# **Analytical Perspectives on Green Finance and Corporate Social Responsibility**

### Dr. Sunil Bhagwanji Kapadia

Sun Investments & Financial Services, India Email: sk.sunil457@gmail.com

**Abstract**— Finance is strengthened in support of financial and individual capital, but frequently we highlight the former at the expense of the latter. As subscribers elsewhere to these essays correctly proclaim, bringing green and sustainable finance requires fastening together of considerable and noteworthy changes right across our economic structure, and indeed in business and society more broadly.

The central bank is chiefly responsible for financial and macroeconomic stability; hence, it must address climate-related and other environmental perils on a well-ordered level. Additionally, central banks, by their regulatory control over credit, money, and the financial system, are in a mighty stand to promote the evolution of green finance models and administer a reasonably sufficient assessment of surroundings and carbon perils by monetary bodies.

Banking institutions have increased their social responsibility practices to reinforce their credibility and the trust their stakeholders have in them. Altogether, we examine the relationship between these two-vastness differentiating between environmental, social, and corporate governance (ESG) actions as well as among nations considering legal systems, the level of development, and the geographic area.

Setting out the Asian economies onto a maintainable path of gradual growth requires an unrivaled rearranging in distancing it from fossil fuel, greenhouse gas, and natural resource all-inclusive sector to high resource productive technologies and business models. The economy will have to play a primary role in this 'green evolution'.

Emerging market multinational enterprises (EM-MNEs) progressively use corporate social responsibility (CSR) reporting as a universal legitimation plan and it is created by their dual embeddedness in their domestic states and the universal institutional surroundings. Although there are hardly any information/facts about when their CSR reporting is dissociated from their CSR fulfillment.

**Keywords**— Green finance, Corporate social responsibility (CSR), Environmental, social, and corporate governance (ESG).

#### INTRODUCTION

While caring for the causes of environmental, social, and governance (ESG), maintainable investment—includes a variety of asset classes. ESG is an investment strategy that seeks to combine social and/or environmental benefits with financial returns, thus linking investor's social, ethical, ecological, and economic concerns.

The present universal challenge is about aligning financial development with maintainable development. And for most developing Asian economies the task is huge given that their growth models have been very carbon and resource-intensive. It must be mentioned that the carbon intensity of economic output has declined substantially in most developing Asian countries over the last decades – however, it is very high than in advanced countries both inside and outside of the region.

Additionally, many Asian economies are also especially endangered to climate perils. Per the University of Notre Dame's (2017) Global Adaptation Index, many South and Southeast Asian economies are extremely endangered to climate movement while social, economic, and governance readiness to boost resilience is missing.

The importance of corporate social responsibility (CSR) is slowly increasing in the wake of the advent and rapid spread of environmental management. Additionally, firms are not deliberately dealing with it and hence, condemned by society, pointing that they are not fully trusted by stakeholders.

Companies have begun to acknowledge CSR internally as a chief business policy since sustainable management has become extremely important. Socially responsible investment (SRI), which involves investing in companies with outstanding CSR performance and the importance of which is also recognized by investors.

A good amount of investment will have to be directed away from carbon- and resource-intensive investments, and toward sustainable investment to achieve the 2030 Agenda for Sustainable Development and the Paris Climate Accord. Since the responsibility for monetary and macroeconomic stability is with the central banks, it must therefore address climate-related and other environmental perils with a structured plan.

For the orderly transition to a maintainable, low-carbon world, the finance sector is entrusted to play an important role. Per the Paris Agreement, where Article 2.1 (c) mandates signatories to initiate flows of finance orderly with lower greenhouse gas emissions and climate-resilient development. Importantly individuals hold the key, besides regional, global, and national financial institutions and regulators — and financial companies - have vital contributions to make.

Green bonds are an economic mechanism that has been strongly recommended in recent years. The issuance of green bonds, can promote Corporate Social Responsibility (CSR), subscribe to environmental enhancement, and value creation, and aids in wooing investors to some extent, thus bring a positive impact on companies.

The attention of both investors and scholars is attracted to the explosive global growth of green bonds. For mitigating the effects of climate change, resource-saving, and pollution control, Green bonds are usually issued to green industry projects and environmental improvement projects. It is mandatory to decide if green bonds can accrue environmental benefits while also subscribing to a comparable return on investment.

The change needs to be led by increasing numbers of finance sector leaders and professionals with an understanding of the critical role in supporting the transition, that's what we seek in bringing maintainable banking and finance, along with the mastery and knowledge of finance and who can develop and deploy services, products, and tools that can arrange and organize funds and support customers in their adaptions.

We strongly believe, on the one hand, the key dimension through which the sustainability of any business model should be viewed is the one created by the relationship between corporate social responsibility, intellectual capital, and financial and non-financial performance, and, on the other hand, creating a new, more responsible, efficient and sustainable business model can be done by acknowledging the value of firms' intangible assets and, especially, the key character of intellectual capital.

#### LITERATURE REVIEW

Through 50 years in the past, exceptionally high fluctuations of severe temperatures have been recorded at a universal level and scholars expect that waves of severe heat and bountiful rainfall will most likely gather in greater latitudes, while in most tropical surroundings the possibility is that they will lower (Intergovernmental Panel on Climate Change (IPCC) and United Nations (UN) 2014, pp. 2–31).

Per a few studies, some countries will soon face a "critical shortage" although, a few ones will still have their energy resources for less than a year - of natural reservoir subsequently becoming depending on imports from nations such as Norway, Russia, or Qatar (UN Interagency Framework Team for Preventive Action 2012; OECD 2008).

Gallego-Alvarez et al. (2014); Patari et al. (2012); Pilar Marti et al. (2015); Rajnoha et al. (2016, 2017) and Skare and Golja (2012) examine the monetary outcome of firms to their selection of social responsibilities. Santis et al. (2016) examine the outcome of firms listed in the corporate maintainability index while contrasting with the outcome of companies listed in the Sao Paulo Stock Exchange Index. Similarly, Pilar Marti et al. (2015) examine the companies listed on the Stoxx Europe 600 Index and the Stoxx Europe Maintainability Index.

