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REPORT OCTOBER 2020

FIRE SALE

MANAGING THE GEOPOLITICS OF CLIMATE-RELATED FINANCIAL RISK IN THE AGE OF COVID

TAYLOR DIMSDALE, CLAIRE HEALY AND DILEIMY OROZCO





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About E3G

E3G is an independent climate change think tank accelerating the transition to a climate safe world. E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change. E3G works closely with like-minded partners in government, politics, business, civil society, science, the media, public interest foundations and elsewhere.

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EXECUTIVE SUMMARY

This paper argues that the risk climate change poses to the stability of the global financial system threatens to spill over into international affairs and increase geopolitical tensions, if not managed.

To date, dialogue on climate-related financial risk has focused mostly on the private sector, and specifically how companies should prepare for and respond to rising insurance premiums and stranded fossil assets. This has been piecemeal and has patched over cracks and gaps in the global financial architecture. Countries have cooperated to the extent they have shared research and technical approaches to the risks that corporations will face as climate impacts and climate policies begin to bite.

However, 78 per cent of global fossil fuel reserves are owned by governments, and it will be governments that face growing sovereign risk as they are forced to respond to both the physical impacts of climate change and to the loss of revenue from stranded fossil assets. Therefore, planning for better financial risk management of climate change cannot be divorced from wider geopolitics.

We focus on two principal ways that the increase in and disclosure of climate-related financial risks could become geopolitical problems. First, physical climate impacts and climate policy implementation will both increase **sovereign credit risk** and the risk of sovereign defaults. Research has shown that higher climate risk vulnerability leads to significant rises in the cost of sovereign borrowing, with premia on sovereign bond yields amounting to around 275 basis points for economies highly exposed to climate risk. For developing countries this could lead to capital flight and inability to raise investment needed to reduce carbon emissions or increase resilience. Bailouts will be needed, leading to disputes over which countries are supported and under what terms. The G20 is not immune to risks related to sovereign debt – South Africa’s coal-heavy state-owned energy utility Eskom, for example, has debts of \$29.3 billion, much of which is guaranteed by the government at 18 per cent of the annual state budget.

Second, as ambitious climate policies are put in place investors will abandon fossil fuels and high carbon assets. These **assets will become stranded** in a stock of unburnable carbon. This will reduce public revenue for middle income fossil



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exporters, which recent history suggests would lead to cuts in subsidies and potentially social unrest that may spread regionally. There may also be attempts by some states to offload these risks to more opaque jurisdictions that do not have strong climate regulations, creating transnational disputes over the rules for debt transparency. There have already been questions raised about the IMF stepping in to bailout Pakistan's debt, some of which originates from energy and infrastructure projects funded by China. The sale of the Swedish energy company Vattenfall's East German lignite business to a Czech firm, at below market value and under highly questionable circumstances, is a preview of troubles ahead.

The potential size of these risks has already been **exacerbated by the Covid-19 pandemic and the global debt crisis**. Many developing and middle-income countries have been hard hit from infections and the global economic slowdown, collapse of tourism sectors and credit downgrades. Downward pressure on already low oil prices is causing financial problems in the debt-burdened oil and gas sector and oil and gas exporting countries. There are also growing risks of "third round" impacts on social stability if currency depreciation, restrictions on food exports, lower food output and income losses in informal sectors lead to widespread food shortages mirroring 2007-2008 food price crisis.

Avoiding a scenario where disagreements on the rules for climate bailouts boils over into geopolitical tensions will require a much stronger degree of international cooperation than currently exists. The global community will need to decide on a new set of rules for how responsibility for climate risk is shared and managed between countries and institutions. More specifically, countries will need to agree on how to solve two critical problems: first, how to respond to sovereign risk from climate change, including **capital flight** from vulnerable regions that already need support in reducing emissions and increasing their resilience to impacts; second, how to improve **debt transparency** and prevent countries from spreading climate risk around or attempting to offload underperforming fossil fuel assets to opaque jurisdictions.

These scenarios are not mutually exclusive, and both will play out simultaneously. Climate impact and transition risk are correlated between countries - not just transmitted through the financial system. There will also need to be **consensus on the rules for climate risk disclosure and better monitoring of systemic risk**. Managing this requires much more vigorous supervision at odds with fragmented geopolitics and governance structures. The international architecture created after World War II to manage risks to the global financial system is not fit for purpose for managing climate risk.



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Covid-19 must be a wake-up call. We offer several recommendations for how the G20 and other international financial institutions (and their major sovereign shareholders) can use the Covid-19 recovery period to implement a robust reform agenda to address the discrepancy between the near-certainty of transition and physical risks from climate change and the failure to systematically consider and prepare for the catastrophic cost on financial stability, fiscal health and foreign relations.

The G20 should:

Strengthen Risk Reporting and Risk Mitigation

1. Make climate risk disclosure mandatory.
2. Implement carbon pricing and carbon market mechanisms.
3. Phase out fossil fuel subsidies by 2025 – as they committed to do in 2009.
4. Fully commit to a green recovery, and support developing countries to accelerate their energy transition as part of Covid-19 recovery as per the IEA and IMF Sustainable Recovery Plan for peak emissions.
5. Ask the IMF to accelerate the reform of their regulatory frameworks to incorporate climate-related financial risks– including Article IV surveillance, Financial Sector Assessment Program and debt sustainability framework.
6. Mainstream climate risk into macroeconomic planning and decision-making as per the Helsinki Principles.

Strengthen the Global Financial Architecture for Climate Risks

7. Set up a new Climate Risk Observatory to assess the social and economic impacts of insurance coverage gaps and risks of withdrawal of credit from vulnerable regions.
8. Agree a more efficient global debt restructuring mechanism, and a more granular view of green conditionality.
9. Take a wider view of fiscal space to include increased liquidity for development and concessional financial support, underpinned by a new issuance of Special Drawing Rights (SDRs) or callable capital.
10. Establish a Financial Stability Board (FSB) taskforce to develop a contingency plan for a green swan or climate-related Minsky moment, and report back with recommendations to India's G20 in 2022, including proposals for an incentive package for fossil dependent export countries.



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11. Work with China to speed up and scale up their efforts to green the Belt and Road Initiative.
 12. Make COP26 the COP that killed coal and where Development Finance Institutions (DFIs) announce an end to public financing of coal including export credits; and scale up emergent models to justly unwind carbon assets as part of recovery packages.

INTRODUCTION

Climate change is a risk to global financial stability. This is true whether the world fails or succeeds at implementing climate policies and targets.

Climate-related financial risk driven by climate policy success is known as **transition risk**. In this case, a rapid shift to a zero-carbon economy resulting from a combination of climate policies, technological innovation and changes in public preferences leads to the devaluation of fossil fuel assets which become stranded in a stockpile of 'unburnable' carbon.

On the other hand, failure to lower emissions and strengthen resilience of infrastructure, economies and social systems to climate impacts will lead to an increase in **physical risk**, driven by extreme weather events like droughts, floods, wildfires and heatwaves. These impacts are already leading to damage to infrastructure and insurance losses that are rippling through the financial system, for example through rising premiums¹.

These two scenarios are not mutually exclusive. In fact, they are both beginning to play out in parallel. A global transition towards a lower carbon economy is underway and has already led to rapid and dramatic revenue losses². There is also evidence that physical impacts from climate change are accelerating which is impacting financial and insurance markets³.

¹ <https://www.forbes.com/sites/energyinnovation/2019/05/22/the-global-insurance-industrys-6-billion-existential-threat-coal-power/#5016b18063c1>; AND <https://www.miamiherald.com/news/weather/hurricane/article243766772.html>; AND <https://www.bloomberg.com/news/articles/2019-03-12/insurance-rates-seen-rising-in-flood-prone-areas-with-trump-plan>

² See for example the loss by several major European utilities of half a trillion euros in 2013 due to overinvestment in fossil fuels. <https://www.economist.com/briefing/2013/10/15/how-to-lose-half-a-trillion-euros>.

³ <https://www.munichre.com/topics-online/en/climate-change-and-natural-disasters.html>



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The scale of this risk is immense

The Intergovernmental Panel on Climate Change has estimated that 2.7 degrees of warming could cost \$54 trillion by 2040⁴. Total losses in the Philippines from Typhoon Haiyan in 2013 were about 5 per cent of the country's economic output⁵. The cost of the Australian wildfires in 2019 is likely to top \$100 billion⁶. Cyclone Idai affected three million people in Malawi, Mozambique and Zimbabwe and cost projections were \$2 billion⁷. Looking to future projections, the residential property market in Florida could see a devaluation of up to \$80 billion, or 35 per cent, by 2050⁸.

Sharp and sudden asset write-downs resulting from policy changes could also represent a massive shift in capital allocation. As of 2018, there were 1,500 oil and gas firms worth \$4.65 trillion listed on stock exchanges, and 275 listed coal companies worth \$233 billion⁹. If these fossil reserves were abandoned by 2035 it would result in a financial loss of up to \$4 trillion¹⁰.

One-third of the current value of big oil and gas companies would disappear under a scenario where governments took action to limit global temperature rise to 1.5C¹¹. Fossil fuel lending has become a risky business. In June 2020 the oil giants Shell and BP wrote down nearly \$40 billion from the value of their oil and gas assets. Over the past year their market values were cut in half, wiping out more than €160 billion of investor equity¹². The loss of over half a trillion euros by the largest utilities in Europe between 2008-2013 due to a failure to anticipate the falling cost of renewable energy is a warning¹³.

