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# THE ROLE OF THE FINANCIAL SECTOR IN COMBATING THE CLIMATE CRISIS

## Introduction

This essay begins by first giving definition to the climate change with economical context to the crisis. Finally, within this part, the role of the financial sector in addressing the crisis will be explored. The second part aims to present a review of the literature considered in the scope of the argument. Finally, the third part will address the feasibility of the solutions explored in the previous section, giving examples where relevant.

## Definition in context

Climate change, or the 'climate crisis' is defined as the crisis of our time. According to the world bank, the global climate is changing drastically at a pace that has never before been observed in the world's history. What is understood as the *changes in climate* comprises of globally increasing temperatures, rising sea levels, extreme weather occurrences and consequently, disaster scenarios resulting in fatal

<sup>&</sup>lt;sup>1</sup> Practical Action 'What is the climate crisis?' < <a href="https://practicalaction.org/climate-crisis/">https://practicalaction.org/climate-crisis/</a> Accessed 22 December 2023

<sup>&</sup>lt;sup>2</sup> ibid

<sup>&</sup>lt;sup>3</sup> World Bank Group, Climate Change Knowledge Portal 'What is Climate Change?' < <a href="https://climateknowledgeportal.worldbank.org/overview">https://climateknowledgeportal.worldbank.org/overview</a>> Accessed 22 December 2023

incidents.<sup>4</sup> As such, the climate crisis is also referred to as a climate 'emergency'.<sup>5</sup>

The climate emergency is responsible for unprecedented disruptions to the global economy. The International monetary fund (IMF) records a few examples from around the world;<sup>6</sup> the 2011 floods in Thailand which accounted for a 10% loss to GDP,<sup>7</sup> the California wildfires of 2018 which cost around \$350 billion.<sup>8</sup> Disasters like this caused by climate change are known to shock the economy and financial markets, resulting in wide displacement of working class people,<sup>9</sup> loss of factors of production and huge financial loss.<sup>10</sup>

The central argument is that the finance sector has a role in addressing the climate crisis. Organisations such as the European central bank warn that without care, the finance sector will suffer great risks if no substantial action is taken.<sup>11</sup> The finance industry is argued to have a double responsibility of curbing the presently unfolding effects of the crisis, and facilitating the shifting of the world economy into one that centres low carbon activity.<sup>12</sup> To this end, over the years, strategies have

 $\underline{economy\#:\sim:text=Every\%20 year\%2C\%20 climatic\%20 disasters\%20 cause, on \%20 average\%2C\%20 per\%20 year).}$ 

<sup>&</sup>lt;sup>4</sup> Ibis. n2

<sup>&</sup>lt;sup>5</sup> Ibid. n2

<sup>&</sup>lt;sup>6</sup> International Monetary Fund, 'Equity Investors Must Pay More Attention to Climate Change Physical Risk' < <a href="https://www.imf.org/en/Topics/climate-change/climate-and-the-">https://www.imf.org/en/Topics/climate-change/climate-and-the-</a>

<sup>&</sup>gt; accessed 22 December 2023

<sup>&</sup>lt;sup>7</sup> ibid

<sup>&</sup>lt;sup>8</sup> ibid

<sup>&</sup>lt;sup>9</sup> UNCHR, 'Climate change and disaster displacement' < <a href="https://www.unhcr.org/uk/what-we-do/build-better-futures/environment-disasters-and-climate-change/climate-change-and">https://www.unhcr.org/uk/what-we-do/build-better-futures/environment-disasters-and-climate-change/climate-change-and</a> accessed 23 December 2023

<sup>&</sup>lt;sup>10</sup> Oxford university, 'Multi-billion-dollar risk to economic activity from climate extremes affecting ports: Oxford report' < <a href="https://www.ox.ac.uk/news/2023-07-20-multi-billion-dollar-risk-economic-activity-climate-extremes-affecting-ports-oxford">https://www.ox.ac.uk/news/2023-07-20-multi-billion-dollar-risk-economic-activity-climate-extremes-affecting-ports-oxford</a> accessed 23 December 2023, Reuters, 'Global economic losses from extreme weather could hit \$5 trillion, Lloyd's say's < <a href="https://www.reuters.com/business/environment/global-economic-losses-extreme-weather-could-hit-5-trln-lloyds-2023-10-11/">https://www.reuters.com/business/environment/global-economic-losses-extreme-weather-could-hit-5-trln-lloyds-2023-10-11/</a> accessed 23 December 2023.

