

Climate Change versus Economics: A Commentary on *Climate Change Scenarios—Implications for Strategic Asset Allocation*

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The Mercer report, *Climate Change Scenarios—Implications for Strategic Asset Allocation*, represents an important attempt at shifting asset allocation practice away from a world of buy-and-hold passivity toward a culture of scenario contemplation and activist decision making. And it's about time.

It may surprise industry outsiders but boilerplate asset allocation largely operates without much thought for what happens next. The 'S' in Strategic Asset Allocation (SAA) more accurately stands for simple, static, and set-and-forget. Simple: institutional agents (trustees and management) are warned away from consideration of anything below the most basic and broad asset categories (leave it to the alpha experts). Static: asset allocation should be performed in a vacuum of equilibrium economics, divorced from the reality of the dynamic and evolving world in which we invest. Set-and-forget: once you've decided on the basic asset allocation don't touch it—no matter how the future unfolds (at this point, you can't be trusted to behave in any way other than irrationally).

The end result is that most institutional investors are unprepared when their environment evolves and especially when bad stuff happens in financial markets. They will surely have a plan in place if their building catches fire, but, if markets break down (or up), there's no plan to follow and certainly no fire drill to fall back on. Either keep your hands off the wheel or panic.

So kudos to a major global consulting house for admitting that traditional allocation practices are deficient in a world of "deep uncertainty" (which is how the report characterizes the issue of climate change), and bravo for advocating a scenario-based process for thinking about and acting on future unfolding events. Of course, now that Mercer has invented this framework and created a straw man, we have a template for discourse and disagreement.

The Scenarios

The four scenarios presented could have been broader and could have covered a wider range of possibilities, including arguments from a more right-wing perspective. The scenarios tend toward an advocacy of the Stern report and this creates an unduly simplistic

linearization of the problem: a lack of regulation will surely lead to disaster, a bit of regulation means less of a disaster, and (of course) everything will turn out fine if we have lots of regulation.

Never contemplated in the report is the possibility that damaging climate change doesn't occur; for example, climate science ends up being wrong (climate scientists tend to quote this chance at 10%), climate changes are benign, or the world finds a cheap and easy fix. The most commonly ignored dynamic in forecasting climate change is peak oil: we may well be running out of fossil fuels to burn, thus solving climate change. Recent innovations with the potential for achieving dramatic cost reduction in solving climate change are emerging in geoengineering proposals, where terraforming sciences are being applied directly to the problem.

The other missing scenario is that it's already too late, and that climate breakdown will occur regardless of what we do (climate scientists are starting to quote this chance at 10%).

In both of these tail scenarios, the relationship between regulation and economic outcome is reversed: the economic cost of carbon emission reductions will now be of no benefit to the future, and it will be detrimental to portfolios skewed in the ways recommended in the paper.

Likely also to stick in the craw of the Right is the degree to which governmental committees are assumed to get it right. From the Stern Action scenario description:

There will be swift agreement to a global framework and a very high level of coordination in policy efforts internationally, resulting in a high degree of economic transformation across the global economy. . . . Less uncertainty for investors about climate policy and new technology investments will be the major drivers of positive transformation.

The current situation in Europe, with the inevitable breakdown of the Euro-zone despite 20 years of political engineering, is the counterfactual. Historically, transnational committees, even with the best of intentions, have rarely worked. Along the way, policy and technology subsidy choices will invariably be wrong, as new evidence comes in and as politicking trumps common good. What also sticks in the craw of the Left is the reality that nations and peoples have diverging interests and often require competition to resolve differences (with national violence the obvious alternative). What happens when winners and losers are created at the nation-state level due to supra-national coordination decisions? A prime example is monetary policy for the Euro-zone: central bank policy

cannot be set to satisfy both Germany and Greece at the same time. As we are now seeing in Greece, threats to sovereignty are often necessary to assert coordination decisions. Without a European demos (common language, history, and culture) to enable politics, the only long-term solutions possible in my opinion are for Greece to lose sovereignty or to withdraw from supra-national coordination so that it can again be competitive as a nation (by depreciating a national currency, for example).

From an economic point-of-view, the regional divergence scenario may be a better option than depicted in the report. Countries (as well as entrepreneurs, companies, and regulatory bodies) competing to find technological solutions to reduce emissions, experimenting with various carbon trading schemes, and dealing with neighboring state transgressions and climate crisis on a bilateral basis may well lead to a better outcome than an idealized new world order.

It's Climate Change Policy, Not Actual Climate Change, That Is Economically Risky

The report compartmentalizes the investment effects of climate change into technologic change, direct impacts of climate change, and policy effects (called the TIP Framework). Via a filter of proprietary risk analysis, it very quickly narrows in on policy as the key investment risk driver. I saw this as the major finding and key insight of the paper. Technological change is an ever-present risk (and opportunity) in investing—climate change is nothing special. The direct effects of climate change are just too far away to make a difference to today's capital allocation decisions. So policy, by a reasonable economic analysis, is the real economic risk that investors need to manage.

