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Prospects and Hurdles in Transition towards ESG linked Sustainable Lending to achieve Resilience against Environment Risk

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Abstract

The drive to sustainability is transforming the way we live. In the wake of deteriorating environment sustainable and inclusive economy is the need of the hour and has become essential to implement in any field possible. In the recent years sustainable finance has come to dominate many investments decision and has an impact on the way funds are mobilised. One aspect of sustainable finance is sustainable lending which covers a range of activities that play a key role in credit decisions. Sustainable lending enhances and encourages environmentally sustainable practices and hence contributing to Environmental-Social -Governance (ESG) framework in lending. Global leaders are focusing on lending in sustainable companies and projects to create long term value for community. This paper is an endeavour to study the opportunities that sustainable lending offers to banking sector. The paper highlights the global best practices in sustainable lending adopted by frontrunners and analyse the business model and technologies associated with this. In descriptive study the paper brings out the challenges faced by firms in adopting models linking sustainability in their commercial lending activities. Moreover, the aspect that is not only financing through ESG lens but which is more than financial returns are bought into light.

Keywords: *Sustainable Lending, ESG Framework, Sustainable development , JEF classification: G10, Q56*

1. Introduction

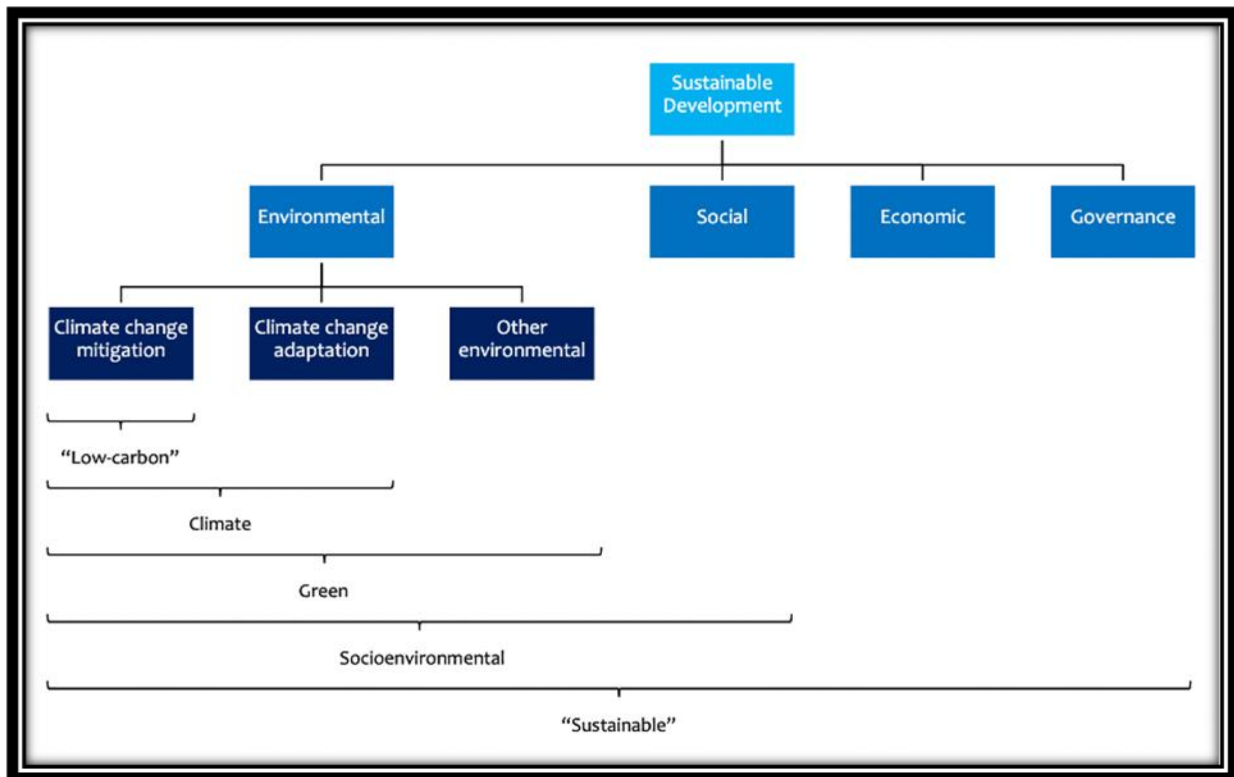
The industrial revolution has transformed the economies from agriculture and handicrafts into economies based on machines and mass production. The competitive economic system is stressing the mother earth through pollution and depletion of natural resources. Climate change and ecological imbalance is now the most pressing survival constraint. World over government, companies and societies have acknowledge the need for a paradigm shift to low carbon emission and circular economy to overcome the environment threats. In order to achieve the sustainable and inclusive economy objectives, stakeholders are developing the agenda for sustainable development.