<sup>&</sup>lt;sup>11</sup> European Central Bank, 'Climate change and the financial Sector' < <a href="https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200227\_1~5eac0ce39a.en.html">https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200227\_1~5eac0ce39a.en.html</a> accessed 22 December 2023

<sup>&</sup>lt;sup>12</sup> Bank Track, 'Climate Change & the financial sector: An agenda for Action' < <a href="https://www.banktrack.org/download/climate\_change\_and\_the\_financial\_sector\_an\_agenda\_for\_action\_full\_rep\_ort\_/wwf\_allianz\_climatechange\_report\_june2005.pdf">https://www.banktrack.org/download/climate\_change\_and\_the\_financial\_sector\_an\_agenda\_for\_action\_full\_rep\_ort\_/wwf\_allianz\_climatechange\_report\_june2005.pdf</a> accessed 23 December 2023

been developed. The next portion of the article aims to explore three of such developments in the form of reviewing literature associated with them. These are green finance, climate risk assessment and ESG or Environmental and social governance.

#### Literature review

This section discusses a broad range of literature relating to the role of the finance sector in tackling the climate emergency. The following section will analyse their effectiveness. The areas of focus as mentioned, are green finance, climate risk assessment and ESG's

## green finance

To begin with, green finance, or 'greening finance', <sup>13</sup> relates to measures such as regulation and organisational tools aimed at urging financial firms to take responsibility for climate change, by way of targeted investments and in house risk assessment programs, in order to mobilise the industries resources towards mitigating the effects of climate change. <sup>14</sup>

In regard to this essay, a primary study to be consulted is a briefing report drafted by the European Parliament, created to assist members of parliament in climate aware legislative work.<sup>15</sup> Relevant contributions of this resource include the measurement of the finance related output of EU bodies at Parliamentary, i.e. legislation, and Industry i.e. European central bank.<sup>16</sup> These contributions are well supplemented by myriad external links leading to statistical reports and

<sup>&</sup>lt;sup>13</sup> international Platform on Sustainable Finance, 'Development and Importance of Green and Sustainable Finance in the EU' (2019)

<sup>&</sup>lt;a href="https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/679081/EPRS\_BRI(2021)679081\_EN.pdf">https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/679081/EPRS\_BRI(2021)679081\_EN.pdf</a> accessed 14 Aug 2024

<sup>14</sup> Ibid

<sup>15</sup> Ibid

<sup>16</sup> Ibid

further detailed contributions.<sup>17</sup> This resource stands to benefit the central analysis of this essay as it gives a well-rounded view of the noteworthy financial measures taken in the EU towards the climate emergency. This is of priceless value, given the pace setting role of the EU in addressing the emergency in the global arena.<sup>18</sup> Nonetheless, due the fact that it was published nearly 5 years ago, much of the information stands to be more indicative than accurate. In addition to this is a similar document from the UK with statistical value.<sup>19</sup>

Supplementing this report is an article by Fan and Zhang, giving an evaluative perspective on the effectiveness of green finance on economic growth.<sup>20</sup> Although this paper is based on the Chinese market, it provides globally applicable perspectives, and the China centred analysis provides a strong comparative point that will prove useful in the analytical portion that follows this portion.

