From the top down: Capital market assumptions in the climate crisis

Key takeaways

Concerns are rising that investors may not have sufficient tools to consider the effects of climate risks on their investment portfolios, especially from a top-down perspective. This is critical since capital market assumptions (CMAs) feed into strategic asset allocation (SAA) design. To help bridge this gap, we are incorporating climate scenarios into our analysis of macroeconomic and financial risks, CMAs, and SAA decisions.

In this summary, we discuss some takeaways from Fidelity's Global Macro & SAA team's latest Global Macro Insights paper supporting our 'Race to net zero' series, written by **Salman Ahmed**, Global Head of Macro and Strategic Asset Allocation, **Anna Stupnytska**, Global Macro Economist, **Edoardo Cilla**, CMA Strategist, and **Stefan Rusev**, Senior SAA Strategist. Read the full research report here.

Financial repercussions of climate change

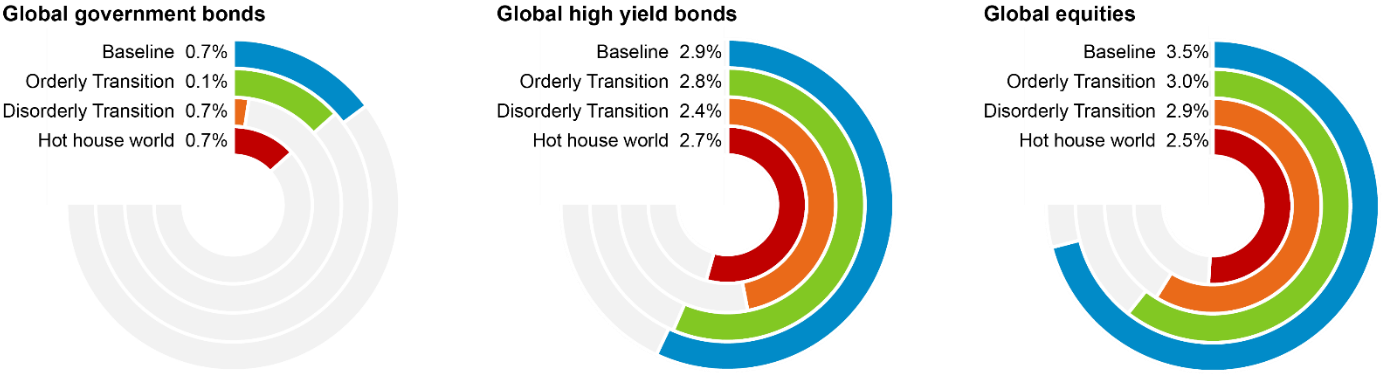
Russia's invasion of Ukraine offers a glimpse into what a disorderly energy transition might entail. Delayed or divergent worldwide responses disrupt economic activities, raise uncertainties in financial markets and heighten transition risk. The latter can contribute to inflation. And as we have witnessed this year, the fight against inflation is not an easy one.

We believe climate risk is financial risk and should be integrated into capital market assumptions (CMAs). We anchor our climate-aware CMAs on a widely accepted scenario-based framework provided by the Network for Greening the Financial System (NGFS), a global coalition of about 135 central banks and supervisors. The framework is built around six scenarios organised into three categories: orderly transition; disorderly transition; and hot house world.

Highlighting some of our research findings

Climate change adds uncertainty to the global economy and therefore increases macroeconomic and financial risks, materially impacting risk-return potential. (See Figure 1.) For example, the estimated annual reduction in global equity returns between Fidelity's climate-agnostic baseline and the NGFS's hot house world scenarios is 100 basis points, which compounded over 10 years is about 13%.

Figure 1: Estimated 10-year annualised real returns, baseline vs. climate scenarios