Among the general market indices and maintainability indices, many analyses have examined the return and volatility linkages and firms. For instance, Charlo et al. (2015, 2017); Fowler and Hope (2007); Lopez et al. (2007); Mensi et al. (2017); Santis et al. (2016); Schmid et al. (2017); de Souza Cunha and Samanez (2013); la Torre et al. (2016), and Tularam et al. (2010) reviewed the maintainable indices for their risks and returns, and their effect on the overall market.

Per Volz (2017), central banks are in a powerful position to support the development of sustainable finance through their regulatory oversight over credit, money, and the financial system, and enforce a sufficient cost of environmental and carbon perils by monetary firms.

Per Hansen et al. yesteryear's winners in the capital/stock market were next year's winners in the corporate debt market, confirming the spillover of momentum from stocks to bonds. Per Kumar and Tsetsekos the share price is considerably impacted by the information that downgrades the bond rating. Reboredo studied the correlations among the green bond market, the stock market, and the national bond market

and found a spillover effect among the green bond market and the equity market. The market responds positively to announcements of green bonds issuance, Per Flammer found that the stock.

Nelling and Webb (2009) report that there is no statistically significant relationship between CSR and corporate financial performance when excluding timeseries effects. They argue that if the research models are designed in more detail, the positive correlation shown in previous literature will weaken. Hence, CSR cannot increase corporate financial performance they contend.

The correlation between CSR and financial performance is being denied by a few findings. McWilliams and Siegel report that there is no significant correlation between CSR and corporate performance and that other research shows positive or negative correlations simply because of problems with the study design.

Park et al. conclude that firms that are more dedicated to protecting the environment produce better financial outcomes based on the comprehensive analysis of firms' environmental performance, which is one of the subdimensions of CSR. Due to enhanced corporate reputation in the long-run, the initial cost of investment in CSR will eventually be outweighed by the savings from reduced long-term costs and by the profits from increased revenues, per findings by a few Researchers who also show that CSR has a positive influence on the firm's market value (or Tobin's Q).

A few researchers have come up with some alarming conclusions (Global Sustainability Institute (GSI), Anglia Ruskin University 2019; World Resources Forum 2015; Food and Agriculture Organization of the United Nations (FAO) 2014) claiming to have used the latest data on known reserves and current consumption.

A recent study by Alshehhi et al. (2018) finds that some 78 percent of the publications opine a positive relationship between corporate social responsibility and financial performance that use content analysis to examine the literature concerning the results of corporate maintainability on the corporate economic outcome.

#### METHODOLOGY

This is a descriptive study hence secondary data are sourced and used from authentic sources like e.g. Government published data & reports, Industry Chambers' reports, other private organization publications, the institution published material, other online available literature, among others.

#### **DISCUSSION & ANALYSIS**

Per publicly available data - between 1980 and 2011, the floods affected more than 5.5 million people and caused direct economic losses of over € 90 billion, and caused damages to property, infrastructure and human health impose high costs for society and the economy, while the sectors of activity that rely heavily on certain temperatures and rainfall levels (such as agriculture, forestry, energy, and tourism) have also been greatly affected (Food and Agriculture Organization of the United Nations (FAO) 2016).

There is always a curiosity and a general discussion whether the sustainable investment alternatives offer better financial returns than the conventional indices from both developed and emerging markets.

Sustainability involves the adaptation of today's business model to the constantly changing economic, financial, social, political, and demographic context, making sure that limited resources (financial, physical and human) are being used responsibly and efficiently to permanently improve individuals' lives as well as strengthen organizations' relationships with the environment.

In measuring organizations' success, competitive advantage, and influence on the marketplace, Corporate social responsibility (CSR), green and sustainable finance, and intellectual and human capital have become central issues.

It is highlighted that problems relating to the environment have become increasingly prominent all over the world, along with the rapid development of the global economy, and sustainable development and economic growth have become popular topics enticing the attention of most nations.

Climate change is the source of significant structural changes that affect the economic and financial system. These structural changes pose severe risks to financial stability, and therefore climate change has gained the attention of central banks and supervisors. According to the Stern Report, the cost of unchecked global warming could equal 5 percent to 20 percent of global GDP annually, while the cost of an effective avoidance strategy would be limited to 1 percent of global GDP annually. Besides, actions against climate change also create business opportunities for new markets in low-carbon industries, which help to decouple economic growth from greenhouse gas emissions. The need which has also been recognized in the Paris Agreement - for financial institutions to "incorporate climate-proofing

and climate resilience measures" (UNFCCC 2015: §44). Per Volz (2016b) for safeguarding the stability of financial systems, accounting for climate and other environmental risk is not least important.

The scenario of an increase in global average temperatures by5 °C would bring about a unique environment that humankind has never experienced before. Whether the related damages would increase linearly or exponentially, or how they will be distributed across regions and sectors can only be guessed.

#### a. Physical Risks

Physical risks refer to the effects of rising temperatures and an increasing number of extreme weather events like droughts and floods or rising sea levels caused by climate change. These risks can affect both the supply and the demand side of the economy. An increase in global warming will impact on labor supply in many countries because higher temperatures can erode public health and productive working conditions in firms. Per Mittnik et al. (2019), a multi-phase vigorous macro model endogenizes on the occurrence of physical risks as the CO2 emissions that impact the disaster vulnerability - on the macroeconomic front and that impacts physical risks.

The capital stock may even decline as rising risk premia are causing the surge in debt and the disaster wipes out some capital, while public and private debt levels increase in the aftermath of a disaster. At the same time, credit constraints may also slow down the necessary reallocation of capital after an extreme weather event has hit the economy, which may call for some policy action by the monetary authorities.