#### Climate risk assessment

Climate risk assessment may be described as the evaluation of a firm's operations against the possibilities of their actions being impacted by or causing harm in their communities and places of residence.<sup>21</sup>In the financial sector, this relates more specifically to financial firms' ability

<sup>&</sup>lt;sup>17</sup> For example,

<sup>&</sup>lt;sup>18</sup> The Royal Society of Edinburgh, 'As Europe sets the pace on the environment, the UK's four nations struggle to keep up' (RSE, 10 Jan 2024) <a href="https://rse.org.uk/resource/as-europe-sets-the-pace-on-the-environment-the-uks-four-nations-struggle-to-keep-up/">https://rse.org.uk/resource/as-europe-sets-the-pace-on-the-environment-the-uks-four-nations-struggle-to-keep-up/</a> accessed 12 Aug 2024

<sup>&</sup>lt;sup>19</sup> UK Government, *UK Green Financing Allocation and Impact Report 2023* (HM Treasury, 2023) <a href="https://www.gov.uk/government/publications/uk-green-financing-allocation-and-impact-report-2023">https://www.gov.uk/government/publications/uk-green-financing-allocation-and-impact-report-2023</a> accessed 12 Aug 2024

Wenjing Fan and Chujingwen Zhang, 'Does Green Finance Affect Economic Performance? Growth and Crowding-Out Consequences', College of Economics, Hangzhou Normal University, Hangzhou, China C40 Knowledge Hub, ''Climate Change Risk Assessment Guidance', (C40 Knowledge Hub, Aug 2018)<a href="https://www.c40knowledgehub.org/s/article/Climate-Change-Risk-Assessment-Guidance?language=en\_US#:~:text=Climate%20risk%20assessments%20identify%20the,action%20and%20investment%20in%20adaptation> accessed 13 Aug 2024</a>

to conduct these assessments against preexisting, finance related goals and variables.<sup>22</sup>

Considering this, climate assessment analysis in this paper primarily utilises a resource which outlines internationally agreed upon principles to guide firms with direction.<sup>23</sup> This resource proves valuable in that it is endorsed by global actors such as the world bank group, the African development bank group, and the Asian Infrastructure investment bank. The collaboration of different global powers here suggests a high level of global collaboration and thus the harmonisation of standards. This may allow for goals to be more effectively reached.

## Environmental social governance

ESG, or environmental and social governance relates to the incorporation of environmental and social factors in the governance structure of financial firms, shaping it towards wider and more ethical consideration.<sup>24</sup> These may include the stewardship of shared land, given the high financial power of private firms,<sup>25</sup> may additionally be seen in the production processes of a firm shaping to offer climate conscious packages. At the core of ESG, high the socio-economic power of financial firms is leveraged and nudged to engage in better environmental and social decision making concerning the firm, its products the sector at large and to extents, state governments also.

<sup>&</sup>lt;sup>22</sup> International Finance Corporation, 'Climate Assessment for Financial Institutions' (World Bank Group, 2024)

 $<sup>&</sup>lt; \underline{https://www.ifc.org/en/what-we-do/sector-expertise/financial-institutions/climate-finance/climate-assessment-for-financial-}\\$ 

institutions#:~:text=The%20Climate%20Assessment%20for%20Financial,for%20Climate%20Mitigation%20Finance%20Tracking> accessed 16 Aug 2024

<sup>&</sup>lt;sup>23</sup> https://www.ifc.org/content/dam/ifc/doc/mgrt-pub/mdb-idfc-mitigation-common-principles-en.pdf

<sup>&</sup>lt;sup>24</sup> Corporate Governance Institute, 'What is ESG and why is it important?' (Corporate Governance Institute, 2024) <a href="https://www.thecorporategovernanceinstitute.com/insights/guides/what-is-esg-and-why-is-it-important/">https://www.thecorporategovernanceinstitute.com/insights/guides/what-is-esg-and-why-is-it-important/</a>

<sup>&</sup>gt; accessed 16 Aug 2024

<sup>&</sup>lt;sup>25</sup> Ibid

One document to be used in the ESG portion of the latter discussion is the a's guidance to environmental social governance in the UK.<sup>26</sup> The FCA is the financial regulator of the UK. By publishing this guide, in a regulatory capacity it helps to shape the ESG direction and action of firms in ways such as managing sustainability marketing and products, as well as disclosure of sustainability reports by firms. While it can be said that this document is a key tool in the ESG practice in the UK, it is more focused on guidelines and yields less analysis of actual ESG impact on mitigating climate change.

