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The Great Repricing: Financial Advice in the Age of Climate Change

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The Great Repricing

FINANCIAL ADVICE IN THE AGE OF CLIMATE CHANGE

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No official geological boundary exists, but conceptually, we are living in the Anthropocene—an epoch in which the human impacts on the planet increasingly are apparent.¹ The havoc wrought by climate change in particular is a tangible consequence of the indelible imprint human civilization is leaving on the planet (see figure 1).

Physical manifestations of climate change, such as wildfires, floods, and droughts, are hastening and amplifying, and have (finally) spurred world governments, financial institutions, corporations, and other actors into implementing pledges, revising regulations, and

developing new products and services. Physical risks are now accompanied by the risks of the transition to a low-carbon economy.

Widespread incorporation of climate risks as fundamental factors in valuation processes is expected to ultimately usher in a “great repricing” that will influence prices across all regions and asset classes. We will see upward and downward pricing at disparate magnitudes over varying timelines. There will be winners and losers. It will be messy.

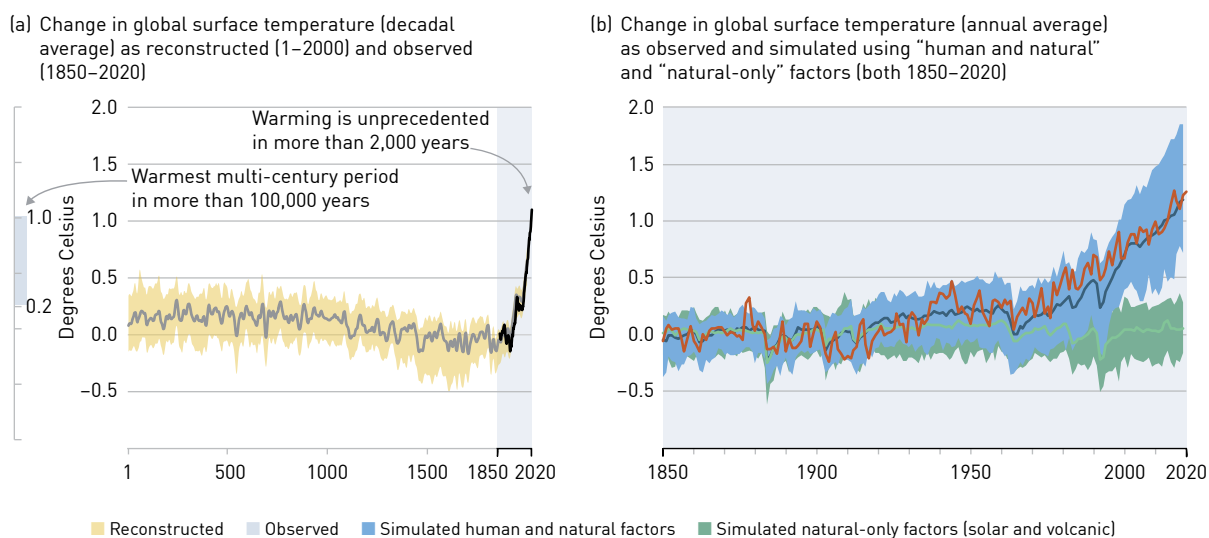
In 2021, I began sharing the great repricing concept, producing a

conference and a report that share the title of this article. I saw a gap appearing between the identification of specific, measurable climate risks and logical anticipated asset repricing. For example, technological advances have made granular mapping of growing flood risks across the United States available to home buyers and other stakeholders. However, knock-on effects on insurance availability and costs, and, in turn, house prices and mortgage access, are not yet fully priced in.² This is especially true in highly desirable areas where other factors drive pricing. Poorer areas may sadly but unsurprisingly be hit harder.

Figure 1

CHANGES IN GLOBAL SURFACE TEMPERATURE RELATIVE TO 1850–1900

Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years



Panel (a): Changes in global surface temperature reconstructed from paleoclimate archives (solid grey line, years 1–2000) and from direct observations (solid black line, 1850–2020), both relative to 1850–1900 and decadal averaged. The vertical bar on the left shows the estimated temperature (very likely range) during the warmest multi-century period in at least the past 100,000 years, which occurred around 6500 years ago during the current interglacial period (Holocene). The Last Interglacial, around 125,000 years ago, is the next most recent candidate for a period of higher temperature. These past warm periods were caused by slow (multi-millennial) orbital variations. The pale yellow shading shows the very likely ranges for the temperature reconstructions.