⁴ <https://www.nytimes.com/2018/10/07/climate/ipcc-climate-report-2040.html>

⁵ <https://www.ft.com/content/d8199e65-5551-3828-b2bb-6016a75bf6ff>

⁶ <https://theconversation.com/with-costs-approaching-100-billion-the-fires-are-australias-costliest-natural-disaster-129433>

⁷ <https://www.theguardian.com/world/2019/apr/13/cyclone-idai-caused-2bn-of-damage-and-affected-millions-says-world-bank>

⁸ <https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts#>

⁹ <https://www.carbonbrief.org/why-fossil-fuel-divestment-wont-be-easy>

¹⁰ <https://www.nature.com/articles/s41558-018-0182-1>

¹¹ <https://www.ft.com/content/95efca74-4299-11ea-a43a-c4b328d9061c>

¹² <https://www.environmental-finance.com/content/analysis/fossil-fuel-lending-is-a-financial-stability-issue.html>

¹³ <https://www.economist.com/briefing/2013/10/15/how-to-lose-half-a-trillion-euros>



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Financial titans are sounding the alarm

Concerns about the impact that climate change will have on financial stability are not only coming from ‘responsible investors’ seeking to do good by improving environmental, social and governance (ESG) indicators. They are now widely shared by public and private financial actors including central bankers, finance ministries, asset managers and institutional investors. Case in point: the major multilateral development banks are on a collective mission to align their operations with the Paris agreement. JP Morgan Chase – the world’s largest lender to the fossil fuel industry¹⁴ – after sustained pressure from its shareholders and activists has announced its intention to align its portfolio and operations with the Paris goals¹⁵.

The Bank of International Settlements has warned that “green swan” events could cause the next financial crisis¹⁶. BlackRock, the world’s largest asset manager, expects climate change risk to result in a “fundamental reshaping of finance”¹⁷. According to the Governor of the Bank of France the “increase in the frequency and intensity of extreme weather events could trigger non-linear and irreversible financial losses [and] the immediate and system-wide transition required to fight climate change could have far-reaching effects potentially affecting every single agent in the economy and every single asset price.”¹⁸

The Covid-19 pandemic and debt crisis have changed the geopolitical landscape

These risks are being exacerbated by, and cannot be assessed in isolation from, the Covid-19 pandemic and the global debt crisis. All countries have taken a big hit from the global economic slowdown. Rich nations can tap their central banks which collectively boast roughly \$11 trillion in reserves¹⁹. Many developing and middle-income countries are more vulnerable from the pandemic and at greater risk of fiscal distress and credit downgrades. Middle income countries did not enter this crisis in great fiscal shape and will be more debt-burdened as a result.

¹⁴ <https://www.ran.org/bankingonclimatechange2020/>

¹⁵ <https://www.ft.com/content/e1be8a23-1c80-43dd-be7b-18636ff61c46>

¹⁶ <https://www.bis.org/publ/othp31.pdf>

¹⁷ <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>

¹⁸ <https://www.bis.org/publ/othp31.pdf>

¹⁹ <https://www.ft.com/content/86d03296-7a61-44b1-a92e-ba55c7ba44cf>

Downward pressure on already low oil prices is causing financial problems in the over-extended oil and gas sector and oil and gas exporting countries.

There are also growing risks of “third round” impacts on social stability if currency depreciation, restrictions on food exports, lower food output and income losses in informal sectors lead to widespread food shortages mirroring 2007-2008 food price crisis. The risk of systemic sovereign debt distress is high. Multiple countries could become insolvent at the same time as a result of Covid-19 pandemic and its cascading effects.

Stand together, or fall apart

To date, the dialogue on climate-related financial risk has focused mostly on the private sector, and the risks that corporations will face as climate impacts hit and investors abandon equities and bonds that run counter to the sustainability objectives heralded by their shareholders and clients, and the goal of keeping global average temperature rise below 1.5 degree Celsius. Efforts heretofore have largely been defined as what financial institutions could do, and technically how, on a voluntary basis.

However, most of the world’s fossil fuels are owned not by corporations, but by countries and state-owned entities (SOEs). 78 per cent of global fossil fuel reserves are owned by governments²⁰. Furthermore, it will be governments that face rapidly growing sovereign risk as countries have to respond to both the physical impacts of climate change and to the loss of revenue from stranded fossil assets and their combined contagion. Climate financial risk can quickly become a fiscal risk issue and spillover to become a foreign policy disaster. Political leaders and international bodies are either not seeing the interlinkages, or they are ignoring the potential geopolitical consequences.

This paper argues that the risks climate change poses to the stability of the global financial system threatens to spill over into international affairs and increase geopolitical tensions, if not managed. Currently these risks are not being managed appropriately by the agents with responsibility for financial stability and international cooperation. There is a global financial architecture in place since just after the second World War that exists to mitigate political, economic and other risks and avoid crises. This includes the Paris Club, multilateral institutions including the IMF and the World Bank and other

²⁰ FT Blackrock ETF thrusts climate change into political sphere. Oct 6 2020



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international regulatory frameworks. These institutions and frameworks were not designed for, and are not equipped to manage, climate risk.

Decisions will need to be made about which countries get bailed out, and on what terms; as well as on how to manage systemic risks in the years to come. Part of the challenge is that no single country or institution is responsible for managing these risks. The G20's mandate is to promote growth, trade and financial stability; but it is a forum for discussion, not a legislative body. Central banks are guardians of financial and price stability. The IMF exists to help build stronger economies through sound monetary, fiscal and structural policies. These entities are adapting regulatory frameworks and practices to address the multifaceted risks posed by climate change, but progress is slow and much gets lost in the gaps. These challenges require a coordinated international response. **The global community must decide on a new set of rules for how responsibility for climate risks are shared between countries and institutions.** This coordination must happen at a time when the multilateral system has been under severe strain.

Considering the scientific consensus on climate change and in the wake of the emergence of Covid-19, **there is no excuse for failing to act.** We hope this analysis contributes to a better understanding of the geopolitical implications of climate-related financial risk. In that vein, we offer emerging recommendations for how the G20 and other financial institutions can help the world avoid the instability that would result from a failure to manage the financial risks of climate change. It is based on desk research as well as extensive interviews and engagement with governments, financial institutions and other civil society experts.

Section 2 provides an overview of the steps that various countries and institutions have taken in recent years to address climate-related financial risk, and why they fall short of what is needed. Section 3 explains how Covid-19 and the debt crisis have changed the geopolitical landscape and links to climate risk. Section 4 describes the ways that climate-related financial risk will spread between countries and why this will be disruptive geopolitically. The paper concludes by offering a set of recommendations for how the G20 can reclaim leadership on climate-related financial risk, or, absent a shift in the politics, who else can pick up the slack.



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SECTION 2: WHAT IS BEING DONE TO MANAGE CLIMATE-RELATED FINANCIAL RISK

In this section, we take a brief look at how the understanding and awareness of climate as a financial risk has been building for well over a decade. Credible individuals have been sounding the alarm bell and institutions with standing have started to grapple with climate risks to financial institutions and the financial system. While momentum has been building, attempts so far have been insufficient and not had a material impact on capital allocation decisions or carbon dioxide levels in the atmosphere. Few actors have considered the full ramifications on the stability of the overarching financial system or foreign policy spillover effects of a fire sale of fossil assets, or a climate-driven “Minsky moment”²¹.

Tragedy of the Horizon – risks dormant in the system

The first official review of the links between the climate crisis and macroeconomic conditions was led by Nicholas Stern, and found that climate change would result in a loss of between 5 and 20 per cent of GDP each year if left unchecked. The Stern Review, published in 2006, established that the main impact of climate change on macroeconomics stems from the physical impacts of climate change (“climate risks”) and the second, caused by the consequences of climate policy. Whether climate policy succeeds or fails, it will have significant financial repercussions. Lord Stern said it was better to get ahead of that wave since the cost of inaction would far outweigh the cost of action. He has said in hindsight that he greatly underplayed the danger²².

Several years later, Governor of the Bank of England Mark Carney gave a landmark speech on climate change and financial stability and first introduced the concept of the Tragedy of the Horizon – whereby the traditional time horizons of most financial actors are too short to take account of any revaluation

²¹ Minsky moment refers to sudden decline in market sentiment that inevitably leads to a market crash, Named after economist Hyman Minsky.

²² <https://www.theguardian.com/environment/2016/nov/06/nicholas-stern-climate-change-review-10-years-on-interview-decisive-years-humanity>



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of assets caused by the adjustment to climate change and the transition to a lower-carbon economy. Carney highlighted that while individual banks may be shielded from the risk of a stranded asset as soon as their financial position unwinds, when they sell it on the economic risk of the stranding lies somewhere dormant in the system, likely with long term investors like shareholders or pension funds. Proverbially, someone is left holding the bag. This marked the first occasion when climate change was formally on the central bank agenda.

The Task Force on Climate-Related Financial Disclosures (TCFD)

In September 2015, Mark Carney, then-chairman of Financial Stability Board (FSB), declared that climate change had become a financial stability risk and set up a Task Force on Climate-Related Financial Disclosures (TCFD)²³. The purpose of the FSB is to promote stability in the international financial system through enhanced cooperation between national and international supervisory bodies and international financial institutions (IFIs); so it was a significant step in the right direction that this authoritative body declared climate financial risk a market failure and took action.

The industry-led Task Force reported back to the G20 in 2016 that climate change threatened financial stability as a result of physical risks, transition risk and liability risks. The task force recommended that businesses and investors review their business models, use scenario-testing and disclose their exposure to these risks so that investors can better account for these issues when allocating their capital. It was noteworthy that the private sector members of the task force coalesced around voluntary, not mandatory, disclosure. The demand for TCFD disclosure is significant and growing; and companies are producing more information of a higher quality. France was the first country to mandate disclosure with Article 173 of the Law on Energy Transition for Green Growth. Institutional investors, such as insurance companies and pension funds with a balance sheet above €500 million, are required to report on their exposure to both physical climate impacts and to 'transition risks'. The UK and the EU have signaled they will soon follow suit and make disclosure mandatory and set standards to make it easier to deliver.

²³ <https://www.fsb-tcfid.org>



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Geopolitical Headwinds

The election of Donald Trump as U.S. President in November 2016 changed the emerging geopolitical consensus and ruptured the G20 cooperation on climate change, and by extension climate-related financial risks. Ever since President Trump announced on June 1, 2017 that the United States would be formally withdrawing from the Paris Agreement, the G20 has been a contested space. Though widely welcomed, the TCFD recommendations only received a lukewarm endorsement by G20 members.

