

INSURANCE FUTURES

Financial market stability: Inventing the big hedge

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Risk and opportunity

Regulators, banks, insurers, corporations and institutional asset managers share a problem: how to ‘transition’ to a sustainable world, whilst maintaining financial stability.

The two are in conflict. Timing is central. Climate, in many parts of the world, is changing fast. Culture, contrary to conventional wisdom, can change in weeks and months, as futures are re-imagined and new narratives emerge. Politics, even faced with long-term strategic and possibly existential risk, is characterised by prevarication and delay.

We can expect shocks to the financial system long before the full impacts of climate change are felt and sea levels rise, as investors make large-scale changes to their asset portfolios. The fundamental structures of asset management and insurance will be transformed. Some risks will be uninsurable. Radical transparency will force sectors, individual corporations and financial institutions to re-invent themselves, or face failure.



There are three broad long-term financial scenarios. The first is ‘too little, too late’, in which action to avoid the extremes of runaway earth systems and adaptation ultimately fails, irrespective of attempts to reduce emissions. There is no financial and economic transition to a sustainable world.

In the second, ‘stable transition’, the ‘orderly’ pathway that regulators, insurers and the investment community hope will be found, emerges. If we define resilience as a set of strategies that will work in all scenarios, even the most extreme, then this amounts to ‘inventing the big hedge’. A set of adaptive options are created, delivering short and long-term action on climate change and zero-emissions, shaping a sustainable world and maintaining financial and economic stability.

The third, ‘crisis now’, operates on a shorter timeframe. This is a scenario in which the world economic and financial system is driven to crisis by sudden cultural changes that leave systemically important sectors and companies facing short-term existential risk and stranded assets. This essay explores the fragility of the financial system and some industry sectors; how hardening public attitudes, investor and regulatory pressure, together with political intervention creates unparalleled transparency and, with that, radical uncertainty.

It outlines the possible financial impacts of ‘earth system’ collapse and draws out scenarios from the complex underlying forces, mental models and cultures that will shape prospects for financial stability and security over time. It goes on to illustrate how the insurance industry has a decisive, central role in supporting vulnerable industries, corporations, institutions and cities, whilst both underwriting and investing in innovative sectors with sustainable long-term growth prospects.

Unhedged and fragile

The world’s financial system is fragile and vulnerable. Long-ignored structural weaknesses range from public, private sector and corporate debt to the challenges facing pension funds and insurers in matching long-term liabilities to investments in a low interest rate environment.

There are fears that the end of the US dollar era will create instability and that cryptocurrencies will undermine financial structures. Trade fears and growing political risks, some driven by inequality, compound the problems. The combination of trade and currency wars, restrictions on technology and intellectual property, ‘deglobalisation’ and risks to security in the Middle East that raise oil prices may create ‘supply shocks’ and recession.

Some economists fear ‘Japanisation’, or ‘secular stagnation’—the combination of deflation, weak growth and failing monetary stimulus packages. Europe may be heading in the same direction. Larry Summers, the former US Treasury secretary, said recently that “The United States is only one recession away from joining them.”

For some time, some private and institutional investors have looked to direct investment, unconventional assets, corporate bonds and private equity for returns, reflecting a lack of confidence in conventional assets and public markets. Non-regulated ‘shadow banking’ has continued to grow and as many investors have turned to illiquid assets, in search of yield, concerns about market structures and stability grow.

Resistance and denial

Against this background, climate change is a force multiplier. It is a clear and present danger, yet there is widespread resistance to rapid structural change. A study of 3000 listed companies by Arabesque S-Ray in 2019 showed that 18% have disclosed plans aligned to respond to the 1.5 Celsius targets by 2050. One explanation is that companies are reluctant to reveal the full scale of emissions for fear of losing short-term investor and insurance support.



A report by the World Resources Institute suggests that only half of the world’s 50 largest banks have made commitments to sustainable finance. In 2019, only seven of the major banks invested more in sustainable finance than fossil fuels.

The hedge, deliberate or not, is that they can continue to drive profits from existing business models until they are forced to change. For some corporate leaders, the current hedging strategy is to maintain business as usual, in order to satisfy shareholders and investors that rely on dividends for as long as possible. This is not, as we will see, an answer: the shocks may emerge at any time.