Panel (b): Changes in global surface temperature over the past 170 years (rust line) relative to 1850–1900 and annually averaged, compared to Coupled Model Intercomparison Project Phase 6 (CMIP6) climate model simulations of the temperature response to both human and natural drivers (blue) and to only natural drivers (solar and volcanic activity, green). Solid colored lines show the multi-model average, and coloured shades show the very likely range of simulations.

Source: “Climate Change 2021: The Physical Science Basis,” Intergovernmental Panel on Climate Change (IPCC), page 8, <https://www.ipcc.ch/report/ar6/wg1/>.

Our goal is to encourage “advisors and investors to take action to integrate climate change considerations into investment decisions and to align portfolio goals with both profits and the planet.”³ This is not without its challenges given the complexities involved. Yet we concur with the United Nations Secretary-General’s statement upon the publication of the latest Intergovernmental Panel on Climate Change (IPCC) report that we have reached “a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable.”⁴ As fiduciaries, we have a duty to recognize all risks that can impact investment values and identify the opportunities that arise from climate investing.

PRICING UP VS. PRICING DOWN

Over the long term, we believe that companies and assets facing significant climate risk will price down and those that offer solutions for decarbonization or adaptation will outperform. However, we expect a bumpy road ahead.

Climate investment risk often is expressed in terms of stranded assets, notably those related to fossil fuels. Research shows that most oil, gas, and coal reserves will be stranded as world economies phase in renewables and other lower carbon energy sources.⁵ This

will, over the longer term, adversely impact the balance sheets of fossil fuel majors. Oil prices currently are trending upward, but this is a function of short-term supply/demand imbalances and geopolitical risks outweighing the longer-term necessity of shifting energy to renewables. All of this could result in a more abrupt transition down the road. As the London-based think tank Carbon Tracker states in a recent letter to the U.S. Securities and Exchange Commission, oil and gas firms have made net zero by 2050 pledges, but “very few companies reveal whether the prices they use to evaluate oil and gas reserves or test the value of their fixed assets for impairment align with such targets or consider climate-related risks at all.”⁶

Across sectors, companies insufficiently focused on how climate change will impact operations likely are to lose market share, revenues, and profitability. As climate disclosures are mandated, increasing data availability will allow for deeper analysis of company strategies. Greater disclosure and transparency will expand the currently limited investment opportunity set, particularly in public markets. Per the chief investment officer of Schroders, Johanna Kyrklund: “Clients

want to decarbonize, but on the other side there are not many opportunities. ... There are not as many places to invest, and this can create a bubble.”⁷

On a positive note, global investments into climate-aligned opportunities are accelerating. BloombergNEF reports that, in 2021, “[i]nvestment rose in almost every sector ... including renewable energy, energy storage, electrified transport, electrified heat, nuclear, hydrogen and sustainable materials. Only carbon capture and storage (CCS) recorded a dip in investment, though there were many new projects announced in the year.”⁸ The total recorded was \$755 billion, catalyzed by the increasing activities around the world.

Metals and minerals involved in the energy transition are experiencing significant price movements. Powering the globe via solar panels, batteries, and wind turbines will require colossal amounts of finite inputs such as copper, lithium, zinc, nickel, and cobalt (see figure 2). Mining companies, which have not exactly been the darlings of environmental, social, and governance (ESG) portfolios in recent years, stand to benefit from increased revenues but also will be subject to increased ESG scrutiny and investment engagement. We also are likely to see more opportunities for circular economy as scarcity and environmental concerns create demand for new recycling technologies.