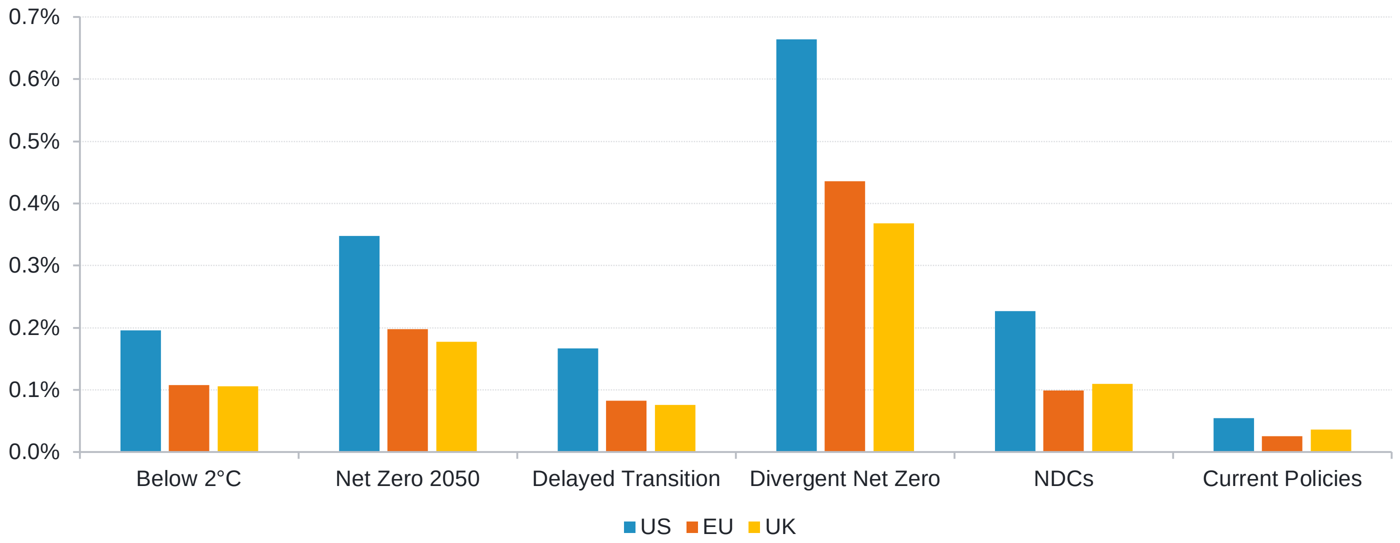


Source: Fidelity International, March 2023. **For illustrative purposes only**. Assumptions are US-dollar denominated, based on proprietary CMA modelling. Baseline refers to Fidelity's climate-agnostic baseline. NGFS orderly scenarios assume climate policies are introduced early and become gradually stringent to limit average temperature rises vs. pre-industrial levels below 2.0°C. NGFS disorderly scenarios reflect higher transition risk from delayed and divergent climate actions. NGFS hot house world scenarios result in severe physical risk due to insufficient actions to mitigate the effects of global warming. Note: The 10-year period is from February 28, 2023, to February 27, 2033.

Gross domestic product (GDP) growth potential is lower under all NGFS climate scenarios compared to our climate-agnostic baseline, though it is not equally distributed across various regions and climate scenarios. Over the long term to 2050, GDP growth is less negatively impacted in scenarios in which the world experiences an orderly transition towards net zero relative to a disorderly transition and a hot house world.

This is largely due to how climate transition and physical risks interact with macroeconomic variables such as GDP growth, inflation, and interest rates. For example, climate risk increases inflation risk in the next decade (see Figure 2), adding uncertainty to policy interest rates because central banks must balance between managing inflation and GDP growth.

Figure 2: 10-year annualised inflation deviation from baseline



Source: Fidelity International, March 2023. Assumptions are based on proprietary CMA modelling. For illustrative purposes only. Note: The 10-year period is from February 28, 2023, to February 27, 2033. Baseline refers to Fidelity's climate-agnostic baseline. EU refers to the EMU.

Climate risk also influences risk-return characteristics of asset classes differently. Fixed income is less affected by climate change as price impact is typically offset by higher income, although the magnitude of each component can vary. In contrast, equities exhibit greater sensitivity to climate change given their valuation is typically based on discounted future cash flows, which are most punitive under disorderly transition and hot house world scenarios due to higher transition and physical risks, respectively.

Implications for portfolio construction

A careful evaluation of the climate risk taken - intentionally or unintentionally - against the underlying performance drivers through various climate scenarios can help investors optimise risk-adjusted returns. Some considerations include the following:

- A broader set of outcomes is expected when integrating climate risks into CMAs.
- Greater dispersion and higher uncertainty at the regional, country, and sector levels due to climate risks may call for a more considered and dynamic implementation of investment strategies.
- The underlying performance drivers when climate risks are integrated into CMAs are also significant. These return components may also change significantly over time.
- The volatility of certain regions and asset classes is likely to increase if climate risks are integrated into CMAs.
- Physical and transition risks are interlinked and may follow a highly uncertain path, be irreversible and have fat-tail distributions.

In our view, failure to adequately consider climate risks may lead to misguided return expectations at best. At worst, investors may fail to recognise the increasing possibility of negative and systemic financial market disruptions as the impact of climate change broadens and intensifies.

Important Information