Climate change sentiment could hit global investment portfolios in the short term

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Riders on the storm II. Credit: Olatz eta Leire

A new report by the University of Cambridge Institute for Sustainability Leadership (CISL) reveals that global investment portfolios could lose up to 45 per cent as a consequence of short-term shifts in climate change sentiment.

The report, "Unhedgeable Risk: How climate change sentiment impacts investment," concluded that about half of this potential loss could be avoided through portfolio reallocation, while the other half is "unhedgeable", meaning that investors cannot necessarily protect themselves from losses unless action on climate change is taken at a system level.

"This new research indicates that no investor is immune from the risks posed by climate change, even in the short run," said Jake Reynolds, Director, Sustainable Economy at the Cambridge Institute for Sustainability Leadership. "However, it is surprisingly difficult to distinguish between risks that can be addressed by an individual investor through smart hedging strategies, and ones that are systemic and require much deeper transformations in the economy to deal with. That's what this report attempts to do."

While existing studies have analysed the direct, physical effects of climate change on long-term economic performance, this new report, commissioned by CISL and the Investment Leaders Group, looks at the short-term risks stemming from how investors react to climate-related information, from policy decisions and technology uptake, to market confidence and weather events.

Reynolds continued, "What's new about this study is its focus on the potential short-term impacts which could surface at any time. Major events, such as the outcome of the upcoming United Nations climate talks in Paris in December, can send signals which drive market sentiment – sometimes slowly, sometimes rapidly – and this study allows us to model the implications."

The study modelled the impact of three sentiment scenarios on four typical investment portfolios.

The scenarios tested were:

1. Two Degrees, limiting average temperature increase to two degrees Celsius (as recommended by the Intergovernmental Panel on Climate Change [IPCC]) and collectively making relatively good progress towards sustainability, and future socio-economic development goals.
2. Baseline, where past trends continue (i.e. the business-as-usual BAU scenario) and where there is no significant change in the willingness of governments to step up actions on climate change.
3. No Mitigation, oriented towards economic growth without any special consideration of environmental challenges, rather the hope that pursuing self-interest will allow adaptive responses to any climate change impacts as they arise.

The portfolio structures modelled were:

1. High Fixed Income, comprising 84 per cent fixed income, 12 per cent equity, four per cent cash; mimicking the strategies of insurance companies.
2. Conservative, comprising 60 per cent sovereign and corporate bonds, 40 per cent equity; mimicking certain pension funds.
3. Balanced, comprising 50 per cent equity, 47 per cent fixed income, three per cent commodities; mimicking certain pension funds.
4. Aggressive, comprising 60 per cent equity, 35 per cent fixed income, five per cent commodities; mimicking certain pension funds.

Each scenario was linked to a series of economic and market confidence factors used to explore macroeconomic effects within a global economic model. In turn these were cascaded down to portfolio level through an industry sector analysis. The factors included alternative levels of carbon taxation, fossil energy investment, green investment, energy and food prices, energy demand, market confidence, and housing prices.

The study found that shifts in climate change sentiment could cause global economic growth to reduce over a 5-10 year period in both the Two Degree and No Mitigation scenarios as a consequence of economic adjustment. In the longer-term, however, the study found that economic growth picks up most quickly along a Two Degrees (low carbon) pathway, with annual growth rates of 3.5 per cent not only exceeding the baseline (2.9 per cent), but significantly exceeding the No Mitigation scenario (2.0 per cent).

This is consistent with recent comments by the Governor of the Bank of England about the risk of "potentially huge" losses to financial markets due to climate change in the short term, and the "merit" of stress testing elements of the financial system to understand and deal with climate risks.

Urban Angehrn, Chief Investment Officer of Zurich Insurance Group and member of the Investment Leaders Group, echoed this view: "As an insurer we understand that the potential human impact and economic cost of extreme weather and climate events are vast. Multiplied by population growth, coastal migration and urbanisation, the threat seems even larger. We see it as our responsibility to help our customers and communities to build resilience against such events. As investors, the tools to help us translate that threat into investment decisions are - at present - limited. This report provides us with a meaningful basis to discuss investment strategies that tackle climate risk. It will help us go beyond the significant commitments that Zurich has already made."

Under the Two Degrees scenario, the Aggressive portfolio suffers the largest loss in the short term, but it recovers relatively quickly and generates returns above and beyond the baseline projection levels by the end of the modelling period. In contrast, under a No Mitigation scenario, a

Conservative portfolio with a 40 per cent weighting to equities (typical of a pension fund) could suffer permanent losses of more than 25 per cent within five years after the shock is experienced.

"Far from being a lost cause, investors can 'climate proof' their investments to a significant extent by understanding how climate change sentiment could filter through to returns," said Scott Kelly, research associate at the Centre for Risk Studies, University of Cambridge Judge Business School, and one of the authors of the report. "However, almost half the risk is "unhedgeable" in the sense that it cannot be addressed by individual investors. System-wide action is necessary to deal with this in the long-term interests of savers."

The report offers a series of insights for investors, regulators and policy makers including:

- Seeing climate change as a short-term financial risk as well as a long-term economic threat.
- Recognising the value of "stress testing" investment portfolios for a wide range of sustainability risks (not only climate risks) to understand their financial impacts, and how to manage them.
- Pinpointing areas of "unhedgeable" risk where system-wide action is required to address risks that cannot be escaped by individual investors.
- The importance of using capital flows to improve the resilience and carbon profile of the asset base, especially in emerging markets.
- Identifying significant gaps in knowledge where new research is required, including of an interdisciplinary nature.

More information: Unhedgeable risk: How climate change sentiment impacts investment. www.cisl.cam.ac.uk/publication … ons/unhedgeable-risk

Provided by University of Cambridge