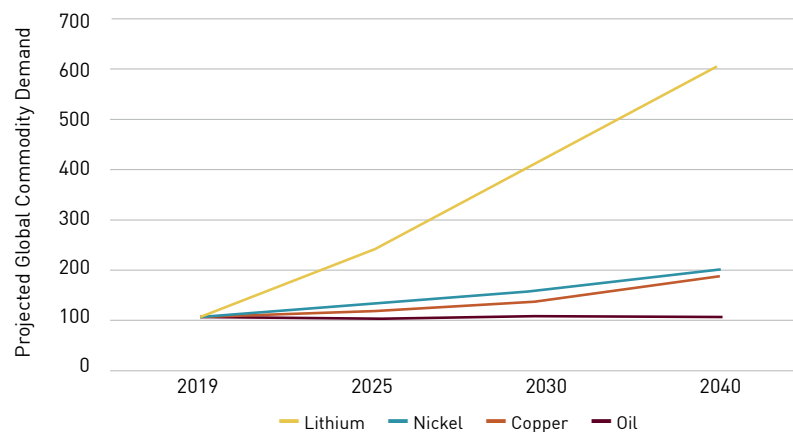
Complexity is a given. Suboptimal second- and third-order impacts will occur. For example, technologies that adapt to physical climate change are potential portfolio outperformers but also potential contributors to emissions, at least in the short term. “Increased energy expenditure from adaptation solutions such as air conditioning acts as a human feedback, whereas the decreasing reflectance (albedo) from melting ice and snow is a natural one.”⁹

In addition, focusing solely on carbon and its reduction is sometimes at odds

Figure
2

DEMAND EXPECTED TO GROW FOR DECARBONIZATION ENABLERS

Projected global commodity demand, indexed (2019 = 100)



Source: International Energy Agency, WoodMac, and AllianceBernstein. Michelle Dunstan, “Climate Change: The Commodities Dimension,” *The Great Repricing: Financial Advice in the Age of Climate Change* (October 2021, <https://gittermanasset.com/greatrepricing/>).

with our most valuable resource—water—and it is a potent example of where climate goals sometimes fall short of considering broader impacts. Water is a key input into the low-carbon transition, but as water risks increase around the world owing to climate change, key industries face headwinds. Per CDP, the international nonprofit focusing on environmental impact disclosure, various technologies including CCS equipment, nuclear power, and some solar power technologies are water intensive. In addition, hydroelectric power is itself dependent on reliable water supplies. Droughts in countries using hydroelectric power have led to significant costs for companies that own and rely on such power plants.¹⁰

The water theme therefore provides multiple investment opportunities, such as in technologies that focus on more efficient resource use as well as in shorting companies facing water risk. The latter “are overlooked opportunities that can generate alpha by providing a portfolio hedge with a potentially powerful tailwind.”¹¹

MOBILIZING CAPITAL

Although we are seeing a plethora of activity and an uptick in ambition and efforts, we are not yet seeing the predicted massive flow of capital toward climate mitigation and adaptation commensurate with the level of the challenge. Some of this is a result of the absence of political will, but there are other influencing factors including:

Data availability and analysis capabilities. Climate change investing is a bigger topic than ever, but climate modeling and analyses in investments are relatively new. Corporations and asset managers are having to learn and hire to fill skill gaps that enable them to work with forward-looking risk models and new datasets.

Global regulatory frameworks. Some jurisdictions, such as the European Union, are further ahead in categorizing

investments in terms of their contribution to or mitigation of climate change. The United States meanwhile is in the process of stakeholder input to determine its path forward.

Carbon trading mechanisms. “While carbon pricing is deemed to be the most effective means of reducing emissions, the implementation of carbon prices is currently fragmented and disparate, or altogether missing.”¹² At the same time, carbon was one of the best-performing commodities in 2021 as indicated by the performance of the KraneShares Global Carbon Strategy ETF (KRBN).¹³

Passive versus active management. With huge shifts toward passive investing in public markets, the signals provided by active funds are quieter. In the absence of carbon pricing, to make change, we need greater focus from passive managers on proxy voting and engagement activities.

Consumer preferences. As everyday citizens become more interested in the issues, shifts toward low-carbon products and services are likely.

TAKING A BROADER VIEW

This will not be a frictionless transition. Markets sometimes will move in favor of traditional commodities and companies and therefore climate-focused portfolios will face ups and downs. In the shorter term, some fossil fuel products will benefit from the transition away from their use. For example, clean energy investment “will provide another demand support pillar for fossil fuels, because the transition will require sizable amounts of steel and cement, whose processes contribute to carbon emissions. A lot of marginal diesel fuel is needed to move those heavy materials around, too.”¹⁴

Naysayers will use this evidence to maintain the status quo. Therefore goals, not just metrics, are important. Knowing where we’re going and why will help us stay focused on the long term,

manage volatility, and pay attention to useful critiques and challenges as we go. Goals are also important when we consider the social impact of climate change both here at home and around the world.