This was not only due to blockers like the U.S. and Saudi Arabia but to the lack of a strong defense of the TCFD from more supportive G20 members. This was likely a question of ‘picking-your-battles’: the more climate-progressive G20 members were trying to defend the Paris Agreement and the TCFD was just one piece of a much larger puzzle. The economic structure of a country, the internationalization of its finance sector, and the ability to set international norms are important factors that have shaped the stance a country takes towards climate-related financial reforms. It is self-explanatory why G20 members whose economies are especially carbon-intensive would be resistant towards climate-related financial disclosures, the purpose of which are to encourage suppliers of capital to transition their portfolios out of fossil fuels.

Network for Greening the Financial System

Having lost the momentum at the G20 and FSB, an alternative international platform was needed at that juncture to develop thinking and approaches about climate change and systemic financial risk. In 2017 the Bank of England joined forces with the Banque de France and the People’s Bank of China to create the so-called Network for Greening the Financial System (NGFS)²⁴. Central bankers and financial regulators are influential actors in any political economy. They have responsibility for, or oversight of, monetary policy, prudential regulation, availability of credit and consumer protection – key ingredients for any well-functioning economy and stable financial system.

It is worth pausing to reflect on the difference between micro and macro prudential regulation. The former refers to the regulation of financial institutions like banks and insurance companies to make sure they are well run and not taking excessive risks that will adversely affect their customers. Over the course

²⁴ <https://www.ngfs.net/en>



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of history, as new risks have come on to the horizon and shocks have threatened the stability of the financial system, macro-prudential risks have become increasingly important and part of regulators' mandate to safeguard the overall health and stability of the financial system. Sometimes, like the financial crisis of 2008, the build-up of risk is missed or ignored, and a full-blown crisis ensues and spreads.

The NGFS is the only worldwide forum bringing together central banks and supervisors committed to understanding and managing the systemic financial risks and opportunities associated with climate change. The NGFS was launched in December 2017 with eight members; the network now includes 72-member institutions and 13 observers, including the IMF, OECD and World Bank, that participate in three different work streams related to mitigating climate risk: supervision, macro-financial issues, and mainstreaming green finance. Since its launch the NGFS has continued to make the case for why climate change is relevant to central banks and supervisors, and what they can do to mitigate these risks and reorient the financial system. The NGFS continues to publish regular status reports, specific guidance on scenario testing and research on the macroeconomic and financial stability impacts of climate change²⁵.

The Bank of International Settlements (BIS) acts like the central bank to the central banks and facilitates official collaboration, lending and dialogue between them. The BIS has 60-member central banks which together make up about 95 per cent of the world's gross domestic product. In January 2020, the BIS issued a warning about "green swan" events: "potentially extremely financially disruptive events that could be behind the next systemic financial crisis". Green swans are different from black swans because there is some certainty that climate change risks will one day materialize, and they threaten even more complex and unpredictable chain reactions. According to the Governor of the Bank of France, "The increase in the frequency and intensity of extreme weather events could trigger non-linear and irreversible financial losses [and] the immediate and system-wide transition required to fight climate change could have far-reaching effects potentially affecting every single agent in the economy and every single asset price."²⁶

To avoid such an outcome, central banks need to develop forward-looking 'what if?' scenario-based analysis. Traditional risk assessment tools look backwards and

²⁵ <https://www.ngfs.net/en/macro-economic-and-financial-stability-impacts-climate-change-research-priorities>

²⁶ <https://www.bis.org/publ/othp31.pdf>



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extrapolate historical data; they cannot anticipate the future form climate-related risks will take. Climate scenario analysis is a different beast; central bankers and conventional risk teams are at an early stage of learning how to do scenario analysis. NGFS has issued guidance on the sort of scenario testing central banks should start to operationalize and the Bank of England has developed scenarios against which to stress test their operations. A nascent industry has emerged to develop more granular financial products, regional and sector-based, that bank risk managers and policy makers can use to integrate these risks into strategy and decision-making processes.

Central banks have many tools at their disposal to fight climate change were they so inclined. For instance, carbon pricing and integration of sustainability into their operational and accounting frameworks. Of course, all of these are complex undertakings and can have cascading effects of their own. Yet many central bankers are only just waking up to the fact that their mandate is to preserve long-term financial and price stability, and that requires a more proactive approach to managing systemic risks such as climate change.

The IMF

The IMF is likewise waking up to its mission to “help ensure stability in the international system”. It does that through monitoring its member’s economic and financial policies, giving practical help and technical advice, and lending to member countries facing balance of payment issues. This latter mandate is key: when countries have trouble meeting their international payments and cannot find sufficient funding elsewhere (capital markets, other governments) the IMF has to help them on affordable terms.

When Kristalina Georgieva became IMF Managing Director in October of 2019, she lost no time in declaring climate change a systemic risk to the macroeconomy and intensifying the institution’s work in this area. This has included more deeply involved research and policy advice; a no-holds bar push on carbon pricing – IMF-own analysis finds that to limit global warming to 2°C or less large emitting countries need a carbon tax of \$75 a ton by 2030²⁷; and a commitment to incorporate climate risks into their country level economic surveillance (Article IV) and Financial System Assessment Program (FSAP) that advise countries on how to strengthen the resilience of their financial and

²⁷ <https://www.washingtonpost.com/climate-environment/2019/10/10/world-needs-massive-carbon-tax-just-years-limit-climate-change-imf-says/>



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economic systems to external shocks. Georgieva has also highlighted the increasing frequency of more extreme weather and the devastating impact on vulnerable countries in terms of loss of life and economic losses. In some countries, as when Hurricane Maria struck Dominica in 2017, total economic losses exceed 200 per cent of GDP²⁸.

Other Developments

When geopolitics prevented the G20 from taking concrete collective action on climate change or the financial risks posed by the climate crisis, new networks were created as alternative venues to advance the agenda. One such platform was the Coalition of Finance Ministers for Climate Action which launched in April 2019. Finance ministers are key architects of the finance system and powerful political actors. The fact that a group of finance ministers came together in favor of climate action – an initiative conceived by the governments of Finland and Chile – indicated a new level of ambition in the fiscal policy space. It has so far failed to live up to its promise. The ministers coalesced around six principles, called the Helsinki Principles, and – pre-Covid – their priorities for 2020 included taking a serious look at the economic benefits and risks of carbon pricing and to address gaps in macro forecasting and fiscal planning for climate change impacts and disaster risk management.

The Europeans as a collective have generally been more progressive and determined to use all the tools at their disposal to shift financial flows away from polluting assets and towards sustainable economic activity. In March 2018, the European Commission unveiled its “Action Plan: Financing Sustainable Growth” – a multipronged approach that included efforts to clarify the duties of institutional investors and asset managers to manage financial risks stemming from climate change and incorporate sustainability in prudential requirements. Much of this work will be delivered by the current Commission over the next few years. The European Union, with China, India and Canada launched The International Platform on Sustainable Finance (IPSF) in October 2019 with a group of countries including Argentina, Chile, Kenya and Morocco that collectively are responsible for 44 per cent of the world’s GDP and the same amount of carbon dioxide emissions. It is early days; but they are already discussing how to align standards and even harmonize their approaches to

²⁸ <https://resilientcaribbean.caricom.org/wp-content/uploads/2017/11/DOMINICA-EXECUTIVE-SUMMARY.pdf#:~:text=Assessment%20concluded%20that%20Hurricane%20Maria%20resulted%20in%20total,226%20percent%20of%202016%20gross%20domestic%20product%20%28GDP%29.>



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create less friction for investors. The U.S. is notably absent as these new rules are being agreed.

The fundamental reshaping of finance

Geopolitical headwinds may have hampered the ability of the G20 to grapple with climate-related financial risks, but money talks and can send important signals. Concern has spread back and forth between asset managers and investors, macroeconomists and central bankers. The world's largest asset manager, BlackRock, released a report in 2016 stating that climate change was a material risk which investors could no longer ignore. When large banks take a stand, it can cut through the noise, shifting norms in the process. In his annual letter to the companies they invest in, Blackrock CEO Larry Fink wrote how climate change has become a defining factor in companies' long-term prospects. He heralded the compelling evidence that is causing investors to reassess core assumptions about modern finance and talked of a 'fundamental reshaping of finance'²⁹.

Of late, there is a drumbeat of large asset managers issuing similar warnings and adopting more aggressive frameworks to pull forward the necessary adjustments. Individually investors have little formal power but acting in concert they wield significant influence. For example, Climate Action 100+ systematically targets the highest-emitting companies forcing their management to disclose their exposure to climate risks and institutional investors from around the globe managing ever larger assets – most recently \$37 trillion, more than the GDP of China and the U.S. combined – to commit to emission-reduction targets. Private climate action is better than no climate action, but to shift financial flows and reduce financial risk requires countries to collectively agree new rules and shift norms, and to stop subsidizing fossil fuels and investing in high carbon assets through State Owned Enterprises.

A Bang not a Whimper

Has any of this made a material difference? It was starting to, but not fast enough. Despite our growing understanding of climate risk, public and private financial actors are still making risky bets on high carbon infrastructure, **in part**

²⁹ https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter?cid=ppc:CEOLetter:PMS:US:NA&gclid=EAlaIQobChMI0bqUxvyD5wIVCr7ACh3Taw9aEAAYASAAEgKSP_D_BwE&gclidsrc=aw.ds



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because they think they will be bailed out by governments and taxpayers.

Capital markets pull future risk into the present, so a reassessment of those risks would result in significant repricing of assets and reallocation of capital. Yet 33 global banks collectively provided \$1.9 trillion to fossil fuel companies since the end of 2015 when the Paris Agreement was signed, increasing year on year enhancing the odds of climate disaster and building climate risk into the financial system³⁰. Many big investors fear that companies in energy-intensive industries are failing to recognize the potential hit to asset values and are beginning to express disquiet about the carbon exposure of SOEs. Still, they continue to invest.