#### b. Transition Risks

The passage to a decarbonized economy from the current economic system is inevitable, but it bears risks, too. The transformation must commence as quickly as possible to be less disruptive, while some disruption is almost certainly unavoidable, as decarbonization requires some major changes in the current modes of production. The disruption will differ from industry to industry, and, as Schoenmaker (2019) shows, even intraindustry differences in the exposure to transition risks are quite significant.

Firms are not only incentivized to divest from brown assets, in the event of regulatory reforms or new taxes change relative prices in favor of green assets but, they are also more likely to fund research in carbon-free innovations. If these innovations yield marketable products or processes, incumbents might be replaced.

Per NGFS (2018), it might be rather difficult to find carbon-free technologies for some industries (namely aviation), and, therefore, their production is likely to be scaled down significantly, which could generate greater economic strain for their creditors and owners.

#### c. Liability Risks

Despite all pledges to limit climate change, we are very likely to experience some of the negative effects described above. Under the "polluter pays" principle, entities that have been negatively affected by climate change could seek compensation from those who were causing the damage and thereby at least partially internalize negative externalities. And as climate change is a global phenomenon, the causing parties will often be located in a different jurisdiction than the affected parties, which complicates the arbitration process.

From a financial stability perspective, two issues are pertinent here. First, given the increasing probability that physical risks will materialize over the coming decades, insurance companies may face an increasing number of claims. As all these events are caused by climate change, they are correlated, which might not be fully reflected in the calculations of the insurance industry. Therefore, the effects of an increase in natural disasters due to climate change have been incorporated in EIOPA's insurance stress tests (EIOPA, 2018). Severe unexpected losses could propagate via reinsurance companies and other interlinkages in the financial system.

Secondly, it is difficult for investors at the current stage to evaluate the potential exposure of an asset to climate change as past data do not contain the expected increase of correlated risk. Many companies do not disclose their exposure to climate-related risks even if they are aware of their existence. Nevertheless, some firms have started to offer so-called "green bonds" and other investment vehicles that claim to be climate-neutral. In the absence of an agreed methodology to classify the effects of economic activities on the climate, investors and supervisors are unable to verify these claims.

## d. Prudential Policies to Tackle Climate-Related Financial Risks

Integrating these climate-related risks into the prudential supervision framework is being recommended in the latest report by the NGSF (2019). A necessary precondition for assessing exposure to climate-related risks is the transparent and reliable disclosure of relevant information. For the time being, private initiatives coexist with official regulatory proposals aiming for more transparency of climate-related business risks.

The Financial Stability Board has established the Task Force on Climate-related Financial Disclosures (TCFD) in 2015 under the chair of Michael Bloomberg to develop voluntary, consistent climate-related financial risk disclosures for well-informed investment, lending, and insurance underwriting decisions. The TCFD developed a framework for companies to disclose their risks more effectively in existing reports.

This framework was published in 2017 and refers to the application of metrics and targets to measure climate-related risks, their incorporation in firms' risk management systems, the strategic control of these risks, and the firm-specific governance around climate-related risks. As the TCFD is a voluntary initiative, its recommendations are not binding on its members. In a recent status report (TCFD, 2018), the results of a review of disclosure practices among more than 1,700 firms worldwide were summarized, showing that only a few companies have indeed incorporated climate-related risks in their governance or their risks management practices so far, but more have already developed or applied metrics and tackled strategic issues.

However, a reliable classification of economic activities for their climate impact is warranted before any of these prudential instruments can be applied. So far, there is no clear evidence that green investment is safer than brown investment. However, in China, where green loans have a lower non-performing loan (NPL) ratio than average loans — a notable exception being highlighted. Consequently, China has already lowered its capital requirements to encourage green investment. More recently, the EU has adopted modest regulatory changes in this direction, which are, however, limited to publicly organized infrastructure investment in its implementation legislation of Basel III (CRRII).

Green central banking is referred to as and takes account of risks from climate change, environmental risks that may have a material effect on the long- and short-term solidity and growth of the financial sector and the macroeconomy in general. One can differentiate among central banks' responses to financial stability, environmental externalities affecting central banks' traditional core responsibility of safeguarding macroeconomic, and an activist character of central banks in "greening" the economy.

Green central banking, therefore, describes, on the one hand, the process of taking the environmental risk and other sustainability-related factors, such as climatechange-mitigation policy, into account in the design of monetary plans and economic administration in the stalking of the conventional goals of financial stability and price.

Frameworks of Central banks and Green Finance Guidelines are in a better shape to generate or validate industry-led, non-mandatory, green finance guidelines, which may set out guidelines for the issuance of E&S risk-management practices, green bonds, or general criteria for the green offering. In many emerging and developing economies where green credit guidelines exist, these tend to be either voluntary industry-led green finance guidelines or, in most cases, central bank-led ones that frequently serve as the base for the generation of statutory green credit administration in the aftermath (Dikau and Ryan-Collins 2017).

Green finance endeavors to limit the impact of climate change as far as possible and plan to attain a greening of the financial system by channeling financial resources for and into better-environmentally friendly investments. Examples of green finance products range from loans for roof solar collectors to "green bonds" used to finance wind farms, for example, or investment in sustainable mutual funds. Currently, green investments are growing very fast, however, they are still a niche market. Per Giese and Lee (2019), a few studies on green investments aims to deliver similar yields while comparing it with mainstream investment products.

For investing in green and sustainable finance skills, there is an equally strong commercial and strategic case reflected in its emergence as an important topic for the discussion in financial institutions around the world amongst HR directors and more broadly in boardrooms.

- Pressure from customers, as consumer demand for more sustainable production, operations and consumption grows;
- Also, pressure from regulatory bodies, since the climate and all risks related to it become an increasing priority for central banks and regulators;
- An understanding more broadly of the impact of climate risks on business, the economy, and society;
- At times pressure from colleagues, especially newcomer and young colleagues, who want to work for organizations contributing to the development of low carbon, not a high carbon world.