A subtext of the climate change debate is that we now control and determine the planetary future, and our primate brains and social structure are probably not ideally evolved for this responsibility. In economics, we even have a suggestive division of the craft into micro-foundations (incentives and decision-making at the individual level—think primate brain) and macroeconomics (think primate social structure). No surprise then that economics (along with human nature) will tend to discount everything more than 20 years away to have zero effect on today's value. Economics may not be ideally suited to analyzing the market failure that is climate change.

I can't prove it in economics terms, but I personally think that climate breakdown would be a bad phenomenon for listed equities rather than a neutral one with low sensitivity. (This is where the specific terminology used in the report is likely to mislead a casual reader. The rating means that it is unlikely the climate will break down over the next twenty years, so listed equities are unlikely to be affected by whatever regulations are

enacted. However, the long-term prospect of climate breakdown suggests that we won't be spending too much time tallying up pieces of paper with dollar signs written on them. At the end of the day, assets are claims on future wealth and, with little prospect for any sort of future, the value of listed equities will be zero.

Invest in Unlisted Alternatives?

“Climate-sensitive assets,” a term used throughout the report, could have been better defined. To quote from the report:

Climate sensitive assets refer to assets whose underlying risk/return characteristics are sensitive to the different sources of risk, defined in this study as low-carbon technology (T), physical impact risk (I) and climate policy risk (P). . . . We conclude that the assets that are highly sensitive to climate change include real estate, infrastructure, private equity, sustainable equities (listed and unlisted), efficiency/renewables (listed and unlisted) and commodities (including agricultural land and timberland).

Is a nuclear power plant sitting on the coast in an earthquake zone climate-sensitive? I think it is, yet the definitions in the paper suggest not—the Fukushima plant was owned by a listed equity company (low sensitivity to scenarios), was certainly not a sustainable asset, and thus would not have appeared in the climate-sensitive asset category.

From an investor's point of view, there is also a dilemma over subsidy capture as a valid strategy. Investing based on government proclamation and support implies a wealth transfer to investors (from the public) and a risk transfer away from investors to the public. Such situations (similar to the current broad-risk asset climate in which the U.S. Federal Reserve is directly supporting risk-asset prices) might be profitable in the short-run but also tend to result in bubbles, misallocations of capital, and bad crashes. Governments choosing winners and promising investors certainty seldom leads to sustainable investing (and sustainable growth).

Large sections of the unlisted asset classes are the problem rather than the solution to climate change investment risk. Infrastructure is largely roads, coal terminals, and energy distribution systems: Won't we be driving less, using less energy and not burning coal, to the detriment of existing capital owners? Real estate (the building industry represents 30% of global emissions according to the report) will surely undergo the liquidation costs of regulated obsolescence. Agricultural land (33% of global emissions) and water rights are dangerous investments, given that property rights may be difficult to assert in times of food and water scarcity.

If you invest in unlisted assets, and are worried about climate change, then you need to try for a very narrow, concentrated portfolio. Don't just tilt your portfolio but go 100% sustainable and renewable. Buy local land, water, and trees (at least your neighbors will get to enjoy them when they're nationalized).

Conclusion

Overall, the report is an excellent example of what scenario analysis is capable of. At its best, scenario analysis can better define a problem domain; can highlight proper orders of magnitude; and more generally lead to productive debate. Climate change may well be the greatest market failure the world has ever seen, as the paper remarks, quoting the Stern report—time will tell. For me, the paper drew out the nature of the potential failure. The horizon of climate change effect may be beyond the normal human capacity for prudence. Given that economics is the science of (human) prudence, normal economics may not deal with climate change very well because humans have difficulty being prudent over multiple generations. Emissions control will at times feel (incorrectly) like an economic burden too big to bear over the next generation or so.

Personally, I would back national competition rather than national co-operation to better address climate change. I would also suggest thinking again about the veracity of alternative assets as a hedge or antidote to the investment consequences of climate change. Maybe a more appropriate hedge is to try to avoid the risks surrounding climate change policy by skewing the portfolio towards “climate-insensitive” assets like low-energy services, home entertainment, pharma, and local (physical and virtual) networking and communication services.

These personal opinions didn't exist prior to reading the paper, and full credit to the authors for creating a framework and analysis that allowed their formulation.

Biography

Tony Day is the founder and managing director of Scarce Capital, an independent advisory firm specializing in collaborating with progressive institutional investors seeking to take responsibility for their strategic decisions. Tony was previously Head of Strategy for the Future Fund (Australia's sovereign wealth fund) and Chief Strategist for Queensland Investment Corporation. He can be reached at <mailto:tony.day@scarcecapital.com>