

Climate Change and Corporate Institutions

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Climate change has been identified as a global issue that has political, economic, environmental, and social repercussions. Extreme climate change conditions such as droughts, rising sea levels, floods, heat waves, hurricanes, and other weather conditions are the major challenges for the world of commerce and business operations globally. In recent years, climate change has emerged as a major threat to the global economy as it threatens to undermine economic growth and create significant risks to human welfare. The global financial community should prepare for a wide range of potential climate-related risks and impacts that may affect the financial system including extreme weather conditions and natural disasters. The phenomenon of changes to climate is already having a severe effect on global capital markets through the physical effects of severe weather events and the economic impact of reduced agricultural productivity. Thus, as the effects of climate change continue to worsen, it will become more costly and difficult for businesses to operate in a changing environment. This paper explores corporate institutions' activities contributing to climate change, the overall impacts of climate change on global capital markets, the development and success of new forms of financial products for mitigating climate issues, Green Bonds and Greenwashing and their implications in the corporate market.

Corporate Institutions' Activities and Climate Change

The environmental challenge of climate change is a pressing global issue with significant economic, social, and environmental implications. It is a global crisis that requires concerted action from multiple sectors such as governments, civilized society, investors, and corporate in order to prevent its worst consequences. Corporate institutions and other sectors face a number of challenges towards climate change including the need to develop strategies to address its impacts as well as to become more efficient in their use of resources. These challenges that they face include the need to reduce emissions of greenhouse gases, reduce waste, improve resource use, and promote the adoption of sustainable business practices.

The corporations that are most vulnerable to the impacts of climate change are those that have large populations, particularly if they are located in high-risk areas such as the tropics with high flooding risk. Moreover, restrictions applied by governments such as the imposition of a carbon tax will also have an impact on them as this can result in higher costs and reduced revenues leading to a reduction in corporations' profitability and growth prospects. This can be avoided by taking measures to ensure that the companies are able to adapt to the new conditions and adopt the necessary technological changes so that they can cope with the restrictions imposed by the government (Chenet, 2021).

Corporate Institutions' Role in Climate Change

In recent years, there has been an increasing awareness of the role corporate institutions play in contributing to climate change. Corporate involvement in climate change can range from large, multinational corporations to small business and non-governmental organizations that can have a significant impact on climate change by producing greenhouse gas emissions, purchasing goods and services that contribute to the change in climate, or engaging in other activities that can contribute to climate change such as the usage of natural resources and impacts of climate change. The use of natural resources especially fossil fuels is one of the largest contributors to climate change. This is due to the fact that these resources contribute to the release of carbon dioxide into the atmosphere that in turn affects the global climate.

Additionally, they are also responsible for causing atmospheric pollution and releasing pollutants into the air. This pollution is harmful to human health and the environment and contributes to a greenhouse effect which leads to global warming (Seljom et al., 2011). Furthermore, the rapid development of industrial societies has led to the emissions of significant quantities of greenhouse gases such as methane, carbon dioxide, and nitrogen oxide, which cause climate change. Emissions of greenhouse gases from industrial processes account for a significant fraction of human-caused emissions into the atmosphere. While various individual industrial activities may produce emissions that are individually insignificant, collectively they can account for a significant fraction of GHGs released in the atmosphere that leads to climate change.

Factors contributing to Climate Change

The increasing level of carbon dioxide in the environment has become a significant concern for many governments, scientific institutions, and businesses. With a higher global average temperature, climate change could potentially result in severe consequences for the world's environment. Research shows that greenhouse gas emissions from large companies are major contributors to climate change. They account for 30% of global emissions and they are growing faster than any other sector. In order to reduce their emissions and improve the future climate of our planet, businesses must take a more proactive role in their operations to reduce energy consumption (Winn et al., 2011).

The social and environmental externalities that result from human actions can be internalized by several different mechanisms that include the government's intervention through taxation. Government regulation can be an effective means to internalize the social and environmental externalities resulting from human actions. However, government regulation can have unintended consequences such as increased social and environmental costs and decreased economic efficiency. Carbon taxes have been implemented in very few countries to control carbon emissions, however, most countries have no or very low carbon taxes. Furthermore, fossil fuel subsidies continue to be widely prevalent and inhibit the adoption of renewable energy sources. As a result, the corporate

sector is increasingly attempting to internalize externalities. Therefore, government regulation of markets and the economy must be carefully implemented to avoid undesirable consequences (Schoenmaker & Schramade, 2018).