Going into 2020, the hope was that the NGFS, IPSF, TCFD and IMF and statements like the one from BlackRock marked an inflection point. Mark Carney, having stepped down as Governor of the Bank of England, was appointed by the UK Prime Minister as Finance Adviser to the UN Climate Change Conference (COP26). Mark Carney had honed his approach to focus on the ‘three Rs’ – reporting, risk management and return – in order to avoid a fourth R – a reckoning. Concern was growing about the rising carbon dioxide in the atmosphere, rising insurance losses from extreme weather events, increased sensitivity of the climate models, rising levels of debt in the financial system – a significant proportion of which has been used to fund high carbon corporate activity and infrastructure in emerging economies. Ominous warnings were commonplace that when the carbon bubble burst, it would be a bang not a whimper and would likely set off a chain reaction of crises that will look unlike anything seen in the past. Then Covid-19 hit.

SECTION 3: DEALING WITH CLIMATE FINANCIAL RISK IN THE AGE OF COVID

The Covid-19 pandemic brought the world up close and personal with the concept of systemic risks. At the time of writing, the virus has infected over 35

³⁰ <https://cleantechnica.com/2019/03/22/banks-funneled-1-9-trillion-into-fossil-fuels-since-paris-agreement/>



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million people, caused over one million deaths and brought the global economy to a grinding halt. The subject of this paper is not Covid-19, or its parallels with the climate crisis, but rather the fall-out from climate-related financial risk. This section explores whether, in a world freshly familiar with systemic risks, it is more or less likely that countries will cooperate, take seriously and step up their efforts to manage climate-related financial risks.

Space is limited so we anchor the analysis in the actors and institutions that have a mandate to maintain financial stability, starting with central bankers and finance ministers, then a look at the role of the International Monetary Fund and Multilateral Development Banks, and end by considering how Covid-19 has affected the geopolitical conditions for cooperation on climate-related financial risk.

Central Bankers monetary responses

Every crisis is different and demands its own response. This crisis differs from the financial crisis of 2008-2009 – it is a health crisis for which the policy response was an economy-wide shutdown. Due to the unprecedented speed and scale of the fiscal and monetary policy response it has yet to mutate into a global financial crisis like the one in 2008-2009. We've seen jaw-dropping amounts of monetary and fiscal measures: an estimated \$15 trillion by last May (for perspective the global economy last year was worth \$87 trillion³¹). Indeed, the Covid-19 crisis reminds us that these institutions are owned by governments and can use the fiscal side of their balance sheet in support of government objectives. Quantitative easing (QE) is when the central bank intervenes as an agent of government to buy up long-term debt, and they scrambled to set up new facilities for loans and asset purchases to maintain liquidity in the system. The need for speed meant blanket coverage that has resulted in high-carbon assets being hoovered up. Further, when the Bank of England announced it was postponing its climate stress tests due to the Coronavirus, it certainly seemed Covid-19 had undermined the recent work of central banks on climate risks.

Because the underlying conditions that spurred the recent developments on climate-related financial risk have not changed, we would expect this work to gain momentum. If anything, Covid-19 underscored the imperative of mitigating the risks of events with severe global impacts. As the crisis played out, the

³¹ <https://uk.reuters.com/article/health-coronavirus-cenbank/rpt-graphic-15-trillion-and-counting-global-stimulus-so-far-idUSL8N2CU1Q9>



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progressive central banks regained their footing. Two months into the lockdown, the Basel Committee on Banking Supervision confirmed that a majority of its members are taking climate risks seriously and taking actions to reduce the implications on the banking system and financial stability³². Soon thereafter the European Central Bank, Bank of Canada, and Banco de Mexico announced plans to conduct stress tests and enhance oversight to prepare their country's financial sector for climate risks, signaling that Covid-19 had not stopped this work. The BoE since has confirmed they plan to proceed with stress testing in 2021.

It is fair to say that so far climate has not been a determining factor for central banks' Covid-19 response operations. But it could be. The ECB has indicated that it is considering how to use Covid recovery to correct market failures and more assertively transition European economies for a low carbon future. Senior executives from the bank have presented research on the "green spread" – the difference in financing conditions for low and high-carbon activities. It is narrow at the moment but could be enlarged by altering capital requirements to change incentives or through Green QE. Another option is to retroactively tag the assets they've purchased during this crisis to unwind their position in a way that accelerates the low-carbon transition. There is now a more active discussion about market neutrality not being an appropriate benchmark for central bank operations when the market by itself is not achieving efficient outcomes and is adding to the risk of future financial instability. There are no details or firm commitments, but it is a promising sign that a few of these powerful actors are intensifying their efforts to understand the economics of the climate challenge and could still use the Covid crisis to inoculate against the bigger one they've acknowledged is looming.

Finance Ministers - Greening the Recovery to Reduce Systemic Financial Risks

Global economic activity is expected to contract sharply in 2020 due to the impact of Covid-19 and the disruptions it has caused to supply and demand. Finance ministers are the chief architects charged with drawing up crisis response and recovery plans. The first priority was rightly health system strengthening and social support. Immediate support measures included direct payments to individuals, payroll support for companies, and nationalization of

³² <https://www.bis.org/press/p200430.htm>



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parts of the economy. It underscored the value of a competent government and strong institutions and shifted the balance between public and private sector.

Now finance ministers are in the process of detailing or implementing plans to invest in infrastructure to stimulate an economic recovery. Stimulus projects such as renewable energy, electric mobility, building retrofit, and land reclamation are labor intensive, have a strong multiplier effect, and strong co-benefits. The IEA and IMF, in an unusual collaboration, offered governments a plan for a sustainable recovery over 2021-2023 to boost economic recovery (an average of 1.1 per cent a year), create jobs (roughly 9 million a year) and put emissions into structural decline. The plan is designed to avoid the sharp rebound in carbon emissions that accompanied the economic recovery from the 2008-09 financial crisis³³. It remains to be seen whether governments take them up on this offer.

China was the first hit by the pandemic and is the first to gear up for the recovery. About 6.35 trillion RMB (\$895 billion) of fiscal stimulus was presented at the opening of China's National People's Congress, prioritizing employment and poverty alleviation. 'New infrastructure' including 5G networks, big data, and electric vehicles were emphasized, while 'clean coal' was also included. The US response has been fractious and fragmented: Congress managed to agree stimulus packages totaling \$3 trillion at the start of the pandemic, but political tensions and ideological differences have meant public support expired before agreement on another support package. The Fed Chair has issued public warnings that the US economy would start to feel negative effects without more fiscal support³⁴. In contrast to China and the US, Europe doubled down on the European Green Deal as their manual for recovery and unveiled "the world's greenest recovery package". The package includes a proposal for the EU's next trillion-euro budget for the years 2021-2027 and an additional front-loaded "recovery instrument" of about \$550 billion specifically designed to cushion the economic blow and build solidarity across the bloc. This is a bright spot, but the devil will be in the detail regarding what actually comes out of the Brussels machine.

The Coalition of Finance Ministers for Climate Action has not been a particularly impactful platform during this period and hasn't been able to adapt to the new reality. They managed to release a report calling for climate mainstreaming in

³³ <https://www.iea.org/reports/sustainable-recovery>

³⁴ <https://www.npr.org/2020/10/06/920770414/feds-jerome-powell-calls-for-more-economic-aid-warning-weakness-feeds-on-weaknes>



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Covid-19 responses³⁵, but their members fell far short of the Helsinki principles in which they committed to take account of climate change when making macroeconomic policy.

Overall, it has been a sad tale of Business-As-Usual. Finance actors have chosen to build more, not less, risk into the financial system by allocating most stimulus investments in high carbon economic activity. Energy Policy Tracker has documented that since the beginning of the Covid-19 pandemic in early 2020, the G20 combined has committed at least \$388.82 billion to supporting different energy types through new or amended policies, according to official government sources and other publicly available information. This includes \$208 billion to support fossil fuel energy and \$141 billion to support clean energy³⁶.

As a practical matter the Covid-19 crisis has highlighted the dire need for harmonization of taxonomies for decision makers, public or private, to quickly determine whether or not a particular economic activity or infrastructure project counts as green recovery. The EU's Sustainable Finance taxonomy is the most advanced and expected to be ready for market by 2021. Canada has continued the work on its taxonomy for a carbon-intensive economy (transition taxonomy)³⁷.

The MDBs and IMF - Creating Fiscal Space for Climate Action as Part of Covid Recovery

Advanced economies that borrow in their own currency can mobilize robust stabilization and stimulus measures because they are able to finance ballooning deficits and debt. Most countries do not have that option. In emerging economies, debt and Covid-19 are part of a vicious circle: countries need resources to deal with the health crisis, whilst the health crisis paralyzed economies and pre-existing constrained balance sheets were hit hard by falling commodity prices, a drop-in tourism, dried-up³⁸ remittances and capital flight, further increasing costs of capital and debt levels. Immediate liquidity and debt sustainability are the major focus for many developing countries. They will seek

³⁵ <https://www.financeministersforclimate.org/news/better-recovery-better-world-resetting-climate-action-aftermath-covid-19-pandemic>

³⁶ <https://www.energypolicytracker.org/region/g20/>

³⁷ <https://www.responsible-investor.com/articles/it-s-the-very-first-time-canadian-companies-have-sat-down-together-and-had-meaningful-conversations-about-climate-transition-canada-s-taxonomy>

³⁸ <https://www.ft.com/content/0b744d46-46b1-48c3-81cd-be0d78d99262>



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support from the Multilateral Development Banks and International Monetary Fund.

The first responses from the MDBs were decisive and widely welcomed. Collectively the MDBs have mobilized \$350 billion and are working with countries to get the money out the door. The MDBs have many assets – big balance sheets, AAA credit rating and expertise in cash transfers – that are currently being deployed to reach the most vulnerable. The second phase will involve debt sustainability, and potentially involve widespread debt restructurings. At present, the conversation about either of these phases does not include climate. The MDBs have been working to align their operations with the Paris Agreement but the methodology has not been agreed, nor have the boards of most banks given the mandate to apply any agreed criteria. Countries can demand more assistance for a green recovery but as yet such demand is not strong.