Nations around the globe adopted the UN 2030 Agenda for sustainable Development and committed to undertake ambitious measures to limit increases in environment degradation. In order to achieve this agenda regulators and world leaders have formed strategies &policies to be taken gradually over a defined timeframe for taking action on economic activities with a significant environmental, social and governance (ESG) impact.

Financial sector of the nation has to play a key role for this transition. Finance plays this role at different levels. The prime role of financial system is to mobilize fund for most productive use. If lending criteria of financial institutions are derived from sustainable objectives and allocation of fund is done to sustainable company and projects, then the goal of achieving low carbon circular economy can be achieved. If the financial sector chooses to finance sustainable companies and projects, they can accelerate the transition. The transition toward sustainable lending is transforming the way the entire credit value system operates. In order to achieve the agenda for sustainable environment the traditionally used credit risk model that focuses on narrow set of performance parameters need to be replaced with sustainability related parameters. Such a transformation in lending would need support from both the government and the whole lending ecosystem. Similarly, investment funds set their investment strategy, regarding which sectors or assets are eligible for investment and which not. In the

ideal picture of corporate financing manager's key role is to maximise value of the business and thus protecting the interests of all stakeholders including environment and society. No negative social impact is the component to avoid agency cost.

Sectors that are counted as leading carbon emitter need huge investment to cut their carbon footprints. This will generate a requirement for green finance along with sustainable finance. UNEP in 2016 recognised and published the definition and concept of sustainability as depicted in the picture below.



Source: Definitions and Concepts: Background Note, UNEP, 2016.

ESG was first introduced in the year 2004. ESG is best categorized as a model that helps stakeholders understand how an organization is managing risks and opportunities related to environmental, social, and governance criteria along with the economic goals.

Environmental Goals

Environmental goals seek to combat climate changes and its impacts and ensure availability of natural resources for future.

Social Goals

Social criteria, addresses the linkeges between the business and the diverse society with in which the business operates. It encompasses labor relations and diversity and inclusion.

Governance Goals

Governance refers to how a company is led and managed. The goal is to ensure the alignment of leaders's incentives to stakeholder expectations, reducing agency cost and employing internal controls to promote transparency and accountability.

"Sustainable finance" is standardised as the wider term encompassing social, environmental and economic aspects. Green finance means floating the financial instruments to raise the funds for environment sustainability. The proceed of such issues are used for environmentally sustainable projects and initiatives, environmental products and policies under the goal of promoting a green economic transformation. While the front-line economies have initiated the availability of green finance, such capital in India is scanty.

Sustainable lending is a subsystem of sustainable finance. The word refers to lending economic activities which is environmentally sustainable. It is concerned with how financial activities interacts with economic, social and environmental issues. Sustainable lending can be defined as the decision by banks to set a lending parameter to lend only to those corporate borrowers who take into account the environmental and social impacts of their operations. The focus on environmental and social issues in

the finance market is becoming mainstream. Global investment requirements for addressing climate change are estimated in the trillions of US dollars, with investments in infrastructure alone requiring about $6 trillion per year up to 2030 (OECD 2017).

The gap between the economic output of the world's richest and poorest countries is 25 percent larger today than it would have been without global warming, according to new research from Stanford University (Josie Garthwaite, 2019). An investigation about anthropogenic climate change effect on GDP of India revealed that GDP is 31 per cent smaller than it would have been in the absence of global warming. Indian economy is aspiring to touch $5 trillion mark by 2024 (Sitharaman, 2019) but this is greatly restrained due to extreme weather conditions (Jain, 2020, p. 2). Thus, adopting the strategies for Sustainable banking system backed by regulatory frameworks and standards in the line initiated by global economies is sought. The philosophy of sustainable finance has grown through different stages over the last few decades. The focus is gradually transiting towards long term value creation.