The orderly decarbonization can create a huge investment opportunity in the global economy. Exchange of experience and ideas among central banks and financial supervisors are being facilitated by the

'Network for Greening the Financial System' – findings of which are presented.

Central banks must respond to surroundings and maintainability challenges - three broad types of arguments are being offered for the justification (i) an argument relating to the role of central banks as credible and powerful actors, especially in developing countries; (ii) the financial and macroeconomic risk argument; and (iii) the market failure argument.

#### i. The financial and macroeconomic risk argument

To begin with, climate change and environmental damages can have a linear effect on price stability thus, impacting food and energy prices. However, from environmental damage and climate change, there may also be risks to financial stability. Furthermore, the crisis experience has shown that financial regulation and supervision needs to extend beyond its traditional microprudential focus and develop macroprudential policy frameworks aimed at limiting systemic risk in the financial sector.

However, as pointed out by Leaton et al. (2013: 23), "the regulators and banking supervisory systems take no notice of an economic formation which is unwell for the motive – and on the top of it, these bodies are not bothered for looking out at any warning signs [of climate change] – still worse. The rules need to evolve to address this systemic risk that guides and governs the operation of financial markets."

Voysey and Abb (2014) recommend that "[t]he Basel Committee should explicitly acknowledge environmental risks and their increasing impact on the stability and sustainability of the economy as an emerging source of systemic risk for banks and banking stability. It needs to adopt current best practice in the management of environmental issues, and to collect the necessary data and conduct analysis to refine the banking sectors' understanding of, and ability to address, systemic environmental risk in the future - basis it should encourage and support bank regulators to work with banks."

#### ii. The market failure argument

The provision of credit by banks can be characterized as a credit market failure for socially undesirable activities – such as carbon-intensive or polluting businesses. Per Campiglio (2016: 224), "the misalignment between the legitimate pursuit of private interests by commercial banks lies in – this 'credit market failure' that makes the most of the money circulation – and the growth motif that a group/locality sets to itself, the attainment of

which is subject to the availability of economic resources and some sort of monetary stability."

Till carbon pricing markets are not functioning and environmental policies are not in place or not effectively enforced, the central bank may have a case to use its powers to affect credit creation and allocation, however, environmental regulation and carbon pricing should be the preferred policy tools to correct this market failure and prevent or disincentivize such investments.

A further form of market failure are missing markets, i.e., situations where efficient, free markets which would enable a Pareto efficient distribution of resources to fail to exist because of set-up costs, such markets need to reach a certain scale to function, and/or such as administration or gathering of information, prevent private profits (Heller 1999). Along these lines, the case can be made for central banks to support the build-up of missing market segments to promote green finance, such as a green bond market. The traditional tools of monetary policy are to be made environmentally consistent, so, in turn, that can also ensure helping to create new green markets.

## iii. An argument relating to the role of central banks as credible and powerful actors

In developing countries, the case for an environmental role of central banks can also be derived from the typically strong institutional standing that central banks have in the policy frameworks of these countries. Central banks can effectively exert influence over private investment decisions Through their command over the banking sector.

Moreover, promoting "best practice" reforms in the financial sector – central banks' financial market expertise and their transnational networks can provide necessary help in this regard. To some extent, this argument is an extension of the market failure argument discussed above, and hence an application of the theory of the second-best. The relevance of this argument for developing country central banks may be larger than for those in developed countries because market failures, especially missing or underdeveloped markets (such as local currency bond markets), tend to be a more prevalent problem in the former.

The newly established Network for Greening the Financial System (NGFS) facilitates central banks' and supervisors' exchange of experience and ideas in three areas: micro-prudential supervision, macroprudential analysis, and measures to scale up green finance. In its recent Comprehensive Report, the NGFS (2019) calls

for action and presents four recommendations for central banks and supervisors:

- knowledge sharing and building awareness and intellectual capacity and encouraging technical assistance,
- 2) incorporating climate-related risks into microsupervision and financial stability monitoring,
- integrating sustainability factors into their portfolio management, and
- 4) bridging data gaps.

The most recent definition of CSR is provided in ISO 26000 (released: November 2010) by the International Organization for Standardization (ISO): "firms' decision making per transparent and ethical behavior and the responsibility of the firms on the impact of the organization's decisions and activities on society and the environment."

Additionally, reviewing the term of CSR by major universal institutions, the OECD defines it as the social responsibility of a firm to repeatedly generate the mutual growth relationship between themselves and society. The most general explanation of CSR followed in literature is that propagated by the European Commission in 2001: "companies of one's own volition engage with its stakeholders and incorporate environmental and social concerns to corporate management."

In demonstrating a long-term commitment to the interests of stakeholders, the company's reputation is maintained by CSR activities. As the company may have the resources to promote CSR, building confidence in the public, commencing to enhance company value over time, since company outcomes accomplish the stakeholders' intentions.

CSR activities can help to retain and attract extremely qualified employees, preferring social benefits (McGuire and Sundgren, Houston and Johnson, encouraging the spirit of dedication and long-term commitment of corporate employees.

Mani, Gunasekaran noted that the impact of supplier social sustainability practices is reflected in aspects of CSR as labor rights, safety and health, social responsibility, diversity, and product responsibilities. Following through the survey method, and having collected the research sample, the research conclusions confirmed the positive impact of supplier social sustainability practices on the performance of the supply chain.

The influence of charitable and corporate giving activities on firm performance is estimated by Tobin Q and ROE - is the other view of CSR. There is a positive correlation between charitable contributions and corporate giving activities and firm performance of Romanian listed companies as revealed by the research outcomes. There is a significant impact on the moderating role of relationships with stakeholders, CSR, and firm's performance.

Per a few results indicate that family ownership of business groups does not have a significant impact on community-related CSR. Referring to the latest work by Terlaak, Kim, and Roh (2018), it is believed that ownership criteria in the family especially in the Indian scenario by itself cannot be enough to boost CSR. In Indian business groups, rather, a union of family leadership and family ownership would be required to promote group-related CSR.