The main point that the Covid-19 crisis highlights for the purposes of this paper is the very real prospect of multiple countries at risk of insolvency at the same time, and the lack of a mechanism, contingent form of callable capital or clear institutional mandate to step in in such an eventuality. The pandemic is still spreading, and full economic ramifications as yet unknown. However, it is now clear that worst fears may be materializing. Zambia has asked investors to accept delays in interest payments into next year, in what would be the first debt default on private creditors in Africa as a result of Covid-19³⁹. Notably, 44 per cent of Zambia's debt is held by China⁴⁰. Many neighboring countries face similar predicaments with Chad, Congo, Mozambique⁴¹, Angola⁴² and Kenya⁴³ facing severe debt-related difficulties. The Alliance of Small Island States is also affected and has called on donor governments and development banks to provide debt relief, aid and climate finance.

³⁹ <https://www.ft.com/content/e56c2a34-16e4-4974-9df8-a72c092c5ee2>

⁴⁰ <https://africanbusinessmagazine.com/region/southern-africa/zambias-debt-default-poses-questions-for-china/>

⁴¹ <https://www.theafricareport.com/43272/zambias-call-for-debt-relief-triggers-fear-of-domino-effect-across-africa/>

⁴² <https://uk.reuters.com/article/us-angola-imf/angola-negotiates-62-billion-debt-relief-from-creditors-imf-idUKKCN26C2CP>

⁴³ <https://uk.reuters.com/article/kenya-railway-china/kenya-should-renegotiate-chinese-rail-loan-parliamentary-panel-says-idUKL5N2GL3T7>



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Experts have started to assess what “headroom” the MDBs have in case of a worst-case scenario⁴⁴. Any increase in capital would have to be endorsed by the Bank’s shareholders, yet the fiscal positions of the governments behind the development banks and the IMF are also weakened by the crisis. Covid-19 has shown how a global occurrence can weaken the entire financial system. During the last financial crisis, the IMF shareholders approved a \$250 billion new allocation of Special Drawing Rights (SDRs) boosting liquidity for cash-strapped countries. That option was taken off the table this time when such a move was opposed by the U.S., the Fund’s dominant shareholder, and India.

The IMF is both a taker and a maker of geopolitics. It has labelled Covid-19 the “Great Lockdown” and says it is the biggest economic shock since the Great Depression. The organization fielded emergency loan requests from more than half of its 189 members, the most in its history. 60 packages have been expedited and approved so far. 27 of the most vulnerable countries have received grants to cover their IMF debt obligations for the next six months.

The debt conversation is going to be of growing importance. Many countries were already facing debt issues before Covid-19 struck and the pandemic has accelerated the trend. The global debt-to-GDP ratio surged by over 10 percentage points to reach 331 per cent during the first quarter of this year, according to the Institute of International Finance, a global association of financial institutions⁴⁵. It was the largest rise on record, as policymakers turned to debt financing to limit the economic damage inflicted by the Covid-19 lockdowns. Ensuring the fiscal sustainability of developing countries will be critical to creating the political and economic space for them to rebound from Covid-19 and invest in sustainable economies resilient to future shocks. Facilitating cooperation and solidarity on debt politics will be critical to building the geopolitical space for cooperation on climate action and managing systemic financial risk.

The only initiative already undertaken at the international level that has attempted to create additional fiscal space is the Debt Services Suspension Initiative (DSSI). Under the DSSI, the G20 and the IMF made calls to encourage bilateral creditors to offer debt relief by suspending interest payments for a limited period of time. The financial architecture of debt is fragmented and not fit for purpose. Despite a vote at the UN General Assembly in 2014 in favor of

⁴⁴ <https://www.cgdev.org/blog/more-1-trillion-mdb-firepower-exists-we-approach-covid-19-break-glass-moment>

⁴⁵ <https://www.iif.com/Research/Capital-Flows-and-Debt/Global-Debt-Monitor>



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working towards a permanent restructuring system, there is still no recognized resolution mechanism or institution which can carry out restructurings. However, the IMF has recently highlighted the importance of reforming the international debt architecture to support an orderly debt restructuring⁴⁶. The G7 has called for a common debt framework⁴⁷.

The major creditors are broadly aligned into five groupings: the IMF, other MDBs, the Paris Club, China and the private sector, represented by the Institute of International Finance. The IMF and MDBs have been making the right noises on climate, but there has to be increased pressure from the shareholders and senior management to drive greater change. The core institutional player is the Paris Club, composed of 22 countries. Only 11 are in the G20. Over the last decade, bilateral payments have become less important as the private sector and new players – such as China’s State-Owned Enterprises – have become more prominent. Private sector creditors only participate in these discussions on a voluntary basis. There is a real risk that resources freed up by the international institutions are going to be repurposed to pay private creditors – the free riders of this arrangement.

China as one of the world’s largest creditors

Global debt is now inextricably linked with the rise of China and represents its own geopolitical risk. China is the largest trading partner and foreign direct investor in many developed and developing countries; China is the second-largest lender to the U.S. government, behind Japan. China has been explicit about their expansionist plans to finance infrastructure development with their Belt and Road Initiative (BRI) and the New Development Bank, and as a result China is one of the largest bilateral creditors, surpassing the Paris Club⁴⁸. This gives China additional leverage to use for strategic purposes. They do not participate actively in the Paris Club and prefer dealing with debt restructuring on a bilateral basis. However, China announced it would back the G20 debt relief initiative. More recently, President Xi has also said that his government will cancel interest-free government loans due to mature by end-2020 for relevant African countries under the Forum on China-Africa Cooperation (FOCAC)⁴⁹. The

⁴⁶ <https://blogs.imf.org/2020/10/01/reform-of-the-international-debt-architecture-is-urgently-needed/>

⁴⁷ <https://uk.reuters.com/article/us-health-coronavirus-g7-statement/g7-ministers-back-extension-of-debt-freeze-for-poorest-nations-urge-reforms-idUKKCN26G243>

⁴⁸ <https://hbr.org/2020/02/how-much-money-does-the-world-owe-china>

⁴⁹ <https://www.fitchratings.com/research/sovereigns/chinas-debt-relief-to-support-liquidity-in-stressed-ems-24-06-2020>



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rise of China as a major creditor financing high carbon infrastructure as part of their BRI is making the lack of transparency and fragmentation more pronounced. We provide more detail on this in the next section.

Assessing Creditworthiness of Sovereigns

Development and debt are interlinked issues as they interact in dynamic and complex ways. Debt sustainability was an issue before Coronavirus. In general, some countries are concerned that participating in the DSS initiative – from the borrower side could send a negative signal to the markets. In an unusual move, nine MDBs issued a joint statement arguing against debt relief regards Covid-19 and in favor of new lending instead⁵⁰. They express concern that premature debt relief would have the perverse consequence of increasing the cost of borrowing for the MDBs at a time when they are trying to maximize their firepower. At some point, they argue, rating agencies will reassess the creditworthiness of their lenders, and shareholders, as the economic impact from the pandemic works its way through the system. Debt relief would reduce their overall ‘quality’ of their portfolios and weaken their ability to offer direct support to countries.

For many countries, and particularly emerging economies, debt sustainability will be a key plank to their economic recovery; managing this could determine whether countries take more action on climate. The financing needs of emerging economies is at least \$2.5 trillion⁵¹. Emerging economies and many small and middle-income countries represent about half of the global economy. Their economic and financial sustainability, as well as their participation in trade, is critical for the world economy. Therefore, how measures to help these economies access net new financing and provide a long-term solution to the debt crisis will have repercussions across the world.

Oil and gas companies in the time of Covid-19

As Covid-19 was spreading and countries went into lockdown, oil demand dropped. Around this time an oil price war erupted between Saudi Arabia and Russia, flooding the market and putting further downward pressure on the price

⁵⁰ <https://reliefweb.int/report/world/world-bank-group-response-legislators-letter-may-13>

⁵¹ <https://unctad.org/news/un-calls-25-trillion-coronavirus-crisis-package-developing-countries>



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of oil, even dipping into negative territory⁵². Bolstered by walls of debt and decades of government support, many oil and gas companies hovered just on the right side of junk-bond status and couldn't sustain operations with oil prices we've seen since. The response to this crisis should be to reshape these industries rather than bail them out and return to BAU. As a priority, governments should use this window to make good on their pledge from a decade ago and end absurd levels of support for carbon-intensive industry. These are not insignificant sums: \$5.2 trillion was spent globally on fossil fuel subsidies in 2017, the equivalent of 6.5 per cent of global GDP⁵³. Even after signing the Paris Agreement in 2015, governments collectively increased taxpayer support for the fossil fuel industry by \$500 billion. This is inefficient when renewables are cheaper in most jurisdictions, and it is incongruous when financial regulators and supervisors are raising the alarm bell about risks to the financial system from fossil fuel reliance.

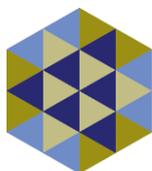
Geopolitics: Whatever it takes – Not.

Geopolitics was in a dismal state before Covid-19 hit, in part because the global response to the last financial crisis and the deleveraging that took place thereafter. It exacerbated the general sense that “the system” is not working for ordinary people. It is the same set of countries facing the same national conditions that are members of the G20 and the majority of the shareholders of the MDBs and IMF; so the institutions face the same geopolitical headwinds as the G20 forum. Covid-19 is a timely reminder that global problems require global solutions, and multilateralism is in the national interest. Geopolitical tensions are often held up as the reason countries can't take collective action on climate change or systemic financial risks; the more enlightened political leaders take stock of geopolitical consequences if they don't, not to mention human suffering and economic losses.