Literature Review

There are a growing number of researches from developing economies along with frontrunner economies that are adopting a process that enables the establishment of a sustainable banking system backed by regulatory frameworks and standards. Kate Raworth (2017) has summarised the social foundations and planetary boundaries in the Doughnut, which shows how the safe and just space for humanity lies between the social foundation of human well-being and the ecological ceiling of planetary pressure. Ortiz-de-Mandojana and Bansal (2016) investigate the short and long-term benefits of organisational resilience through sustainable business practices. Paper concluded that in the long run, resilience helps companies to avoid crises and bounce back from shocks and companies have a higher survival rate of sustainable organisations. They show that companies that adopt responsible social and environmental practices, relative to a carefully matched control group, have lower financial volatility, higher sales growth and higher chances of survival over a 15-year period. Yip & Bocken (2018) contributed through their research paper, a new set of archetypes articulated for the banking industry that facilitates further innovation and systematic analysis of sustainable banking practices. Semi-structured interviews were used to develop and validate a set of sustainable business model archetypes for the banking industry. Felipe Calderona and Li Choy Chong(2013) investigated how banks, engaged in sustainable lending, monitor the performance of small and medium entrepreneur (SME) borrowers to be environmentally and socially responsible throughout the life of the loan. In an exploratory research, author concluded that the use of storytelling as the emerging tool being utilized to holds together the triumvirate banks, borrowers, and third party stakeholders in the common pursuit of sustainability The interview results also suggest the potential of banks to contribute in the promotion of sustainable practices among SME borrowers. Schoenmaker, Dirk. (2018) reviewed the environmental and social challenges that society is facing and highlighted how finance contribute to sustainable development. Financial institutions have started to avoid unsustainable companies from a risk perspective, which author labelled as Sustainable Finance 1.0 and 2.0 in new framework. The paper concluded that frontrunners has started increasingly investing in sustainable companies and projects to create long-term value for the wider community (Sustainable Finance 3.0). in her paper Julia Freytaghe (2020) highlighted that the main challenges India faces in developing the green financial market are the missing transparency provoked by the fragmentary regulation as to disclosure and verification requirements. Mario La Torre et al (2019) using stock market performance data, showed that new sustainable business models do not necessarily lead to better economic performance. However, economic performance does not get any worse either. This makes sustainable business models a serious alternative for companies. Chinese experience suggests that green window guidance can be utilized as an instrument to help align the financial system with climate and other sustainability goals, but that such policies need to be fitted to the specific context in which they are used. Simon Dikau & Ulrich Volz (2021). They have bought out changing nature of window guidance and highlighted the importance of direct monetary policy instruments and controls

2. Materials And Methods

An inductive approach into the subjectivity of the subject matter was followed to conduct the qualitative study. The paper is an exploratory research based on secondary sources and literature review in the area like sustainable finance, green bonds, sustainable economy. The research included data collection about Indian corporates through secondary published sources. Secondary published sources were the reports on sustainable finance and lending practices and other relative information published on the banks and other internet sites.

Objective of the study: To study the opportunities that sustainable lending offer to banking sector To analyse the strategies and best practices adopted by global lending market To understand the business models and technologies associated with achieving sustainable lending To highlight the challenges and regulatory hurdles in adopting the strategies for green financing in India.

3. Results and Discussion

The implementation of a national plan to pursue the climate change actions India consented to in the Paris Agreement requires more than US-$ 2.5 trillion2 between 2015 and 2030 (Government of India, 2015), necessitate driving innovative practices across banking, insurance, investment products and financial instruments as well as the financial system's capacity and readiness to respond to the sustainable development goals (Robins & Choudhury, 2014, p. 3). Regulators in India aim to provide clear, overarching guidance on sustainability reporting and compliances to both issuers and investors by establishing a framework for Disclosure Requirements. Financial institutions are also increasingly being seen as responsible for the environmental and social impacts of their clients' businesses. Sustainable finance has the potential to move from finance as a goal (profit maximisation) to finance as a means facilitating sustainable development.