In conclusion, corporations need to step back and evaluate their operations from an environmental standpoint by making a serious commitment to renewable energy and conservation. By taking these steps, businesses can play an important role in mitigating climate change and preserving our environment for future generations. Nonetheless, humans, as the inhabitants of the planet Earth, are at the peak of climate change caused due to corporate institutions' activities that have resulted in endangering food security by damaging weather-changing conditions. Similarly, other anthropogenic impacts such as flooding are certainly been disastrous which is an irreversible climate change condition putting many countries at risk (Weinhofer & Hoffmann, 2010). Moreover, climate change has caused a major rise in global temperatures characterized by constant changes that have led to a rise in the cost of operations in most corporations.

Impacts of Climate Change on Global Capital Markets

Climate change has the potential to cause wide-ranging disruptions in global capital markets. Its physical impacts are already being felt by economies around the world and are expected to become more severe in the coming decades. The economic impacts of climate change are also expected to increase as households and businesses incur costs from damage and adaptation. For instance, commercial fishing sector is threatened the most as climate change affects fish and their habitats. Climate change affects not only the fisheries themselves but also the ways fishermen engage with their environment and communities. In recent decade, the fishing industry has faced climate change and impacted its revenue and profitability negatively due to global warming and sea level rise. In addition, climate change is likely to have distinctive impacts on financial stability as it can affect the value of assets and the functioning of global financial markets (Pagnottoni et al., 2022). In addition, climate change is a problem worldwide that is impacting the capital markets in many ways with both insurers and asset managers reporting that they are seeing increasing premiums and potential divestment from assets that could be impacted by global warming (Alessi et al., 2022). They report that their businesses are being harmed by the increasing frequency and severity of extreme weather events.

Some of the key effects on insurers are extreme weather events, which lead to claims, liabilities, and higher premiums as well as potential loss of market share to more competitive and aggressive marketers and disruption to supply chains. On the other hand, asset managers are seeing a rise in investors asking about how climate change could impact their portfolios and more clients want to take climate change into account when making investment decisions. These impacts have important implications for asset pricing and long-term financial performance. The future impacts of climate

change will also result in greater volatility in financial markets and greater potential for crises that would further disrupt global capital markets by reducing economic growth and causing damage to infrastructure. Climate change risks to infrastructure are becoming increasingly severe as the frequency and intensity of extreme weather events such as floods, heat waves, and storms continue to rise. These climate risks threaten the safety and functionality of critical infrastructure including transportation systems, power grids, and water treatment plants that can lead to increased energy consumption and related emissions. Moreover, the effects are more likely to be most severe in low and middle-income countries as they have fewer resources to adapt to these changes and are more vulnerable to extreme weather (Thistlethwaite, 2015).

The source of risk and uncertainty in global financial markets is significant as the risk of extreme weather events increases, supply chains deteriorate and businesses are forced to undertake costly adaptations to cope with the severe impacts of climate change. Climate change could have a significant impact on the stability and volatility of the financial sector if businesses experience severe losses due to extreme weather conditions or require expensive adaptations to the impact of climate change. They range from short-term risks of natural disasters to long-term risks associated with shifts in resource availability and changes in government policy. While the transition to a low-carbon economy at the global level presents new opportunities for investors seeking exposure to renewable energy stocks, investors look for long-term growth in green industries and companies with environment-friendly corporation models (Burch, 2010). To achieve that, reducing carbon emissions and strengthening resilience to climate change are both critical components of any strategy in any sector including corporate institutions to manage risk in global capital markets (van Benthem et al., 2022).

Critical Factors for the Development and Success of New Forms of Financial Products

The market for new financial products to mitigate climate change is growing rapidly, as investors seek to make money while combating global warming. The demand for these products is driven by the recognition that they are an efficient way to reduce carbon emissions. This growing market creates many opportunities for businesses around the world to develop new forms of financial products aimed at financing the implementation of green projects. One of the important effective forms of financial approach for the development of financial products is long-term value creation (LTVC), which includes creating enough space to grow the company through acquisitions or licensing to explore how corporations' financial system can move from a traditional investment to LTVC that optimizes financial value at the expense of risk. Following are discussed the six conditions as mentioned in the book "Principles of Sustainable Finance" for investing in LTVC:

Long Investment Horizons

Long Investment Horizons (LIH) is the amount of time during which investors maintain the value of their investment. Longer LIHs tend to have lower returns but they offer more protection against potential market fluctuations that allow investors to prefer investment strategies that yield a lower return than those that provide more regular income.

Active Management in Concentrated Portfolios

Active management in concentrated portfolios involves actively managing the equity or bond proportion of a portfolio and the mix of the two components in order to achieve a desired-risk adjusted return. The purpose and objective of active management are to outperform the market by finding managers who outperform the market to add value to a portfolio by identifying value-added opportunities and executing in order to maximize the return on capital.

Effective Engagement with Companies

The use of engagement practices such as targeted introductions and meetings for companies is one of the most important ways to build relationships and strengthen business relationships. Corporations can improve their engagement with other companies by implementing a variety of methods including joint ventures, partnerships, and strategic alliances.