We need 12-18 months of incremental cooperation and trust-building around concrete areas of the recovery agenda. Cooperation is required to stop the spread of the virus, prepare treatments and equitable vaccination distribution; to restructure debts and mobilize development finance; and to ensure trade and investment flows. Cooperation is required to build back better after Covid. To

⁵² <https://www.cnbc.com/2020/03/30/oil-falls-amid-saudi-arabia-russia-price-war-coronavirus-hits-demand.html>

⁵³ <https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509>



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halve global emissions over the next decade, green recovery and climate ambition has to be hardwired into the system this time. Energy-related CO₂ emissions are expected to drop by as much as 7 per cent as a result of Covid and the shutdown⁵⁴. The emissions drop in 2020 is expected to be temporary, as governments are not doing enough to avoid a rebound next year. To reach net zero by 2050 and limit the temperature increase to well below 2 degrees, GHG emissions must decline by 7 per cent per annum. Next year, the Intergovernmental Panel on Climate Change will publish its latest Assessment Report that may give even starker signals about the global carbon budget and the risks of imminent Earth Systems tipping points. This gives a visceral sense of the scale of disruption and dislocation the science requires for a safe climate. It is no longer abstract.

The Age of Covid is still being written and there are many twists and turns left before we can decisively measure the impact on climate action and climate financial risks. The pandemic has the full attention of society as a whole and financial regulators and asset managers. Much has been written about the similarities: both are related to changes in our natural ecosystems, both were fore-warned by scientists and yet systematically undervalued in risk frameworks and prices. A defining legacy of this crisis is that we can't afford to find ourselves so unprepared. If nothing else, given the loss to global welfare Covid-19 has proven how an ounce of prevention is worth more than a pound of cure. That surely must create more, not less, impetus to act now to strengthen the global architecture to deal with climate-related systemic financial risks. Because the risks climate change poses to the financial system are likely to become geopolitical problems, unlike those we have seen in the past.

SECTION 4: GEOPOLITICAL TROUBLE AHEAD

So far we have argued that physical and transition risks from climate change represent a threat to the stability of the global financial system, that existing efforts of countries and financial institutions to address this problem fall far

⁵⁴ <https://www.iea.org/reports/world-energy-outlook-2020>



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short of what is needed and that the Covid-19 pandemic represents both a challenge and opportunity for a course correction.

In this section, we consider how physical and transition risks might evolve into geopolitical tensions as countries and financial institutions are forced to grapple with questions about where responsibility for managing climate risk sits in the international rules-based system. These widespread consequences suggest that this deserves the attention of decision-makers in state governments and senior advisors who are tasked with thinking about diplomacy and geopolitical stability; it is not just an issue to be managed solely by regulators and finance ministries.

In a general sense, it is not difficult to imagine how the fallout from a climate-driven financial crisis could lead to regional or even global instability. A sudden write-down in fossil fuel assets will be a crisis for governments dependent on fossil energy exports. If past is prologue, the response to falling rents would likely be cuts in subsidies which could lead to social unrest. Some of these governments could turn to foreign adventurism as a distraction. In a world characterized by climate policy failure, on the other hand, stress on developing countries and major emerging economies from extreme climate impacts will stretch the limits of their governance capacity. Growing food and water scarcity could lead some producers respond with export bans of key commodities and agricultural products and escalating trade tensions. This is not hypothetical. Severe drought in Eastern Europe in 2010 led to export bans on agricultural commodities, the response to which eventually sparked the Arab Spring⁵⁵.

We have not undertaken a comprehensive assessment of every way that climate-related financial risk could lead to transnational or international disputes. Instead, we focus on two principal and interrelated ways that this may occur, forcing countries and international institutions to consider writing new rules for dealing with climate-related financial risks. The first relates to the impact of climate change on **sovereign risk**, including the possibility of capital flight from vulnerable regions and tensions over the rules for sovereign bailouts. The second involves the need to address problems arising from **stranded asset risk and the sale of underperforming fossil assets** that demand stronger rules for debt transparency.

⁵⁵ <https://www.chathamhouse.org/publications/the-world-today/2020-02/fiddling-while-australia-burns>



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Responding to sovereign risk – Who gets bailed out?

Sovereign risk, also known as country risk, is the probability of a government or government-backed entity failing to repay its loans⁵⁶. It includes political risk in cases where a country refuses to honor its debts. It can also occur when a country imposes regulations, restricting the ability of debt issuers in that country to meet their obligations, for example a central bank implementing foreign exchange rules.

Ratings agencies have warned for several years that climate change risks could impact sovereign credit ratings through several mechanisms, including the lowering of fiscal revenue, increase in fiscal expenditure, higher costs of mitigation and **political instability**⁵⁷. Climate change as a sovereign credit risk will be an additional financial burden on debtor countries, as fossil fuel assets become liabilities and as they spend money to prevent or respond to either acute or chronic climate hazards. It is worth noting that it is the poorest and lowest rated countries that are likely to be hit the hardest⁵⁸, but as we will see below G20 members are not immune to these risks.

Physical climate risk and capital flight in vulnerable countries

The list of countries with the highest exposure to climate impact risks overlaps strongly with some of the most economically vulnerable countries⁵⁹. There is strong evidence that physical climate risk is already increasing the cost of capital for developing countries – to the tune of \$62 billion in higher interest payments across the public and private sectors. Recent research supports this, finding that premia on sovereign bond yields amount to around 275 basis points for economies highly exposed to climate risk, and 113 basis points for emerging market economies overall⁶⁰. This is highly likely to get worse over time – amounting to an estimated additional \$168 billion of debt payments over the next ten years among the most climate change vulnerable countries⁶¹.

⁵⁶ Credit risk ratings agencies including Moody's, Standard & Poor's and Fitch regularly measure sovereign risk and sovereign risk indices are available from other institutions.

⁵⁷ <https://www.ftserussell.com/research/how-could-climate-change-impact-sovereign-risk>

⁵⁸ <https://blogs.worldbank.org/voices/tackling-climate-change-poorest-countries>

⁵⁹ <https://www.bloomberg.com/news/articles/2020-10-02/climate-risk-could-hit-already-vulnerable-nations-with-a-double-whammy>

⁶⁰ https://eprints.soas.ac.uk/33524/1/Climate%20Change%20and%20Sovereign%20Risk_final.pdf

⁶¹ <https://unfccc.int/news/climate-change-is-driving-debt-for-developing-countries>



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This doesn't stop with the cost of borrowing, however. Climate risk could eventually prevent vulnerable countries from attracting investment entirely. As climate-related disasters become more frequent and severe, insurance prices against their impacts are expected to increase. This means that more sectors will find it hard to insure their assets, leading to capital flight from those sectors exposed to most exposed to physical climate risk. This will further widen the protection gap and deprive vulnerable communities from access to finance⁶². This dynamic is starting to play out at the country level as creditors are increasingly worried about the level of climate risk in their sovereign bond portfolios. As physical climate impacts and the disclosure about these risks both increase, investors will begin to reduce their financial exposure to vulnerable countries by pulling their money out of sovereign bonds. This will hit vulnerable countries on two fronts. Without debt relief or the ability to raise capital, many will lack the fiscal space needed to invest in reducing emissions or invest in building climate resilience⁶³. If countries can't borrow, they can't invest in resilience or mitigation, which will increase their physical climate risk. The consequences go beyond economic impacts, as capital flight could contribute to instability and increased migration⁶⁴.

As discussed in section 3, these dynamics are exacerbated by Covid-19, which has dramatically increased the risk of debt distress for the most vulnerable countries. Poor countries are already facing a debt crisis, with the financing needs of emerging economies measuring at least \$2.5 trillion⁶⁵. The G20 has offered relief through its Debt Service Suspension Initiative⁶⁶. But there are warnings being issued that more will need to be done to avoid some of the more concerning scenarios. including those that have to do with rising risk of food or fuel price shocks leading to instability. Growing food and water scarcity could, for example, lead some producers respond with export bans of key commodities and agricultural products and escalating trade tensions.

Admittedly, the literature on the risk of capital flight is very limited. A recent study did not find any specific examples of capital leaving developing countries

⁶² https://www.e3g.org/wp-content/uploads/E3G-A-Vision-for-Sustainable-Finance-in-Europe_Chapter-5-Resilience.pdf

⁶³ <https://www.bloomberg.com/news/articles/2020-10-02/climate-risk-could-hit-already-vulnerable-nations-with-a-double-whammy>

⁶⁴ https://climatefinanceadvisors.com/wp-content/uploads/2019/07/GCA-Adaptation-Finance-background-paper_FINAL-7-17-19.pdf

⁶⁵ <https://www.nytimes.com/2020/04/20/opinion/coronavirus-economy-bailout.html>

⁶⁶ <https://www.ft.com/content/1466fdd7-b50e-4c66-af27-64d60296e32f>



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due to better understanding of physical climate risk⁶⁷. However, this is likely due more to the lack of understanding and disclosure of physical climate risk in granular or subnational detail than on the absence of such risks. A growing list of fragile states that are increasingly unable to attract investment would pose a threat to regional stability. It also runs counter to the principles of the UNFCCC and Sustainable Development Goals, and the commitment to provide financial and technical support to vulnerable countries to help them manage their climate risk.

With climate impacts and climate risk disclosure both on the rise, there will be a growing need to prevent or at least respond to capital flight from the most vulnerable regions. There are options to consider, including tasking or creating an institution with the capacity for assessing the social and economic impacts of insurance coverage gaps and the risks of withdrawal of credit from vulnerable sectors and communities. This has been included as one of our emerging recommendations.

Don't do it for me, do it for you: sovereign risk in the G20

G20 member states will largely determine which climate-impacted countries get bailouts and which are left to fend for themselves, but they also face their own sovereign risk from physical vulnerability and stranded assets. Take physical risk in the case of the **United States**. The US has spent \$1.75 trillion cleaning up from 258 weather and climate disasters since 1980⁶⁸. A recent study by McKinsey & Co. looked at the impact of climate risk on the US property market and the possibility that it will trigger capital reallocation and asset repricing. In Florida, average annual losses for residential real estate due to storm surge from hurricanes already amount to \$2 billion. Losses from flooding could devalue exposed homes by \$30 billion to \$80 billion, or about 15 to 35 percent, by 2050⁶⁹.