As a result, this is supplemented by articles such as Dan Daugaard's work on emerging themes in ESG investing.<sup>27</sup> This measures the climate and returns impact on a key ESG product, ESG investing. ESG investing will form the main ESG point of analysis.

## Analysis of the feasibility of each measure

Following the literature review, this section engages the main query of the essay: analysing the extent to which the financial sector is mitigating the climate crisis. Using the previewed areas of climate finance measures, this section will consider the feasibility of each in turn.

To begin with, on way that the finance sector can be said to be mitigating the climate crisis is through the popularisation of green finance in the industry at large. To recap, green finance may be described as the use of financial products and measures, in a climate conscious manner or form in order to address various environmental

<sup>&</sup>lt;sup>26</sup> Financial Conduct Authority, 'Environmental, Social and Governance Sourcebook' (Release 39, August 2024) < <a href="https://www.handbook.fca.org.uk">www.handbook.fca.org.uk</a> accessed 14 Aug 2024

<sup>&</sup>lt;sup>27</sup> Dan Daugaard, 'Emerging new themes in environmental, social and governance investing: a systematic literature review' Accounting & Finance 60 (2020) 1501–1530

crisis concerns.<sup>28</sup> One of such means is for example, green bonds. Green bonds may be described as fixed income investments, issued by public and or private firms, with the goal of raising capital for a particular promised climate focused goal/implementation.<sup>29</sup> Examples of such implementations include renewable energy projects such as funding solar/ wind energy,<sup>30</sup> energy efficiency projects which aim to improve energy use in buildings,<sup>31</sup> and the reinventing of social infrastructure such as public transport by means of introducing climate friendly electric vehicles.

Next, considering the extent of feasibility of this measure, in a recent UK green financing report, it was reported that green financing in the UK facilitated the installation of over 200,000 electric vehicle charging points, <sup>32</sup> and funded the planting of over 1,000,000 trees. These are measures seek to mitigate carbon output. The large numbers thus suggest that financial firms leveraging their funding power to improve environment quality and access to conscious technology is well within their means as it is their primary purpose to generate revenue, thus suggesting green finance is feasible and sustainable for the finance sector. Nonetheless, the revenue potential of green finance is well known in the investment space,<sup>33</sup> and as such, the original purpose of revenue generating mechanisms such as green bonds can be said to be at risk of capture, possibly giving rise to green finance campaigns that are less greening the society and more 'green washing',<sup>34</sup> therefore risking environmental impact for private gains.

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<sup>&</sup>lt;sup>28</sup> N-12

<sup>&</sup>lt;sup>29</sup> Investopedia, 'Green Bond: Types, How to Buy, and FAQs' (Investopedia, April 27, 2024) < <a href="https://www.investopedia.com/terms/g/green-bond.asp">https://www.investopedia.com/terms/g/green-bond.asp</a> accessed 16 Aug 2024

<sup>30</sup> N-19

<sup>31</sup> Ibid

<sup>&</sup>lt;sup>32</sup> Ibid, pg. 4

<sup>&</sup>lt;sup>33</sup>Adam Lowenstein, 'Black rock is Profiting Off the Climate Crisis' (Jacobin, April 2022) <</p>
<a href="https://jacobin.com/2022/04/blackrock-climate-crisis-finance-fossil-green-esg-investments">https://jacobin.com/2022/04/blackrock-climate-crisis-finance-fossil-green-esg-investments</a> > accessed 16
August 2024

<sup>&</sup>lt;sup>34</sup> EU

Next, another vehicle of the financial sector with view to mitigating climate concerns is that of climate risk assessments. To recap, climate risk assessments relate to the practice of financial firms weighing the climate risks immediate to their customer base and place of establishment, against the ways they may impact their services. This enables them to accurately prioritise their climate control strategies and direct their investments. Examples of climate risks necessary to necessarily be weighed by firms In this scenario include physical risks such as the destruction of assets belonging to households and corporations which may in turn disrupt banking operations due to unexpected loss of incomes etc. 37