We must be cognizant of the unintended consequences that could impact everything from commodity prices to the level of household incomes. In the United States, where many people are dependent on cars, not everyone can afford to switch to an electric vehicle or bear the increasing prices of gas under rising carbon pricing. As physical risk data proliferates and increasingly is used in investment decisions, low-income homes in areas most affected may lose value. Access to insurance and other services also may be hindered. Advanced geospatial datasets (such as those developed by risQ, Wellington Management, and the Woodwell Climate Research Center) can be deployed to both assess portfolio risks as well as to inform opportunities to mitigate the widening inequalities that climate change poses.

It is well known that climate change impacts and attempts to mitigate and adapt will compound existing social and racial justice issues around the world. In addition to ambitious decarbonization, we also need innovative financing from global governments and the private sector to ensure that poorer communities are supported. Beyond the obvious physical effects, communities also may experience multiple health, social, and psychological challenges because of acute and chronic climate shifts. Per McKinsey, it is imperative that climate risk become integral to all decision-making, for example urban planning, and “adaptation efforts will need to be accelerated to manage the risk that is ‘locked in’ from past emissions.”¹⁵

CONCLUSION

The great repricing already is afoot, albeit at inconsistent speeds and magnitudes, depending on the regions and

assets involved. We see multiple opportunities for innovation in both public and private markets, as well as challenges for market participants. We hope that regulatory signals, especially in the United States, strengthen and that carbon markets become more prevalent.

We encourage advisors and other industry professionals to commit to working within the complexity we face. The task at hand can feel overwhelming; however, we cannot underestimate the importance of going deep into the subject matter. Doing so will help us alleviate missteps and misunderstandings to better manage the trade-offs, focus on adaptation at the same time as decarbonization, and arrive at better solutions for all.

ADDENDUM

Since this article was written in February 2022, Russia invaded Ukraine. At the time this article went to press, Russia continues its brutal assault as Ukrainians fiercely defend the country against civilian atrocities and the destruction of critical infrastructure and services.

In response to the war, numerous nations have moved to implement sanctions upon Russia and many global companies have ceased Russian operations. However, reducing dependence upon Russian energy is more complicated than seizing the assets of oligarchs, especially for Europe, which “spends as much as \$1 billion a day to pay for coal, gas and oil imported from Russia.”¹⁶

As energy prices have risen in Europe, the United States, and elsewhere, governments face challenges to maintain energy supplies and keep short-term costs contained, all while working toward their climate pledges. In the United States, having banned Russian oil imports, President Joe Biden approved a release of oil from the national stockpile as domestic production is increased. The European Union has not implemented an outright ban, although individual members are

making their own moves. Lithuania, for example, is the first European nation to announce its ban on Russian natural gas.¹⁷

Russia’s aggression is a catalyst for countries to reassess their degree of energy independence (or lack thereof) and their decarbonization pathways. Some renewables can ramp up more quickly than others—solar panels, for example, can be expedited more easily than wind turbines—but policy and permitting changes may be needed to clear the way.

Some countries are re-evaluating existing plans to cease the use of nuclear energy. New nuclear plants are costly and take time to build, but announcements are being made in countries such as the United Kingdom to invest in newer technologies such as small modular reactors.¹⁸ Despite significant domestic energy challenges, Germany will continue to phase out nuclear but has guaranteed €200 billion to accelerate its ambition to reach 100-percent renewable energy.¹⁹

In the article, we stated that “this will not be a frictionless transition” and this could not be more apparent right now. Despite the short-term rise in oil and gas production, we believe that many countries will accelerate decarbonization initiatives and that more governments will look to nuclear as well as hydrogen for roles in transitioning to a low-carbon economy, alongside wind and solar.

However, new challenges will abound as countries electrify and otherwise decarbonize. Certainly, this war also has shone a bright light on the vulnerabilities in metals and minerals supply chains that support the energy transition. Russia is responsible for producing 11 percent of global nickel, which is a primary input for electric vehicle batteries. The United States has joined with the member nations of the International Energy Agency to launch a minerals security program to help secure and

stockpile the various inputs needed for batteries and renewables components.²⁰ In the end, there is no absolute escape from geopolitical risks, whether we rely on fossil fuels or not. ●

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