On the other hand, three-quarters of investors are using the climate rules set out by the Task Force on Climate-related Financial Disclosures (TCFD) before buying company shares. In a recent speech in Japan, Mark Carney, the governor of the Bank of England, said that if listed companies do not set out their climate-related risks, then regulators will impose standards.¹

The underlying problem is that some sectors, such as aviation and the major carbon emitters, cannot re-invent quickly enough. Take aviation: ‘green’ aircraft, using next generation batteries, will not emerge for a decade or more. This explains why the response of airline leaders to the viral idea of ‘flight shaming’ included language like ‘existential threat’. For growing numbers, flying is discretionary spending and so demand may fall abruptly. Carbon offsets are not an answer. Meanwhile, there are early signs of substitution: international rail has found new momentum.

Fossil fuel corporations and oil-dependent nation-states, both major sources of dividend income, face similar challenges: they cannot become ‘green energy’ specialists overnight. Total is investing in biofuels, Shell in electric power. Neither will transform the picture in the short timescales demanded by a growing number of public and investor activists. Meantime, massive carbon taxes and bans on fossil fuel vehicles in cities have momentum on political agendas.

Culture shocks

There is, above all, growing realisation that the financial system is vulnerable to long-term climate-related shocks. What is less recognised is the underlying narrative that multiple major cultural and structural adjustments are underway.

Shocks will emerge well in advance of events themselves, such as major floods and storms leaving some of the world’s major cities, like Miami, uninhabitable by 2050. This is because markets and strategic asset management decisions are shaped by imagined futures—the cultural realities that determine whether investors should buy or sell, sooner or later.

According to conventional wisdom, culture changes slowly. The reality is that, in volatile, chaotic times, culture change can be abrupt. Faced with large-scale, radical uncertainty and the lack of a shared sense of purpose or vision at international level, a new narrative is emerging around urgent action. The recent shift in public attitudes to microplastics, the surge in global protests on climate change illustrated by the schools strikes and the momentum of the ‘flight shaming’ story illustrate.

Public, investor and regulatory pressures are aligning with a shared sense of purpose. Pressure will only increase, as images of extreme weather events dominate daily news headlines and social media. When lived experience makes language like ‘climate crisis’, ‘climate emergency’ and ‘existential risk’ real, sudden shifts in attitudes will undermine the narrative that climate is a problem solved by making commitments to be met in the distant future, say by 2050. Evidence of short-term action to meet long-term risks will be decisive.

Regulators: Prime movers

Against this background, the cumulative impact of fragility and resistance will put the financial sector, corporations and insurers under unprecedented scrutiny. Transparency will emerge as the dominant driver of disruptive, urgent change.

In the short-term, much of the pressure will come from regulators. Banking, insurance and corporations will be judged according to new criteria.

Take as an example the framework set out in the recent discussion paper for banking and insurance by the Bank of England's Prudential Regulation Authority (PRA) in the UK.² As recently as March 2019, the narrative was that the 'catastrophic impacts of climate change will be felt beyond the traditional horizons of most banks, investors and financial policymakers, imposing costs on future generations that the current one has no direct incentives to fix. Once climate change becomes a clear and present danger to financial stability it could already be too late to stabilise the atmosphere at two degrees.'³

In just a few months, the story has changed. The stakes are 'existential' and the realisation that there is little time left has galvanised action. The PRA has set out a framework on climate risk that requires banks and insurers to adopt a 'strategic approach' to evaluating long-term financial risks linked to climate change. The strategies must use long-term 'scenario analysis to inform strategy setting', governance and an approach to disclosure to investors.

Limiting the scenarios to climate may itself encourage reductionist thinking and fail to capture the full scale of potential inter-systemic failures. The challenge is to recognise the uncertainties surrounding the transformation of the global economy, rather than simply evaluating 'physical and transition' risks of climate change.

This is best seen as a holistic 'future-readiness assessment'. The PRA defines long-term as 2050. This is new to the vast majority of banks, insurers and corporate boards, who often operate on one to three-year time horizons. Few leaders in the financial and corporate worlds are practised in thinking long-term.

One of the consequences that the PRA notes is that many regulated institutions lack the experience, methods, specialist skills or imaginative talent to meet new demands for what amounts to a new way of thinking. This will slow implementation and itself increase financial market volatility.

