinguished academics, CIGI supports research, forms networks, advances policy debate and generates ideas for multilateral governance improvements. Conducting an active agenda of research, events and publications, CIGI's interdisciplinary work includes collaboration with policy, business and academic communities around the world.

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