A few types research outlines the ownership characteristics that influence receptivity to institutional pressures and drive engagement in community-related CSR. We find that Indian business groups and family firms under institutional pressures that increase sociopolitical legitimacy (Young & Thyil, 2014) and preserve socio-emotional wealth (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007) thus, are encouraged to engage in community-related CSR. This provides support to a view indicating that business groups and family firms engage in CSR to maintain a positive family image and reputation for the 'long-term horizon' (Berrone et al., 2010; Gomez-Mejia et al., 2011).

Per Chakrabarty & Bass, (2015); Su, Peng, Tan, & Cheung, (2016), since CSR activities in emerging markets are considered as a means for filling existing institutional voids, hence, this study makes efforts to our understanding of how differences in ownership structures in weak institutional environments might be associated with community-related CSR.

There may be several reasons for increasing CSR activities of the firms floating the green bond's issuance.

- 1. Firstly, green bonds are generally floated to play a part in the green or environmental conservation project for the issuance purpose. For activities that are supporting green projects that can promote CSR participation, the project itself is quite relevant to the environment and society.
- 2. Secondly, as for the issuance costs, the issuance of green bonds reduces the financing costs and

- improves the efficiency of using resources, and thus helps a company to provide products and services for the society.
- 3. Thirdly, as for the issuance significance, the issuance of green bonds is conducive to establishing a good corporate image. For the promotion of social responsibility and corporate reputation, disclosing the use of the raised funds on relevant websites, companies continuously release positive information, which is both useful and conducive.

In the longer-term with repercussions for the financial institutions that have financed non-sustainable investments, a failure to address systemic sustainability challenges will impinge on the growth and returns of individual firms and economies at large. Therefore, to take account of social, environmental, and governance (ESG) risks — there is a strong case for financial institutions as well as for financial regulators.

Given the substantial amount of investments required for a 'green transformation' for maintainable, with a low-carbon development, the financial sector has a huge task to play a major part in directing required resources to maintainable investments – and refrain from allied financing practices that damage the surrounding environment. Awareness has been rising that the financial system needs to take account of environmental and climate risks facing the real economy, and a large and growing number of central banks and administrators in advanced and emerging countries have initiated dealing with these issues in operations.

#### CONCLUSION

Environmental risks can have a substantial effect on macroeconomic stability and finances, and an increasing number of central banks have started to develop microand macro-prudential frameworks that incorporate risks related to the environment and climate change which is largely accepted.

At present, green and sustainable finance may still be characterized as something of a niche, albeit a highly dynamic and fast-growing one. However, it is evident that green finance now has moved into the mainstream. It won't be long before, and by their education and training, all finance professionals are, leading the systemic change for sustainable finance that we need to protect people and the planet.

CSR activities relieve various potential conflicts among different stakeholders, and that they enhance firm reputations, per the analysis that is based on the stakeholder theory. This will have positive effects on long-term firm value, and not only on short-term financial performance.

Fund managers and other investors now integrate ESG factors into all investment decision-making, rather than have a small, sustainability team, and separate funds. To practice sustainable finance principles in insurance, banking, and investment contexts, COVID-19 has enlarged the need/scope for mastery of and the capability, and such philosophies will, indeed, and are progressively are now included as an essential part of the mainstream of finance.

Financial governance should target the following goals to successfully align the financial system with sustainability goals:

- a) Developing long-term, local currency refinancing sources for banks to enable them to extend longterm credit.
- Raising awareness among regulators and market participants in the financial sector for environmental and climate risks.
- Developing capacities in the financial industry for environmental risk analysis and management through knowledge-building and sharing.
- d) Building up the capacities in the financial industry needed to develop sustainable financing practices and new lending instruments for financing sustainable projects such as renewable energy.
- e) Providing incentives, where needed, to banks and NBFIs for the financing of green projects.
- f) Supporting the development of new market segments such as the green bond market or climate risk insurance.
- g) Enhancing transparency through ESG disclosure requirements.

A dialogue among all relevant domestic stakeholders is needed to achieve these goals. For developing and promoting the adaption of new green financial products, public financial institutions, including central banks, development banks, and public pension funds, can play an important role.

Per UNEP, the CCCA – Collective Commitment to Climate Action has the eagerly desirous global banking group ambition bracing the shift to a net-zero economy by 2050. The group has pledged to align their portfolios with the universal climate goal to restrict warming to a well-below two degrees, aiming for 1.5 degrees Celsius.

It is highlighted that some thirty-eight banks from all six continents of CCAA, managing over USD 15 trillion in

assets, are accelerating the allegiance all Principles for Responsible Banking signatories have made to position their commerce plans with the objectives of the Paris Agreement on Climate Change.

#### Signatories mandated to:

- Direct and expedite the necessary shift in the real economy by their customer linkage, products, and services.
- Take critical action right from signing, pinpointing the most carbon-intensive and climate-vulnerable groups in its portfolios.
- Set and publish group-centric goals for aligning their portfolios with a well-below 2 degrees and aiming for 1.5 degrees' Celsius ambit, basis scientific climate scenarios within three years of signing.
  - (https://www.unepfi.org/banking/bankingprinciple s/collective-commitment/).

The theoretical design of green bonds and related trading systems should be enhanced in terms of information disclosure, to enable external supervision and control of green bonds and ensure the smooth progress of green projects. The independence and integrity of third-party rating institutions should be guaranteed, and more companies should be included in the matter of CSR. While drafting public policies civil societies may employ them in monitoring and controlling the social and environmental responsibility of firms, additionally, the government may use such information for the same.

Our study has determined that the long-term relationship between CSR and firm performance is connected with the long-term benefits generated by both Green Finance and CSR operations. Our findings are relevant not only for intellectuals, but also for the executives of these firms, investors, planners, government administrators, and society at large.