Nowhere to hide

Transparency will be decisive in other ways. Understanding imagined futures and the narratives that describe them is as important in the short-term as mapping the complexities of long-term coastal resilience or asset class prospects and structures. Any futures readiness assessment must include socio-cultural forces, which are in play today, not 2050. The 'climate catastrophe', in cultural terms, is here and now.

Financial services firms and corporations will be judged by the rate at which they can align strategic re-invention with demands for action. They need a sustainable business narrative to match the sustainable world narrative. As Janet Yellen put it as long ago as 2003 when talking about Federal Reserve strategies "communication is policy". For banks, insurers and corporates, the narrative is not simply an expression of strategy, it is strategy.

The surge in granular information about the regions, cities and corporations most at risk from short and long-term physical changes, such as flooding and sea level rise will put the financial system in the spotlight. Intelligence techniques are improving. To illustrate, governance statements made by corporate leaders can be interrogated to reveal underlying strategic intent, revealing gaps between rhetoric and reality. Hedge funds are already developing shorting strategies. The upshot is that the intelligence and complexity modelling tools needed to make targeted judgments about everything from underwriting, to asset management, to supplier networks are emerging.

There is some way to go. The challenge is constantly changing context and uncertainty. Even so, rigorous, imaginative, company-specific long-term scenarios are rare and few corporates align strategies to scenarios. The gold standard for resilience is to match strategic options to scenarios and monitor them over time.

To recap, the portfolio options, from investor and insurance perspectives, should deliver answers to even the worst-case scenarios. The corporate playbook should be adaptive, as one scenario emerges over another.

Scenarios: Emerging extremes

TOO LITTLE, TOO LATE

In one possible scenario, irrespective of large-scale, urgent action to slow climate change, for many vulnerable parts of the world it is ‘too little, too late’. The fears of a growing number of scientists are realised, as earlier estimates of the relationships between carbon emissions and rising temperatures prove understated. Carbon emissions already stored in the atmosphere, cumulative ocean-warming and melting ice sheets begin to drive ‘runaway’ conditions and biosphere collapse over the next two decades and beyond.

Climate change exposes structural weaknesses in politics, society and financial systems, leading to existential crises before the full impacts are felt. The narrative reads: worsening climate and weather systems; food, water and temperature crises; social unrest, mass migration, revolution and wars; radical innovation; political panic, policy errors and unintended consequences; accelerating financial chaos. Some regions and sectors are hit harder than others, reverting to subsistence conditions and isolation. Feedback loops emerge.

Despite central bank and regulatory intervention, support from corporate leaders and long-view asset managers, the finance sector fails to anticipate the scale or severity of the structural disruption. The lack of coherent management of systemic risks to the climate and the biosphere undermines confidence.

The insurance ‘protection gap’ increases due to the mismatch between demand and available capital. This leaves corporations, cities, the public and national governments exposed. Stranded assets and long-term liabilities dominate the agenda. In the extreme, sudden shifts in dominant investor and public narratives trigger panic and financial collapse. Shockwaves follow, with cascading impacts flowing through sectors, regions and nations.

STABLE TRANSITION

In a second scenario, temperature rises are moderated slowly over time. The theoretical models that suggested the Paris Agreement of two degrees over pre-industrial levels could be achieved are proved broadly right. The worst impacts are avoided. Vulnerabilities are met with ‘systemic innovation’ in everything from global governance to coastal ecosystems. The ‘transition’ to a sustainable economy follows a ‘predictable’, if rocky and hazardous path.

There are financial and corporate winners and losers, since some companies cannot re-invent themselves strategically, or quick enough to keep pace with growing public, investor and political pressure, to the new economy.

This pressure on corporate leaders, the finance and insurance sector plays a vital role in preventing extreme outcomes. The financial system, seen as a whole, is hedged, in anticipation of emerging endgames and the so-called ‘transition risks’. The finance sector, insurance and credit agencies are prime movers in shaping a sustainable economy. Trillions of investment dollars are directed towards corporates that match short-term action to environmental promises.

CRISIS NOW

A third scenario emerges on a shorter time frame. The financial system is thrown into short-term crisis by sudden cultural changes that leave entire sectors facing existential risk, long before the full impacts of climate change, or on corporate profits, take hold. The underlying narrative that having created climate change, the mechanisms can work in reverse and the rate of change brought under control proves unsustainable.