4.1 Opportunities that sustainable lending offer to lending sectors and businesses

Sustainability linked lending are a hot topic in the loan markets. They are a relatively recent innovation, but volumes have risen dramatically over the past few years to over US$99bn in 2018 (Bloomberg.com). The rise of green and sustainability linked lending indicates the inception of a fundamental shift in the wider economy. The expansion of sustainable finance and lending principles is therefore not surprising. Practice of sustainable lending could be considered as a strategy of financial institutions to promote environmental and social responsibility of borrowers. For business investor and consumer interest is driving changes in businesses' attitudes and behaviours and shaping lending policies. The main drivers for the integration of sustainable lending practices in the banking sector could be enumerated as below-

- Such practices tend to strengthen banks' capacity to focus and leverage on long-term benefits rather than focus on short to medium-term gains. (Stampe,2014) 1
- Lending institutions could identify such practices as an opportunity to improve quality of their operations in terms of risk management techniques.
- In comparison to conventional lending more ethical approaches can be evolved while transacting loans towards sustainability driven projects and initiatives.
- Environment-friendly Economic Value Added will attract investors and support from public and institutions will be able to capitalize on opportunities.
- In Sustainability Linked lending the borrower has to demonstrate how it is achieving sustainability performance targets that include various metrics which measure improvements. Such practices ensure the soundness of credit as well as warrant a robust risk management approach to environmental and social issues.

On the other hand, business while integrating environment, social and governance externalities can optimise the true or total value of the corporate. Total value is the sum of the financial value, the social value and the environmental value (Dirk Schoenmaker, 2018). The growing awareness about environment affecting people at large, business are becoming more conscious about their attitude towards sustainability and has recognised that their actions have material influence on investors and customers too. The public and market analysis of corporate approach regarding environmental risk has an impact on the brand value of the company. In totality, business organisation can except to rationalise their increased expenses owing to more sustainable operations with enhanced value creation through being more socially and environmentally responsible. The policy act as a resilient, withstanding and recovering from a wide range of both external and internally generated shocks.

4.2 The strategies and best practices need to be adopted by global lending market

Business leaders have recognized the importance of assessing and mitigating environmental risks in their business operations. In this respect business community is also focusing on sustainable strategy and fundraising like issuance of sustainable financial instruments—across green/social loans and bonds. Reflecting increased demand and focus, the lending market has responded first with the emergence of green (or purpose) loans and, subsequently, with sustainability-linked loans (and, in each case, equivalents in the bond market). Business models are grouped into four categories, which

correlate to the four types of strategies a company can choose to implement sustainable practices: (Renate van Drimmelen,2013).

Besides this sustainable value innovations are totally new strategies and business models, in which economic and environmental goals are combined. New start ups are in a better position to go for a completely new business model, not being limited by existing protocols, to think of new sustainable ways of making money.

Similarly, Banks and financial Institutions are required to have a complete understanding of the impact of environmental risks on their loan portfolio. Weber, Fenchel, and Scholz (2008) report that analysis of environmental risks was integrated only during due diligence at loan application but not in all aspects of the life of the loan specifically the monitoring phase. Recent research shows that there appears to be a positive change towards this direction and governments have mobilized its banks to implement control mechanisms for environment protection. Although many reviewers advocates a homogenous set of appraisal & monitoring mechanism adopted across various sectors, but in practical set-up it is likely that as sustainability linked lending matures, separate suites of sector-relevant procedures has become more commonly used. Parties to lending transaction defines measurable targets based on each business plan alongside usual financial and business information to direct the terms and conditions on sustainable lending. Following is some of the development and best practices adopted by lending market in designing and monitoring SL-