Performance Analysis of Value Added in the Real Economy

The realization of the value added of LTVC is equivalent to the aggregate of the contribution of each component. Since each component contributes a unique asset to the overall value added, the impact of each one can be measured using a ratio of contribution to the total value added.

Long-term Alignment of the Mandates of Asset Owners and Asset Managers

The long-term alignment of the mandate of an asset manager is to maximize the value of its assets while that of an asset manager is to maximize returns for its clients. Since there is a strong correlation between the economic performance of asset owners and the returns of asset managers, it is essential that they be aligned over the long term.

Keeping the Investment Chain Short

It is a significant principle of LTVC that the investment chain should be kept as short as possible to minimize the risk of political or economic interference. This will reduce the amount of backtracking, which can improve the efficiency of the policy implementation process. This means that investments made by multilateral institutions and governments should be made only when there is a clear and established mandate and no other competing interests at stake (Schoenmaker & Schramade, 2018).

Governments and companies around the World have begun to set ambitious targets to reduce carbon emissions and pollutants from their operations. In particular, new financial products have been created to help companies and investors make investments in sectors that benefit the environment and to facilitate the development of new technologies that can minimize the risk of carbon emissions (Solecki et al., 2015). To achieve this goal of mitigating climate change and its impacts, many corporations are now looking for ways to make a positive impact and have invested in innovative financial products to help them accomplish this. One such form of finance is investing in renewable energy. This investment would provide a number of benefits including the ability to minimize the severe effects of climate change and generate income or reliable revenue for the investor as well as generate green energy in the process.

Green Bond as the New Climate-related Product

As the climate crisis continues to escalate, the inhabitants of this planet see a greater push for businesses to adopt sustainable practices. Therefore, in order to combat climate change, many companies have turned to invest in green bonds. The Green Bond is one of the leading instruments in the climate finance landscape that is a form of debt issued by a corporation or organization that aims to fund green projects or initiatives (Bank, 2014). However, the process of issuing green bonds can be complex and there are a number of principles that should be followed in order to ensure that the debt instrument is executed in a way that is consistent with the terms of the bond itself. The most important principles include the assurance of the sustainability of the project being financed, the low-interest rate on the debt instrument, transparent issuance of the green bond, responsible environmental performance, and promotion of sustainability (Schoenmaker & Schramade, 2018).

Bond issuers are exploring new ways to market their products to a wider audience in the face of increased investor interest in climate-related investments. This is due to the fact that green bond premiums represent a new and innovative way for investors to access climate risk while maintaining the liquidity, stability, and security of traditional bond markets (Zerbib, 2016). Moreover, Green Bonds have several advantages over traditional debt and equity products. These include that they are globally accessible and can be used to finance a wide range of climate-related projects that offers climate-related investments for investors in the energy market.

The Green Bond market is growing at a rapid pace and has the potential to play an important role in

financing climate change mitigation and adaptation initiatives. This is because the issuance of Green Bonds typically carries a lower credit rating than traditional bonds, providing investors with an opportunity to purchase low-risk and climate-related securities. Issuers and investors invest in high-quality climate projects without having to shoulder the associated risk to achieve greater returns while also supporting environmentally responsible investment (Piñeiro-Chousa et al., 2021). However, the challenge for green bond issuers is to find ways to reach a wider audience and differentiate their products from others in the market. An important way issuers can use to reach a wider audience is through the development of new marketing campaigns that emphasize environmental and social responsibility. Overall, the green bonds market is thriving rapidly and issuers are innovating to find new ways to maximize their audience reach.

Greenwashing

An unfortunate fact is that many companies are resorting to Greenwashing in order to stay afloat during this tough economic situation. Greenwashing is the deceptive practice of claiming to do something environment friendly where truly the actions taken may not be as responsible and sustainable or environmentally friendly as claimed. Many claims to do things like reduce energy consumption, use sustainable products and recycled materials, or create less waste when in reality it can be inversed actions or not as much as they show or should be doing. For example, a company may claim to use recycled materials in their products, but if they can do so marginally or if the materials are not actually recycled, this is considered Greenwashing. However, the economic climate has been tough for many businesses and it looks like Greenwashing is becoming more popular as a way to try and stand out.

The current climate crisis is one of the most serious environmental challenges the world faces and it is clear that corporations are responding to this by making a real effort to improve their environmental practices (Kalesnik et al., 2020). Nonetheless, some organizations or corporations are still trying to greenwash their products by using misleading or inaccurate information. Unfortunately, there is also a growing trend of companies trying to market themselves as eco-friendly by using tactics that have nothing to do with the environment but cause environmental degradation. However, this method has been criticized for not being effective at promoting sustainability and the use of environment-friendly products.

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