#### REFERENCES

- [1] Alshehhi, Ali, Haitham Nobanee, and Nilesh Khare, (2018). The Effect of Maintainability Theories on Corporate Financial Outcome: Literature Tendencies and Potential in Further Investigation. Sustainability 10: 494. [Cross Ref]
- [2] A. Terlaak, S. Kim & T. Roh, (May-2018). Not Good, Not Bad: The Effect of Family Control on Environmental Performance Disclosure by Business Group Firms. Journal of Business Ethics. https://doi.org/10.1007/s10551-018-3911-5.
- [3] Andreas B., Wolfgang P. & Helene S., (2019). The Potential Contribution to Green Finance from

- Central Banks. Leibniz Information Centre for Economics with German Institute of Economic Research (DIW Berlin). ECONSTOR. http://dx.doi.org/10.3790/vjh.88.2.55.
- [4] (April 2019). A call for action. Climate change as a source of financial risk: First comprehensive report. NGFS 2019a
- [5] Bourdieu, Pierre, (1986). The Forms of Capital. In Handbook of Theory and Research for the Sociology of Education. Edited by John G. Richardson. New York: Greenwood Press, pp. 241– 58.
- [6] Borrone, dkk, (2010). Bisnis keluarga berpendapat bahwa titik referensi dari keluarga pemegang saham – manajer adalah untuk mempertahankan hubungan sosioemosional, yang menjelaskan mengapa keluarga bisnis mengambil keputusan yang tidak mengikuti logika sepenuhnya.
- [7] Blaxekjær & Nielsen, (2015). "Beyond 2015: Exploring the Future of Global Climate Governance". Mapping the narrative positions of new political groups under the UNFCCC.
- [8] Commission for Architecture and The Built Environment, (2005). Physical Capital: How Great Places Boost Public Value; High Street Epsom: Ernest Bond Printing Ltd., pp. 1–75.
- [9] Chen, Noble, I.; Hellmann, J.; Coffee, J.; Murillo, M.; Chawla, N., (2015). University of Notre Dame Global Adaptation Index. Country Index Technical Report. ND-GAIN.
- [10] Charlo, Maria J., Ismael Moya, and Ana M Munoz, (2015). Maintainable Growth and Corporate Economic Outcome: Findings on the FTSE basis for Good IBEX Index. Business Strategy and the Environment. 24: 277–88. [Cross Ref]
- [11] Campiglio, E., (2016): "Beyond Carbon Pricing. The Role of Banking and Monetary Policy in Financing the Transition to a Low-carbon Economy", Ecological Economics121, 220–230.
- [12] Charlo, Maria J., Ismael Moya, and Ana M Munoz, (2017). Maintainable Growth in Spanish Listed Corporates: A Planned Strategy. Corporate Social Responsibility and Environmental Management. 24: 222–34. [Cross Ref]
- [13] Cristina R. Gh. P. & Gheorghe N. P., (Oct-2019). A Fact-finding Analysis Basis a Questionnaire For Green and Maintainable Finance, CSR, and Outcome: Proof from the Romanian Commercial Surrounding. Journal of Risk and Financial Management. MDPI. doi:10.3390/jrfm12040162.
- [14] Corporate Finance Institute (CFI), (2019). Capital:
  Anything that Increases One's Ability to Generate
  Value. Available online:

- https://corporatefinanceinstitute.com/resources/kno wledge/finance/capital/
- [15] Caroline Flammer, (2020). Green Bonds: Implications and Effectiveness for Public Strategy. The University of Chicago Press Journals. Vol. 1. <a href="https://doi.org/10.1086/706794">https://doi.org/10.1086/706794</a>.
- [16] de Souza Cunha, F. A., and C. P. Samanez, (2013). Outcome Examination of Maintainable Investments in the Brazilian Share Market: An Analysis for Corporate Maintainability Index (ISE). Journal of Business Ethics. 117: 19–36. [Cross Ref]
- [17] Dikau, S. and Ryan-Collins, J., (Oct-2017). Green Central Banking in Emerging Market and Developing Country Economies. The New Economics Foundation.
- [18] E. Nelling & E. Webb, (2009). CSR and economic outcome: the "virtuous circle" re-considered. Review of Quantitative Finance & Accounting (Journal). https://doi.org/10.1007/s11156-008-0090-y.
- [19] (2011). A Renewed EU Strategy 2011-14 for Corporate Social Responsibility. European Commission. 2011. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Brussels, 25.10.2011; COM 681 Final. pp. 1–15.
- [20] EIOPA, (2018). Insurance Stress Test report. European Insurance and Occupational Pensions Authority. Publications Office of the European Union. Luxembourg.
- [21] Fowler, Stephen J., and Chris Hope, (2007). An Analytical Evaluation of Maintainable Commerce Indices and their Effect. Journal of Business Ethics. 76: 243–52. [Cross Ref]
- [22] Food and Agriculture Organization of the United Nations (FAO), 2014 & 2016.
- [23] Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, (2007). Socioemotional wealth (SEW) perspective.
- [24] Gallego-Alvarez, Isabel, Isabel M Garcia-Sanchez, and Cleber da Silva Vieira, (2014). Climate Change and Economic Outcome in Critical Period. Business Strategy and the Environment. 23: 361–74. [Cross Ref]
- [25] Giese, Guido, and Linda-Eling Lee, (Apr-2019). Weighing the evidence: ESG and equity returns.Research Insight. MSCI ESG Research LLC.
- [26] (2019). Global Sustainability Institute (GSI), Anglia Ruskin University. Available online: https://www.anglia.ac.uk/ global-sustainability-institute-gsi.