Moving on, climate risk assessment can be considered a feasible means by which firms address the climate crisis. This is because regular practice of this can aid a banking firm in organising their investments, and in some cases utilising trends and predictions to better absorb climate shocks to assets and incomes. In the UK for example, the Climate Change Act (CCA) requires that the government conduct an assessment on a regular basis,<sup>38</sup> thus making available some geographically unique information to further assist finance firms in their own calculations.<sup>39</sup>

The feasibility of this measure is further highlighted by the global standardisation of variables to be calculated,<sup>40</sup> enabling financial

<sup>35</sup> N-20

<sup>&</sup>lt;sup>36</sup>C40 Knowledge Hub, 'Climate Change Risk Assessment Guidance and Screening' (C40, 2024) < https://www.c40knowledgehub.org > accessed 16 Aug 2024

<sup>&</sup>lt;sup>37</sup>PIERPAOLO GRIPPA, 'Climate Change and Financial Risk' (IMF, Dec 2019) < https://www.imf.org/en/Publications/fandd/issues/2019/12/climate-change-central-banks-and-financial-risk-grippa> accessed 16 Aug 2024

<sup>&</sup>lt;sup>38</sup> Climate Change Act 2008

<sup>39</sup> Ibid

<sup>&</sup>lt;sup>40</sup> International Finance Club, 'COMMON PRINCIPLES FOR

firms to move in a harmonised and monitored way. Additionally, this speaks to the need for global cooperation in the face of a global crisis. On the evaluative side of this point, however, is that it may be difficult to say when this global cooperation may truly be achieved. It Is well known that countries with higher financial power mostly limit their climate effort to their immediate environment, and to the detriment of others. Therefore, beyond the setting of abstract standards to guide global efforts at climate risk assessment, it remains to be seen whether i.e., the more developed countries of the global north, have a real interest in harmonising with the global south, to truly, feasibly tackle a global issue.

The final measure of financial sector action towards mitigating climate change is the phenomenon of Environmental, Social Governance (ESG). To recap, this may be defined as the incorporation of environmental, social and governmental considerations and functions in the organisational structure of a finance firm.<sup>43</sup> This means of climate mitigation can be said to leverage the organisational size<sup>44</sup> and spending power of finance firms to formulate their decision-making power into one more policy oriented, towards climate efforts.<sup>45</sup> The focus of this analysis is the environmental aspect of this formulation. As such ESG related solutions for climate change in banking include i.e., the making and certification of 'ESG' conscious financial products.<sup>46</sup> This may look like

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CLIMATE MITIGATION FINANCE TRACKING' (October 2021)

https://www.ifc.org/content/dam/ifc/doc/mgrt-pub/mdb-idfc-mitigation-common-principles-en.pdf accessed 16 Aug 2024

<sup>&</sup>lt;sup>41</sup> Ibid

<sup>&</sup>lt;sup>42</sup> Clipped, 'The unequal geographies of climate finance: Climate injustice and dependency in the world system' Political Geography 99 [2022] 102769

<sup>&</sup>lt;sup>43</sup> N-24

<sup>&</sup>lt;sup>44</sup> Multinationals

<sup>&</sup>lt;sup>45</sup> CFA Institute, 'ESG Investing Overview' (CFA Institute) <a href="https://www.cfainstitute.org/en/rpc-overview/esg-investing">https://www.cfainstitute.org/en/rpc-overview/esg-investing</a> accessed 16 Aug 2024

<sup>&</sup>lt;sup>46</sup> RFI Global, 'The Future of ESG in the UK Financial Services Sector' (RFI Global) <a href="https://rfi.global/the-future-of-esg-in-the-uk-financial-services-sector/">https://rfi.global/the-future-of-esg-in-the-uk-financial-services-sector/</a> accessed 16 Aug 2024

environmentally factored finance products, such as 'green bonds' as prior explored.

On the one hand, ESG as a climate effort can be argued to be feasible. One reason for this is that, as ESG relates to the decision-making facility of finance firms, in the application to climate concerns, this may encourage firms to make more environmentally conscious decisions<sup>47</sup> in regard to i.e. who they may work with, such as renewable energy firms as opposed to fossil fuel powered firms.