- A great deal of flexibility is principally required against ongoing monitoring and assessment. What may be appropriate for one business will not necessarily be appropriate for another. Focussing on maintaining an rising focus of sustainability, SL do not require adherence to a universal, prescribed list of criteria but rather look to measurement against individual, targeted sustainability performance outcomes.
- Unlike in green loans where loan proceeds are used to financing a single asset, businesses being able to utilise debt across a broader range of projects or a whole business is clearly beneficial.
- Sustainability reporting has is the key part of the whole process. Sustainability reporting should aim to provide information to a wider audience of stakeholders rather than just investor-led audience. Sustainability reporting should cover non-financial information on different levels such as the direct footprint of operations in accordance with internationally accepted standards or the indirect footprint like sustainability performance management system
- Digitalized credit life cycle management process, supported by modern IT infrastructure has also emphasized the importance of Circular Economy Strategy. Digitalized internal documents, internal governance, electronic management of proceeds improve risk profile, audit checks compliance and reporting, Commercial Lending Suite associated with digital transformation accelerate digital-first experience that is analytics driven, cloud capable and AI powered. To adopt a sustainable mindset and technology, utilizing a range of artificial intelligence, machine learning and robotic process automation tools to support end-to-end credit origination, assessment and servicing, thus covering the full lending journey is essential.
- The Expert member of the deal team need to execute the tasks relating to ESG, including questionnaires, document capture, analysis and assessment.

- Recognising the purposes which may or may not themselves be 'green' but do generate other environmental, social and/or governance benefits makes SL more relevant to businesses more generally and is reflective of broader considerations than purely climate change.
- The relevance of sustainability ratings resources will grow as investors increasingly demand third party ratings and as sustainability-focused financial products increasingly require independent opinions. All of the major ratings agencies should be committed to incorporating sustainability principles into credit ratings and analysis in a systemic and transparent way.
- Issuer sustainability eminence, the alignment of an issuance with the relevant themed principles and the sustainability quality of the projects financed to be assessed and monitored continuously over the tenure of lending and accordingly the loan structure should be changed.
- Financial regulatory authorities have to focus on appropriate regulatory policies and guidelines other than informal/qualitative moral suasion.

4.3 The challenges and regulatory hurdles in adopting the sustainable lending strategies in India

Despite being the progenitors of this process, advanced economies are still largely applying a voluntary non-compliant mode of sustainable banking management, the effectiveness of which is often doubted and requires further research (Macve and Chen 2010). Following challenges can be enumerated in adopting the strategies for green financing in India

1. Time taking and slow process of execution- As the participants are not familiar with the sustainable finance and targets & terms discussed by borrowers and lenders are not factored in alike, as a result transactions structured on sustainability takes longer to execute.
2. When it comes to measure the viability of sustainability measures from manager's and investors point of view, there is a conflict regarding the time horizon. The cost of sustainability driven actions are incurred now while the benefits will be pouring in future. So, there is a clash of planning time horizon as managers and investors in conventional finance tend to evaluate in short term.
3. Regulatory and incentive mechanism – adopting sustainability linked criteria as a part of lending evaluation process is a systematic programme where coordination from multiple stakeholders such as policy makers, rating agencies, financial institutions and corporate is required. The framework and guidelines for lending should be supported by incorporating sustainable elements into laws including fiscal, monetary, credit and industrial policies in order to create a proper incentive and restrictive mechanism.
4. Lack of standard design and mechanism of climate change make widespread adoption of green finance difficult. it is necessary to deepen the understanding amongst all market participants including government at all levels, financial intermediaries' investees & business managers.
5. A range of practical issues within financial institutions and system has ambiguity because of lack of clear definitions and metrics of terms and vocabulary, A well-defined toolkit for financial sector is incomplete.
6. There are also challenges around what projects get classified as green and thus get access to green finance,
7. Another challenge is the reflection of mitigation of carbon risk in the valuation of the business as impounded in the market price of share. Since there is little awareness of this risk among capital market investors, and thus it is not priced by the market.
8. Challenges of environmental audits: In the lack of well-defined measure to investigate the status and regulatory compliance of environmental risk and liabilities associated with the project, audit in this aspect will remain subjective and unstandardised only. Independent body or expert team should undertake to determine the current and potential risk embedded in facility, property or operations of the project.
9. An important component of sustainable lending is economic/financial viability. Attaching a financial value to social and environmental factors facilitates the optimisation in assessing

potential risk and value creation. In the absence of clear policies, measuring toolkit and formal process to measure the impact, the adoption of sustainability issues at all levels is necessary.

