A Holistic Pathway Towards a Low-Carbon Future

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Climate change is a global macro issue that cannot be successfully mitigated or adapted to via the siloed activities of governments, companies, and NGOs, no matter how ambitious. Meeting the goals of the Paris Agreement necessitates a coordinated global approach, rather than multiple regions and jurisdictions determining their own definitions, frameworks, and policy interventions.

A stable climate is a public good that has been taken for granted over many decades. As this becomes more evident, efforts to price in negative externalities are growing in number and intensity. However, the pace and productivity of these efforts are insufficient to mitigate the palpable physical effects of climate change and its many second order impacts.

All over the world, we see multiple manifestations of global warming, with actual effects varying significantly according to specific geographies and the socio-economic context of inhabitants. Multi-million dollar apartments in Miami and other coastal cities face the threat of sea-level rise. Extreme drought in sub-Saharan Africa is causing acute food insecurity for populations reliant on the land. From health impacts via increased disease vectors, to the destruction of homes and livelihoods, to the migration of climate refugees, the human cost of climate change is colossal.

From the investment perspective, there is a correlation between physical effects, transition risks borne from moving to a low-carbon economy, and overall portfolio risks. These mean climate considerations are an ever-greater part of asset allocation and security selection decisions. Transition risks are likely to accelerate given the greater focus from legislators and financial services, but uncertainty remains high given the inadequate pace of change thus far, and the deficiencies in global coordination.

For example, while carbon pricing is deemed to be the most effective means of reducing emissions[1], the implementation of carbon prices is currently fragmented and disparate, or altogether missing. Granted, emissions-trading schemes ("ETS") are proliferating across jurisdictions with China's recently launched ETS being the world's largest[2], and other markets such as the California cap-and-trade program[3] and the European ETS having been in operation for several years. However, even with broader coverage of global GHG emissions, we'll still be way behind where we need to be.

[1] "Managing Climate Risk in the U.S. Financial System", Report of the Climate-Related Market Risk Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission (CFTC), September 09, 2020, https://www.cftc.gov/PressRoom/PressReleases/8234-20

[2] "China Launches World's Largest Carbon Market: But is it Ambitious Enough?", Nogrady, Bianca, Nature, July 20, 2021, https://www.nature.com/articles/d41586-021-01989-7

[3] "Cap-and-Trade Program", "About", California Air Resources Board, Retrieved: October 25, 2021, https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/about

Regional cap-and-trade systems and localized prices cannot achieve full decarbonization, let alone get us to net zero. More holistic, international efforts supported by governments, for example to harmonize carbon pricing, will help successfully internalize the costs of negative externalities in company financial statements and catalyze innovation. Global carbon pricing will support cross-jurisdictional trading and mitigate carbon leakage.[4] Moreover, carbon sequestration, using both high-tech and nature-based solutions, is a critical and presently expensive element that is not occurring at a major scale, partly because of insufficient carbon pricing.[5]

We see the potential for an exciting unleashing of innovation in micro-cap to mid-cap companies if global carbon trading mechanisms are created. Large cap companies are not likely to be the originators of newer technologies, but they will be the buyers, through M&A, venture capital, or both. But without adequate market signals, capital will not reach novel, but currently risky, earlier stage technologies.

As a quantitative manager, it would be remiss not to mention the data benefits that global coordination can also bring. As the adage goes, what gets measured gets managed. While net zero pledges are great intentions, they often rely on carbon offsets, which are rarely underpinned by measurement of a company's full carbon footprint. With effective carbon pricing mechanisms comes the incentive to comprehensively audit all emissions, which enables more effective monitoring and accountability. Individual and institutional asset owners increasingly want to know if they are stewarding their investment capital towards sustainable outcomes – reliable, comprehensive, and comparable data is the only way to determine this.

We are encouraged by the increasing availability of data and the coverage of key metrics such as Scope 1, 2, and now Scope 3, emissions. We recently partnered with the MIT Joint Program on the Science and Policy of Global Change as a sponsor. This collaboration brings together progress in climate science and financial metrics to help design the carbon-pricing mechanisms of the future.[6] Given our quantitative approach, we are well positioned to leverage the data now available to analyze, harmonize, normalize, and compare. Without the capacity to analyze high volumes of data it is becoming more-and-more difficult for any single individual portfolio manager to synthesize all material information needed to make robust investment decisions.

On a related note, we suggest that advisors themselves focus on equivalences and comparability. It's not necessary, or even possible, for every advisor or client to understand

[4] "Carbon Leakage", European Commission, Retrieved: October 25, 2021, https://ec.europa.eu/clima/eu-action/eu-emissions-trading-system-eu-ets/free-allocation/carbon-leakage_en

[5] "The Low Carbon Pathway", V-Square Quantitative Management LLC., April 2021, https://www.climate-action.org/images/uploads/documents/The_Low_Carbon_Pathway.pdf

[6] "MIT Joint Program Welcomes V-Square Quantitative Management as New Program Sponsor", MIT Joint Program on the Science and Policy of Global Change, September 17, 2020, https://globalchange.mit.edu/news-media/jp-news-outreach/mit-joint-program-welcomes-v-square-quantitative-management-new-program

every climate-related metric. Instead, focusing on metrics that can be compared across portfolios such as carbon emissions, overall waste, water usage, etc., is sufficiently granular. In addition, understanding what an individual asset manager is doing in terms of their thesis, their investment decisions, and their industry collaborations also provides significant insights that clients will value.

But most importantly, we hope that more advisors will engage in climate investing to deepen awareness across the financial industry and within broader communities. While markets have a massive role to play in climate change solutions, the awareness and action of all people will help encourage the global coordination needed to bring forth the policies and mechanisms that can put us on the trajectory to net zero.

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Simply diversifying away from climate change is no longer an option for equity investors. Whether made through a fundamental or quantitative lens, climate risk is an unavoidable consideration in equity investment decision-making. The last several years have seen an improvement in the quality of emissions data and a growing number of publicly traded companies signing on to net-zero pledges against a backdrop of increased regulatory pressure surrounding corporate climate disclosures. This panel will cover equity risks and opportunities across regions, sectors, and market capitalization from three investors at the forefront of this rapidly changing landscape. They will discuss their unique approaches to navigating these challenges while also sharing their perspectives on engagement, divestment, greenwashing, and carbon markets.