Another reason why ESG in finance efforts against the climate may prove feasible is due to the fact that it may be considered a signal of particular values of a company, encouraging like to follow like, eventually building a trend towards climate conscious finance.<sup>48</sup> While this employment of signalling may sometimes lead to cases of green washing, i.e. through ESG ratings,<sup>49</sup> In places like the UK, finance regulators keep careful watch, as well as provide detailed guidance on exactly how ESG business should be conducted.<sup>50</sup>

Nonetheless, in the face of these benefits, it may be considered that ESG may not be a feasible option for climate control. The reasoning here relates to the potential volatility of ESG measures such as ethical investing. For example, the financial times reports that before the covid outbreak, investors were crowding to the invention, however, in 2023, it was seen that due to high living costs, many investors pulled out prior to the maturity of their funds.<sup>51</sup>

<sup>&</sup>lt;sup>47</sup> Finance Alliance, '7 Benefits of ESG Investing' (Finance Alliance)< <a href="https://www.financealliance.io/7-benefits-of-esg-">https://www.financealliance.io/7-benefits-of-esg-</a>

 $<sup>\</sup>frac{investing/\#:\sim:text=ESG\%20stands\%20for\%20environmental\%2C\%20social,positioned\%20for\%20long\%2Dterm\%20success>\ accessed\ 16\ Aug\ 2024$ 

<sup>&</sup>lt;sup>48</sup>Roula Khalaf, 'What is the point of ESG ratings?' *Financial Times* < <a href="https://www.ft.com/content/9082d21b-dde5-4228-abfe-d4e4cd0f9b12">https://www.ft.com/content/9082d21b-dde5-4228-abfe-d4e4cd0f9b12</a> accessed 16 Aug 2024

<sup>&</sup>lt;sup>49</sup> Ibid

<sup>&</sup>lt;sup>50</sup> N-26

<sup>&</sup>lt;sup>51</sup> Laura Noonan, 'Why Asset Management's Green Revolution Stalled' *Financial Times* (London, 6 August 2023) https://www.ft.com/content/7ae8c97e-5814-4ae3-a3a7-98ec4fe76e0d accessed 16 Aug 2024

#### Conclusion

In conclusion, it is recapped that climate change has been referred to as the crisis of our time. The increase in weather extremes, usability of natural resources, and the unpredictable and increasing frequency of natural disasters continually threaten the labour productivity of a country, job security, personal and corporate assets and the quality of life lived by all. In the middle of this all, a key industry the financial sector, is increasingly looked to in order to step into a more active role in mitigating the climate catastrophe. This central query of this essay is the treatment of the argument; to what extent can the financial sector play a role in addressing the clime crisis?

To this end, the essay regarded three key measures taken by the financial sector, with view to evaluate their feasibility in current conditions. These measures are green finance, climate risk assessment, and environmental social governance. First, a literature review was conducted, in order to present and assess of some key sources towards the building of analysis that would support the discussive section. Some highlights of this portion include; the well cited EU and UK reports which meticulously tracked and evidenced the impact of green finance in their respective jurisdictions, the document containing a standardisation of concerns when calculating climate risk assessment, particularly valued for its sense of global coperation, and finally the UK FCA guide to monitoring the ESG implementation of banks, noting the ongoing public role of regulation in the face of banks purporting noble climate causes.

The final section of this paper dealt with the main discussion on feasibility, evaluating all through. Green finance to begin with, while praised for its practical and measurable impact in restructuring society for climate conscious operation, fails in that it is largely seen by investors as more of a revenue generating incident. Next, climate risk assessment, while becoming a firm part of UK legislation, and achieving a sense of global financial cooperation through the formulation of internationally applicable standards, is weak in that it is merely an abstract measure towards necessary global corporation on a truly global issue. And at last, ESG's may be considered innovational in that they leverage firms' known organisational and revenue power to address climate through changing decision-making frameworks, however their transformative potential is offset by the volatility of its products, as well as the fact that ESG has merely been reduced to an empty green washing signal.

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