- [27] Heller, W.P., (1999): "Equilibrium Market Formation Causes Missing Markets", in: Chichilnisky, G.(ed.), Markets, Information and Uncertainty. Essays in Economic Theory in Honor of Kenneth J. Arrow, Cambridge: Cambridge University Press, 235–252.
- [28] Hansen, Daniel, Patrick Houweling, and Jeroen Van Zundert, (2017). Momentum spillover from equities to credits. Journal of Banking & Finance. 79, pp. 28–41.
- [29] International Institute for Sustainable Development (IISD), (2008). The Natural Capital Approach: A Concept Paper. Winnipeg: IISD, pp. 1–85
- [30] (2009). Innovation in social and institutional structures. OECD, p. 13
- [31] Intergovernmental Panel on Climate Change (IPCC), and United Nations (UN)., (2014). Climate Change 2014 Synthesis Report Summary for Policymakers. pp. 1–32.
- [32] Juan C. Roboredo, (2018). Green bond and economic merchandise: Co-movement, differentiation and, rate spillover impacts. Elsevier. Energy Economics. https://doi.org/10.1016/j.eneco.2018.05.030.
- [33] Jacob C., M. Umar, Phung A.T., Thao N.T., M.S. Sial & N.V. Khuong, (Feb-2019). Does CSR Impact the Economic Outcome of the Industrial Territory? Evidence from an Emerging Economy. Sustainability. MDPI. doi:10.3390/su11041182.
- [34] Lopez, M. Victoria, Arminda Garcia, and Lazaro Rodriguez, (2007). Maintainable growth and corporate outcome: An analysis basis the Dow Jones Maintainability Indices. Journal of Business Ethics. 75: 285–300. [Cross Ref]
- [35] Leaton, J., (2012). Unburnable carbon—Are the world's financial markets carrying a carbon bubble. London: Carbon Tracker Initiative.
- [36] Leaton J., (2013). Unburnable carbon: Wasted capital and stranded assets. Carbon Tracker Initiative & Grantham Research Institute on Climate Change and the Environment.
- [37] la Torre, Oscar, Evaristo Galeana, and Dora Aguilasocho, (2016). The usefulness of the maintainable investment versus the broad market one. A first trial in the Mexican share market. European Research on Management and Business Economics. 22: 117–23. [Cross Ref]
- [38] McGuire, Joseph William, (1963). Business and Society. New York: McGraw-Hill.
- [39] McWilliams, Siegel & Wright, (Jan-2006).
  Corporate Social Responsibility: Strategic Implications. Journal of Management Studies.

- https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1 467-6486.2006.00580.x.
- [40] Michael Sampson, (2017). What lessons haven been learned from Basel-II, the ECB's implementation of Basel-III in the Euro-area. Leiden university. International Relations and Organisations. Bachelor Thesis. Cassie Tingen.
- [41] Mensi, Walid, Shawkat Hammoudeh, Idries Mohammad Wanas Al-Jarrah, Ahmet Sensoy, and Sang Hoon Kang, (2017). Active perils spillovers among oil prices, gold, and traditional, maintainability and Islamic equity accumulation and groups with portfolio inference. Energy Economics. 67: 454–75. [Cross Ref]
- [42] Mittnik, S., Semmler, W. & Haider, A., (2019). Climate Disaster Risks Empirics and a Multi-Phase Dynamic Model. IMF Working Paper 19/145.https://www.imf.org/~/media/Files/Publications/WP/2019/WPIEA2019145.ashx.
- [43] M. Jain, G.D. Sharma & M. Srivastava, (Feb-2019).

  Can Maintainable Investment Deliver Better

  Economic Gains: A Relative analysis of ESG Index

  and MSCI Indices. Risks. MDPI.

  doi:10.3390/risks7010015.
- [44] Maria M.M.Q., Jose M.L.Q. & Jesus R.H., (Mar-2019). ESG Outcome and Stakeholder's Value Generation in the Banking Sector: Universal Variances. Sustainability. MDPI. doi:10.3390/su11051404.
- [45] National Consumer Law Center (NCLC), (2019). Wealth Creation in Rural Communities: Discovering Eight Forms of Community Wealth. pp. 1–3.
- [46] OECD, (2019b). OECD Insights: Human Capital: What Is Social Capital? pp. 1–4. Available online: https://www.oecd.org/insights/37966934.pdf
- [47] P.C. Kumar & G.P. Tsetsekos, (2007). Supervisory ownership and share value response to debt products downgrades. Applied Financial Economics. <a href="https://doi.org/10.1080/758534950">https://doi.org/10.1080/758534950</a>.
- [48] Park, Sung Yong, and Sang-Young Jei, (2010). Assumption and Hedging Efficiency of Time-Differentiating Hedge Ration: Adjustable Bivariate GARCH Tactics. Journal of Futures Markets. 30: 71–99. [Cross Ref]
- [49] Patari, Satu, Ari Jantunen, Kalevi Kylaheiko, and Jaana Sandstrom, (2012). Does Sustainable Development Foster Value Creation? Empirical Evidence from the Global Energy Industry. Corporate Social Responsibility and Environmental Management. 19: 317–26. [Cross Ref]
- [50] Prof. Dr. Rüdiger Hahn, (2013). ISO 26000, Policy Administration, CSR, Maintainability,

- Management Process, Orderliness. Wiley Online Library. https://doi.org/10.1002/bse.1751.
- [51] Pilar Marti, Carmen, Maria Rosa Rovira-Val, and Lisa Geneva Johanna Drescher, (2015). Are Companies that Subscribe to Maintainable Growth Better Economically? Corporate Social Responsibility and Environmental Management. 22: 305–19. [Cross Ref]
- [52] Peter, Valentina & Tatiana, (2019). Walking the walk or talking the talk? Corporate social responsibility decoupling in emerging market multinationals.