The amounts deployed for both adaptation of sustainability criteria and mitigation of environmental risk activities should be tracked and measured against the needs, priorities and compliance.

4. Conclusion

Over the coming decades a shift to sustainable economics will accommodate the growth of human prosperity alongside environmental protection.'India is in a race against time in meeting its climate goals and greening all finance has become an imperative. This requires concerted efforts, a cohesive approach and the collective vision of policymakers, regulators and actors in the financial system. The way forward is to accelerate the dialogue at the highest level and initiate a narrative around sustainable finance

There should be a unified approach around taxonomy, green guidelines, financial products, as well as defining the roles of private and public sector and bankers and asset managers. This will stimulate action to align the financial system with green finance and in turn support the sustainable growth of the country. The economy is shifting to become a progressively green one, and green lending will unequivocally be one of the key components to uplift such an economy. The whole financing arrangement that we have today needs to undergo a huge transformation.

Business leaders and credit market have begin the process of understanding these forces; assess the implications for their own organizations; and devise strategies for managing risks and harnessing opportunities.

References:

A.W.H. Yip, N.M.P. Bocken / Journal of Cleaner Production 174 (2018) 150e169

Drimmelen, R. (2013). New Business Models for Sustainable Development. In: Kauffman, J., Lee, KM. (eds) Handbook of Sustainable Engineering. Springer, Dordrecht. https://doi.org/10.1007/978-1-4020-8939-8_53

Felipe Calderon & Li Choy Chong (2014) Dilemma of sustainable lending, Journal of Sustainable Finance & Investment, 4:2, 192-209, DOI: 10.1080/20430795.2014.883302

Finger, Maya; Ilanit Gavious and Ronny Manos, (2018), Environmental risk management and financial performance in the banking industry: A cross-country comparison, Journal of International Financial Markets, Institutions and Money, 52, (C), 240-261

Garthwaite, J. (2019). Climate change has worsened global economic inequality, Stanford study shows. Stanford News. https://news.stanford.edu/2019/04/22/climate-changeworsened-global-economic-inequality/. [Retrieved 23 May 2020]

Jain, S. (2020). Financing India's Green Transition. ORF Issue Brief Issue No. 338, January 2020, Observer Research Foundation.

La Torre, Mario, Annarita Trotta, Helen Chiappini, and Alessandro Rizzello. 2019. "Business Models for Sustainable Finance: The Case Study of Social Impact Bonds" Sustainability 11, no. 7: 1887.

OECD (Organisation for Economic Co-operation and Development). 2017. Investing in Climate, Investing in Growth. Paris: OECD Publishing.

Ortiz-de-Mandojana, N. and P. Bansal (2016), 'The long-term benefits of organizational resilience through sustainable business practices', Strategic Management Journal, 37(8), 1615-1631

Renate van Drimmelen, New Business Models for Sustainable Development Handbook of Sustainable Engineering, 2013 , ISBN : 978-1-4020-8938-1

Richard Macve and Xiaoli Chen, (2010), The "equator principles": a success for voluntary codes?, Accounting, Auditing & Accountability Journal, 23, (7), 890-919

Schoenmaker, Dirk. (2018). A Framework for Sustainable Finance. SSRN Electronic Journal. 10.2139/ssrn.3125351.

Simon Dikau & Ulrich Volz (2021): Out of the window? Green monetary policy in China: window guidance and the promotion of sustainable lending and investment, Climate Policy, DOI: 10.1080/14693062.2021.2012122

Robins, N. & Choudhury, R.R. (2014). Building a sustainable financial system to serve India's development needs. Executive Briefing. United Nations Environment Programme & Federation of Indian Chambers of Commerce & Industry. Available via:http://unepinquiry.org/wp-content/uploads/2015/12/Building_a_sustainablefinancial_ system _ o_serve_Indias_development_needs.pdf. [Retrieved 24 April 2020].

Government of India (2015). India's Intended Nationally Determined Contribution is Balanced and Comprehensive: Environment Minister. Press Information Bureau Release, Forest and Climate Change, Ministry of Environment, 2 October 2015. Available via: https://pib.gov.in/newsite/printrelease.aspx?relid=128403. [Retrieved 18 April 2020]