The convergence of public, institutional and political pressures delivers systemic failures in corporate value and assets. This is before, for example, vulnerable cities experience direct impacts from changing climactic conditions. In this scenario, the shocks are driven by social, cultural and political action. Total transparency plays a vital part.

The realisation that coastal cities in India, or the Eastern seaboard of the US, cannot be saved from extreme storms and flooding, is enough for investors and credit agencies to withdraw support. This amounts to a sudden, cultural shift, a new realism already clear in the structure of narratives about long-term resilience. Since real estate and investment markets depend on confidence, the story that critical assets can be defended, or migrated, is not sustained for long.

In this scenario, the integrated, fragile financial system, characterised by complex interdependencies, creates instability and crisis, as large numbers of investors take action to avoid the long-term, risks associated with stranded assets and poorly performing portfolios.

INSURERS: INVENTING THE BIG HEDGE

These scenarios raise the question of how insurers can contribute to the invention of the big hedge, both in their own interests and broader social terms. What options will work, in all scenarios?



The first option, well documented but not widely implemented, is to support and underwrite large-scale government borrowing and, with that, corporate national and regional investment in sustainable development and infrastructure. More specifically, in a world where some regions face long-term existential risk, by directly investing in resilience measures, such as ‘natural’ defences, insurers can shape sentiment.

Geography is beginning to play a direct role in borrowing costs and long-term investments, since the impacts of climate change, whilst global, are specific to individual locations. We can expect property and casualty insurance to become hyper-local as climate models improve.

The second option, illustrated by AXA, is to withdraw insurance cover and investment from fossil fuels and polluting industries. This amounts to bringing forward the structural adjustment to the future operating environment, absorbing short-term business impacts in the public interest and building reputational assets. As CEO of AXA Thomas Buberl said in 2017, announcing divestment in tar sands companies, oil pipelines and coal “an increase of 4C is not sustainable and therefore uninsurable”. AXA announced cuts in both underwriting and investment.

The third: to invest in complexity modelling, drawing together partnerships that target sustainable developments in vulnerable regions and easing the transition of sectors that have a long-term role, but short-term problems.

Insurers can take a leading role in delivering what Mark Carney calls ‘high quality disclosure’ insisting that their underwriting clients meet rigorous long-term risk management standards. This might include providing advice and services in everything from anticipating policy and regulatory interventions, to supporting tax incentives for sustainable policies. In broad terms, insurers are well-positioned to lead the development of environmental, social and governance (ESG) standards.

More generally, the industry has a public policy role. It can re-invent itself in the public mind by stressing its role in providing security, underwriting emerging, systemic risks and supporting financial stability, as well as driving systemic innovation, in say transport, in the public interest.

More important, insurers can underwrite ambitious infrastructure renewal projects, to accelerate change and minimise climate and biosphere risk. In a new sustainable economy, developing insurance products and services is an opportunity to not simply support systemic innovation, but to lead and drive it, giving inventors and investors confidence to take risks.

Backing rapid changes in transport networks and electric vehicles is one clear strategy, where both public and commercial interests can be aligned. This support can range more widely, from encouraging developing intellectual property regimes to support sustainable infrastructure in the world’s major cities to direct innovation, in, for instance, extensive use of drones to improve risk assessment, management and claims.

Insurance and risk services are by definition a key part of any institutional hedging strategy. They define the boundaries of the risk envelope and shape risk appetite, particularly for investors and governments. It is easy to forget that insurers underpin risk assessments for investors, banks and corporate supply chains.

The industry has the opportunity to protect its own business models and support clients. Bespoke risk management and advisory services will complement the drive for greater automation and self-service. Catastrophe bonds and novel reinsurance instruments may form part of a reinvention of the industry, placing it at the centre of new partnerships with wider stakeholder groups to meet rising demand.

1 <https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/tcfd-strengthening-the-foundations-of-sustainable-finance-speech-by-mark-carney.pdf?la=en&hash=D28F6D67BC4B97DDCCDE91AF811283A39950563>.

2 <https://www.bankofengland.co.uk/paper/2019/biennial-exploratory-scenario-climate-change-discussion-paper>.

3 Mark Carney, Bank of England, <https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/a-new-horizon-speech-by-mark-carney>.

About the author

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