These numbers are increasing at the same time as the US national debt has risen dramatically – currently standing at \$22 trillion. S&P downgraded US federal debt for the first time in 2011 due to concerns about long-term fiscal

⁶⁷ <https://gsdrc.org/publications/risk-of-capital-flight-due-to-a-better-understanding-of-climate-change/>

⁶⁸ <https://www.ncdc.noaa.gov/billions/>

⁶⁹ <https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts#>



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sustainability⁷⁰. Analysis by the Rocky Mountain Institute shows that ballooning disaster spending could threaten the US's low cost of borrowing⁷¹. This borrowing is likely to go up to pay for climate-related disasters at the same time as US credit ratings are going down.

South Africa offers another cautionary tale. It is the most coal-dependent country in the G20 and the world's fifth largest coal exporter, leaving it highly exposed to shifts in global demand⁷². Given that financial institutions are abandoning coal at increasing rates⁷³ with the latest being Goldman Sachs announcing it won't support coal mining, this represents a significant risk. Due largely to its exposure to coal markets, South Africa faces transition risk of \$125 billion in present value terms under a scenario where the world meets the Paris goal of 2 degrees, according to a recent study by CPI. In fact, coal market volatility between 2013-2017 means that the country has already lost \$60 billion in revenue it was otherwise projected to earn between 2018 and 2035⁷⁴.

If there is a single face of the transition risks facing South Africa it comes in the form of the state-owned utility Eskom. Eskom is in financial crisis, struggling to manage an aging and poorly run coal fleet and distressed construction of new coal plants. In early 2000s global coal use was growing quickly, but South Africa had an aging fleet. Several large international financial institutions supported new coal build as the solution to help stabilize the economy. Since then, however, there have been structural economic changes leading to a large drop in demand. This included the successful deployment of a highly efficient small-scale procurement program for renewables that eventually undercut coal plants. There were other factors as well, including many years of below cost tariffs, cost and time overruns at new coal plants, and corruption. Eskom now has debts of \$29.3 billion, much of which is guaranteed by the government at 18 per cent of the annual state budget. The utility is therefore the largest threat to the South African economy, according to both the Finance Ministry, various credit rating agencies and other investment banks. The financial crisis has resulted in Eskom declaring a multi-billion Rand loss (R20bn/\$1.33bn) for the 2018-19 financial

⁷⁰ <https://www.cbsnews.com/news/sp-downgrades-us-debt/#:~:text=S%26P%20first%20put%20the%20government%20on%20notice%20in,deficit%20reduction%20plan%20and%20avoided%20a%20default%20>

⁷¹ <https://www.nytimes.com/2020/06/23/opinion/climate-change-financial-disaster.html>

⁷² https://www.eia.gov/beta/international/analysis_includes/countries_long/South_Africa/south_africa.pdf

⁷³ http://ieefa.org/wp-content/uploads/2019/09/South_Africa_Coal_Exports_Outlook_Sept-2019.pdf

⁷⁴ <https://climatepolicyinitiative.org/wp-content/uploads/2019/03/CPI-Energy-Finance-Understanding-the-impact-of-a-low-carbon-transition-on-South-Africa-March-2019.pdf>



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year. South Africa has also seen intermittent power outages for over a decade⁷⁵ including several rolling blackouts during the first quarter of 2019. There is a real threat that this will spill over into a sovereign debt crisis.

Russia and **Saudi Arabia** are highly vulnerable to oil price shocks. Recent news reports points to the fact that China's recent climate pledge to reach net-zero emissions by 2060 has implications for **Australia**, which exported \$14 billion worth of coal to China in 2018/19⁷⁶. **Argentina** is in the process of developing huge natural gas reserves and is reliant on US investment and technical capacity. On the other hand, Argentina along with **Brazil** are the two G20 countries facing the greatest sovereign credit risk from factors associated with economic dependence on natural capital. 28 per cent of its sovereign bonds will be exposed to changes in climate and anti-deforestation policy⁷⁷. **Canada** is a champion of the climate risk disclosure agenda, if a rather cautious one. But it is highly exposed to physical impacts of climate change, and to the financial impacts of a global low carbon transition. Its economy is over-reliant on fossil fuel production and its largest six banks have a credit exposure to the oil and gas sector of over \$100 billion⁷⁸.

China is investing in coal abroad despite almost 40 per cent of coal plants globally being unprofitable. This figure could rise to 75 per cent by 2040⁷⁹. According to Carbon Tracker, two-fifths of China's own coal plants are unprofitable, and the stranded asset risk associated with coal plants for China's National Energy Investment Group is \$66 billion, equivalent to half its total capital⁸⁰. Polling in six key countries involved in the BRI also shows that citizens have a clear preference for investment in clean energy above fossil fuels⁸¹ raising the prospect of further public backlash against Chinese investment. China is also highly vulnerable to physical risk. Food security is a key concern, with food production expected to fall by up to 20 per cent and rice may face heat damage in 80 per cent of years going forward. Interregional agricultural trade patterns

⁷⁵ https://www.washingtonpost.com/business/energy/why-eskoms-power-crisis-is-south-africas-top-risk/2019/07/31/7a146cb4-b366-11e9-acc8-1d847bacca73_story.html

⁷⁶ <https://www.smh.com.au/environment/climate-change/china-s-carbon-pledge-leaves-australia-isolated-and-economically-vulnerable-20201001-p5610k.html>

⁷⁷ Argentina and Brazil have 'most sovereign credit risk from natural capital'. Environmental Finance. 5 February 2020.

⁷⁸ <https://internationalbanker.com/banking/low-oil-prices-affecting-canadas-banks/>

⁷⁹ <https://www.e3g.org/library/why-china-should-green-its-overseas-finance>

⁸⁰ <https://www.carbontracker.org/40-of-chinas-coal-power-stations-are-losing-money/>

⁸¹ <https://www.e3g.org/news/media-room/polling-citizens-six-belt-and-road-countries-want-clean-energy-not-coal>



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are likely to become increasingly imbalanced as the north and south West experience large decrease in yields. Ocean warming has reduced sustainable fish catches by 15 per cent to 35 per cent in the East China Sea⁸².

Indonesia is the world's 2nd largest exporter of coal and a major player entangled in Asian coal and gas trade. In 2016, it exported 73 per cent of its primary coal production mostly to India, China and Japan. A revived narrative based of 'resource nationalism' has resulted in expansive new efforts to increase support for state-owned enterprises (SOEs) in the resource extraction and processing sectors. The state-owned utility PLN received \$3.6 billion in subsidies in 2017; and according to IEEFA's analysis this amount may triple by 2021. Recognizing that climate will impact government finances, BlackRock has recently launched a sovereign bond Exchange Traded Fund (ETF) that weights countries on their level of risk from climate change. Government debt from **Germany** is underweighted in the portfolio, for example, due its dependence on hard coal and lignite for electricity⁸³. The **Netherlands**, meanwhile, is underweighted as a result of its vulnerability to rising sea levels and low share of renewables in its energy mix.

The role of the IMF

The IMF will have a critical role in addressing these issues. Questions have long been raised about the level of representation of developing countries on the IMF board and in its governance. If the international financial institutions face a wave of sovereign defaults due first to Covid-19 and then increasingly to climate risk, how will decisions be made about which countries should be bailed out? Will the wealthy countries take priority? The legitimacy of these choices depends in part on the transparency of the rules and the decision-making process, but governments and institutions were not wired to cope with these kinds of risks and face uncharted territory.

Offloading risky fossil assets and the rules of debt transparency

The falling cost of clean energy has already upended energy markets. As stronger climate policies and regulations begin to really bite the risk of high carbon assets becoming stranded will rise. Fossil fuel lending has become a risky business. In

⁸² <https://www.theguardian.com/environment/2019/mar/04/heatwaves-sweeping-oceans-like-wildfires-scientists-reveal>

⁸³ <https://www.ft.com/content/112e536a-91db-426a-aef6-3106f0717972>



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June 2020 the oil giants Shell and BP wrote down nearly \$40 billion from the value of their oil and gas assets. Over the past year their market values were cut in half, wiping out more than €160 billion of investor equity⁸⁴.

This is a geopolitical issue. **78 per cent of global fossil fuel reserves are owned by governments rather than private-sector companies.** SOEs emit more carbon dioxide annually than the European Union and Japan combined, and account for half of China's national energy emissions⁸⁵. Most of the world's oil reserves are owned by national oil companies. Transition risk will hit public balance sheets, and countries will have no choice but to respond. Countries that are reliant on fossil fuel assets for public revenue will quickly need to find way to mitigate their risk exposure to these assets. One option they might pursue is to try to offload underperforming fossil fuel assets. In some cases, this could involve countries that are increasingly concerned about sustainability selling assets to jurisdictions that either have not evaluated the climate risk of the projects or do not have similar environmental or climate safeguards in place.

In 2014, for example, the Swedish energy company Vattenfall announced plans to sell its East German lignite business as part of an effort to improve its environmental performance. The German government was eager to ensure that the coal plants continued to operate in order to avoid economic hardship for the surrounding communities, and so appealed to Sweden to prevent the sale. Market conditions for lignite power worsened between 2014 and 2016 and many potential buyers lost interest. Eventually, a deal was made in 2016 to sell four German coal plants and mining assets to a Czech firm, Energeticky a prumyslovy holding (EPH). The sale was made for a price well below the initial market value and, against a backdrop of the decline of the German coal industry due to market and political pressures, included Vattenfall paying EPH to take the business off its hands. One factor in these dynamics was that wholesale power prices in Germany fell by 47 per cent between 2012 and 2016, which was due in part to the entrance of renewable energy in the electricity system.

In the case above, the Swedish government was determined to get rid of its lignite assets which had become a political and economic liability for climate-related reasons, while the German government wanted to keep the assets open at any cost to avoid severe political blowback from coal workers. Instead of

⁸⁴ <https://www.environmental-finance.com/content/analysis/fossil-fuel-lending-is-a-financial-stability-issue.html>

⁸⁵ <https://www.ipsnews.net/2020/09/state-owned-enterprises-key-climate-success-developing-countries-often-overlooked-international-dialogue/>



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underperforming coal plants being closed due to poor market conditions, they were sold at a discount under highly questionable circumstances.