  <a href="https://sociorepec.org/publication.xml?h=repec:pal:jintbs:v:50:y:2019:i:2:d:10.1057/s41267-018-01717">https://sociorepec.org/publication.xml?h=repec:pal:jintbs:v:50:y:2019:i:2:d:10.1057/s41267-018-01717</a>.
- [53] Roland, Ethan, and Gregory Landua, (2015). Regenerative Enterprise: Optimizing for Multicapital Abundance. Lulu.com. pp. 1–59.
- [54] Rajnoha, Rastislav, Petra Lesnikova, and Antonin Koraus, (2016). From Economic Outcomes to Planned Achievement Measurement Plan And Corporate Maintainability: Experimental Observation From Slovakia. Economics and Sociology. 9: 134–52. [Cross Ref] [PubMed]
- [55] Rajnoha, Rastislav, Petra Lesnikova, and Vladimir Krajcik, (2017). Implication of Business Outcome Measurement Plans and Corporate Maintainability Notion to Total Business Outcome: "Protect the Earth And Maintain Your Accomplishment". E and M Ekonomie And Management. 20: 111–28. [Cross Ref]
- [56] Skare, Marinko, and Tea Golja, (2012). CSR and Company Financial Achievement—Is There Any Relationship? Ekonomska Istrazivanja-Economic Research. 25: 215–42. [Cross Ref]
- [57] S. Young & V. Thyil, (2014). Corporate social responsibility and corporate governance: Role of context in international settings. Journal of Business Ethics. Springer.
- [58] S. Chakrabarty & A.E. Bass, (2015). Comparing virtue, consequentialist, and deontological ethicsbased corporate social responsibility: Mitigating microfinance risk in institutional voids. Journal of Business Ethics. Vol. 126, no. 3, pp. 487-512.
- [59] Santis, Paula, Andrei Albuquerque, and Fabiane Lizarelli, (2016). Do maintainable firms have a good economic outcome? An analysis of Brazilian public firms. Journal of Cleaner Production. 133: 735–45. [Cross Ref]
- [60] Schmid, Jochen, Marieta Olaru, and Ana-Maria Verjel, (2017). The impact of maintainable investments on the financial motives of the firm

- concerning the overall standard practices. Amfiteatru Economic. 19: 939–50.
- [61] Shelagh W., Joe T., Helena W. & Caroline O., (Dec-2018). Making finance consistent with climate goals. Insights for operationalizing Article 2.1c of the UNFCCC Paris Agreement. The work was licensed under CC BY-NC-ND 4.
- [62] Samira D. & Sandra R., (Dec-2018). Environmental Reporting Practices: Are CAC 40 Firms Compliant with the Recommendations of the Task Force on Climate-related Financial Disclosures? www.anc.gouv.fr
- [63] Simon Dikau & Ulrich Volz, (Sep-2018). Central Banking, Climate Change, and Green Finance. Asian Development Bank Institute. No. 867.
- [64] Sang J.C., Chune Y.C. & Jason Y., (Jan-2019).

  Abstract on the Link between CSR and Economic Achievement.

  Sustainability.

  MDPI.

  doi:10.3390/su11020343.
- [65] Sreevas S., Bindu A. & Mulesh S., (Published online Jun-2019). Ownership Structure and Corporate Social Responsibility in an Emerging Market. Springer. Asia Pacific Journal of Management (2020). 37:1165–1192 <a href="https://doi.org/10.1007/s10490-019-09649-1">https://doi.org/10.1007/s10490-019-09649-1</a>.
- [66] Schoenmaker, Dirk, (2019). Greening monetary policy. Bruegel Working paper 2/19. Brussels.
- [67] Simon Thompson, (Oct-2020). Pathway to COP26: The Part of Green Finance. The Social Market Foundation in partnership with Chartered Banker, London.
- [68] Tularam, Gurudeo Anand, Eduardo Roca, and Victor S H Wong, (2010). Analyzing of Socially Responsible Monetary Markets (SRI) Applying Active Conditional Correlation (DCC) Mode: Repercussions for Differentiation. Journal of Mathematics and Statistics. 6: 385–94. [Cross Ref]
- [69] (2008). UN Interagency Planning Team for Avoidable Operation 2012; OECD.
- [70] Ulrich Volz, (2016): Fostering Green Finance for Sustainable Development in Asia. Report Prepared for the 2016 Annual Meeting of the Asian Development Bank, Bonn: German Development Institute. https://www.diegdi.de/uploads/media/Fostering\_Green\_Finance\_in\_Asia\_Volz.pd.
- [71] Ulrich Volz, (Feb-2017). Art of a Maintainable Monetary Structure. The Part of Central Banks in Promoting Green Finance. The UN Environment Inquiry and The Centre for International Governance Innovation (CIGI). Inquiry WP 17/01.

- [72] Ulrich Volz, (Mar-2018). Nurturing Green Finance for Maintainable Growth in Asia. Asian Development Bank Institute. No. 814.
- [73] Vanetti, Renzo, (2007). Tavola rotonda: Etica, Reputazione e Competitivà—Competitività d'impresa e dimensione etica della tecnologia. Notizie di Politeia XXIII: 175–77. (In Italian).
- [74] Voysey, A.and Abb, C., (2014): Stability and Sustainability in Banking Reform. Are environmental risks missing in Basel III?, Cambridge and Geneva: University of Cambridge Institute for Sustainability Leadership and UNEP Finance Initiative.
- [75] V. Mani & A. Gunasekaran, (Feb-2018). Four forces of supply chain social sustainability adoption in emerging economies. International Journal of Production Economics. DOI: 10.1016/j.ijpe.2018.02.015.
- [76] World Bank, Sustainable Development Network, Global Facility for Disaster Reduction, and Recovery Unit, (2009). Economic Modeling of Income, Different Types of Capital and Natural Disasters. Policy Research Working Paper 4875. pp. 1–33.
- [77] World Resources Forum, (2015). Natural Resources: Sustainable Targets, Technologies, Lifestyles and Governance. Villigen: Paul Scherrer Institute (PSI), pp. 1–356.
- [78] W. Su, M.W. Peng, W. Tan & Y-L Cheung, (2016).

  The Signaling Effect of Corporate Social Responsibility in Emerging Economies. J. Bus Ethics. DOI: 10.1007/s10551-014-2404-4
- [79] X. Zhou & Y. Cui, (Dec-2019). Green Bonds, Company Achievement, and CSR. Sustainability. MDPI. doi:10.3390/su11236881.