Stranded assets and the geopolitics of debt

The largest global transfer of climate transition risk might be happening through the Belt and Road Initiative (BRI). While China has been at pains to shut down its own coal power in order to reduce air pollution meet its carbon reduction commitments, it is also financing hundreds of coal projects overseas, including in at least 25 BRI countries⁸⁶. IEEFA has estimated that of the 399 gigawatts (GW) of coal plants currently under development outside China, Chinese financial institutions and corporations have committed or offered funding for over one-quarter of them.

As mentioned previously, a large share of sovereign debt from low- and middle-income countries is owed to China. In some of these countries, debt to China amounts to more than 20 per cent of GDP⁸⁷. Some of these loans are known as resource-backed loans, most often in crude oil but there are examples of other minerals or commodities as well. Unlike bonds or loans from multilateral development banks, the terms of resource-backed loans are often hidden, or at least very unclear. The borrower can be a state-owned enterprise (SOE) meaning it may not be on the public balance sheet which could increase the risk of debt crisis⁸⁸. China has lent heavily to Venezuela over the past several decades through high interest loans with repayments made in oil. Since the collapse in the oil price this arrangement has become unsustainable for Venezuela which is in the middle of its own major political and socioeconomic crisis⁸⁹. A \$9.6 billion investment in oil and gas pipelines linking Myanmar to Yunnan Province are underutilized five years after being launched⁹⁰.

There have been tensions between the IMF (and some of its sovereign Board members) and China over who should pay for underperforming loans. In the case of the Democratic Republic of Congo (DRC), for example, the country's debt has ballooned in large part due to the collapse in crude oil prices. It's debt to China

⁸⁶ <https://e360.yale.edu/features/how-chinas-big-overseas-initiative-threatens-climate-progress>

⁸⁷ <https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative>

⁸⁸ <https://www.forbes.com/sites/scottcarpenter/2020/02/29/opaque-oil-backed-loans-could-fuel-next-african-debt-crisis/#45af4bff6b1e>

⁸⁹ <https://www.csis.org/analysis/when-investment-hurts-chinese-influence-venezuela>

⁹⁰ <https://www.rfa.org/english/commentaries/bri-obstacles-01152019155613.html>



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now stands at roughly \$2.5 billion, or 5 per cent of GDP⁹¹. China has refused to reduce the principle owed and the IMF has stepped in to provide a bailout for the DRC, in effect bailing out Chinese oil investments as well. It has not gone unnoticed that there is a lack of transparency around many of the terms of these infrastructure agreements⁹².

In 2019, Pakistan agreed to a \$6 billion bailout from the IMF to address its current account deficit (already owing the IMF \$5.8 billion from previous bailouts). The IMF specifically advised Pakistan to consider planning for cost recovery in the energy sector and SOEs to take the pressure off government resources. The US raised concerns that the IMF loans would effectively be paying off Chinese debt, which has pledged \$57 billion in loans to Pakistan as part of the China-Pakistan Economic Corridor (CPEC)⁹³ that has been agreed under the Belt and Road Initiative. Pakistan currently owes China roughly \$15 billion under the CPEC⁹⁴.

This is part of a wider concern expressed by some governments that the IMF is bailing out China across many BRI countries⁹⁵. A majority of the ‘priority’ energy projects listed for CPEC are coal-based projects⁹⁶. Notably, the problem domestically in Pakistan is not lack of generating capacity but rather ‘circular debt’. Pakistan mainly produces electricity from imported oil and gas, at a much higher cost than other sources; and the production cost is also higher than the tariff charged by the government resulting in a circular debt problem and contributing to electricity crises⁹⁷. The government is failing to pay subsidies to distribution companies, which charge customers below-market tariffs; distributors can’t pay power producers which can’t pay for fuel and must keep plants idle. Customers then refuse to pay bills when they aren’t receiving enough power, which means distribution companies are unable to invest in new transmission infrastructure⁹⁸.

⁹¹ <https://www.scmp.com/news/china/diplomacy/article/3020394/are-chinese-infrastructure-loans-putting-africa-debt-trap>

⁹² <https://www.reuters.com/article/us-congorepublic-imf-idUSKCN1U62NR>

⁹³ <https://www.reuters.com/article/us-pakistan-usa-china-idUSKBN1KM4BR>

⁹⁴ <https://thediplomat.com/2019/07/the-imf-takeover-of-pakistan/>

⁹⁵ <https://www.bloomberg.com/opinion/articles/2018-07-31/pakistan-s-bailout-is-really-china-s>

⁹⁶ <http://cpec.gov.pk/energy>

⁹⁷ <https://www.sciencedirect.com/science/article/pii/S1364032117313394>

⁹⁸ <https://www.aljazeera.com/ajimpact/lights-circular-debt-cripples-pakistans-power-sector-190524055240222.html>



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There is a danger of contagion in other major economies, including India where there has been a wave of corporate defaults in India's power sector. It is a similar case of government subsidies leading to state-owned distribution companies being unable to repay loans to power producers⁹⁹. The government has taken control of these non-performing loans to take the pressure off SOEs, but this increases sovereign credit risk. The problems in India have been compounded by lower cost renewables undercutting coal plants.

Part of the solution to the 'merry-go-round' of climate risk described above is improved debt transparency. Transparency is a critical issue for increasing the ability of governments and institutions to control risks. Debt transparency allows for good decision-making based on available information including related to risk of stranded fossil fuel or other assets. Being able to measure debt and being clear on the terms can help with debt restructuring when that is necessary¹⁰⁰. This is particularly a problem for State-Owned Enterprises (SOEs) and public banks which often are not subject to the same transparency rules as sovereign debt. The World Bank and IMF have been working together with developing countries to improve debt transparency¹⁰¹ but there is a lack of urgency relative to the scale of risk.

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

While the mechanisms through which climate-related risks in the financial system will manifest into the geopolitical space are complex, they all flow from one simple problem: physical and transition risk will both put enormous fiscal pressure on governments. In some cases, better measurement and disclosure of physical climate risk will lead to capital flight from already fragile states. In others, fossil assets, many of which are owned by states, will underperform or become stranded with implications for public balance sheets.

⁹⁹ <https://www.ft.com/content/07bca5a4-73bc-11e8-aa31-31da4279a601>

¹⁰⁰ <https://www.msn.com/en-au/money/news/imf-pushes-for-changes-governing-debt-restructurings/ar-BB19BAD1>

¹⁰¹ <https://www.worldbank.org/en/results/2019/08/27/promoting-debt-transparency-because-the-sdgs-depend-on-it>



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The Covid-19 pandemic has given us a preview of what lies ahead for climate risk. The IMF has warned that the pandemic could result in sovereign bankruptcies if creditors and financial institutions can't agree on response measures like debt restructuring or loan forgiveness. This is due in part to capital flight and fiscal austerity measures. Climate change will cause similar problems but at an even larger scale and over a longer time.

The thread that links these challenges is the need for the international community and G20 to agree a new set of rules on climate risk disclosure and transparency, along with criteria for how decisions will be made about sovereign bailouts. A wave of sovereign bankruptcies would pose a problem for the global community. Currently, there is a lack of clarity and transparency regarding the rules and responsibility for the response. This will necessitate changes to the rules of institutions like the Paris Club and the IMF. New architectures may be needed. There also needs to be greater recognition that physical climate risk and transition risk are correlated between countries - not just transmitted through financial system. Managing this requires much more intrusive supervision at odds with fragmented geopolitics.

To have a chance of moving to 1.5 degree pathway by 2023 economic and finance ministers across the G20 must believe that taking ambitious climate action is in their national interest not least to access cheaper finance and for the long term competitiveness of their economies, but also because the lives and livelihoods of their citizens depend on it as does global financial stability. For this to happen we need to see a step change in the politics in all member countries of the G20 so it can become an effective functioning institution. If the G20 aligned around the need to halve emissions from 2020 to 2030 that means we have two business cycles, or 10 IMF annual meetings, to construct the new financial system to stop runaway climate change. Climate disclosure must be mandatory, climate risk management must be revolutionary and sustainable investing must go mainstream.

No single actor can solve this type of crisis. There is no silver bullet. Due to the global nature of these risks, global coordination is a pre-requisite and it will take many agents of change to reduce these risks, better price them and better prepare for the spillover effects of climate-related financial risks. The following list of recommendations is by no means exhaustive; it is however a start. And the lesson from Covid-19 is that there is no excuse and no time to waste.



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The G20 should:

Strengthen Risk Reporting and Risk Mitigation

1. Make climate risk disclosure mandatory.
2. Implement carbon pricing and carbon market mechanisms.
3. Phase out fossil fuel subsidies by 2025 – as they committed to do so in 2009.
4. Fully commit to a green recovery, and support developing countries to accelerate their energy transition as part of Covid-19 recovery as per the IEA and IMF Sustainable Recovery Plan for peak emissions.
5. Ask the IMF to accelerate the reform of their regulatory frameworks to incorporate climate-related financial risks– including Article IV surveillance, FSAP and debt sustainability framework.
6. Mainstream climate risk into macroeconomic planning and decision-making, as per the Helsinki Principles.

Strengthen the Global Financial Architecture for Climate Risks

7. Set up a new Climate Risk Observatory to assess the social and economic impacts of insurance coverage gaps and risks of withdrawal of credit from vulnerable regions.
8. Agree a more efficient global debt restructuring mechanism, and a more granular view of green conditionality.
9. Take a wider view of fiscal space to include increased liquidity for development and concessional financial support, underpinned by a new issuance of SDRs or callable capital.
10. Establish an FSB taskforce to develop a contingency plan for a green swan or climate-related Minsky moment, and report back with recommendations to India's G20 in 2022, including proposals for an incentive package for fossil dependent export countries.
11. Work with China to speed up and scale up their efforts to green the Belt and Road Initiative.
12. Make COP26 the COP that killed coal and where DFIs announce an end to public financing of coal including export credits; and scale up emergent models to justly unwind carbon assets as part of recovery packages.