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THE CAPCO INSTITUTE
JOURNAL
OF FINANCIAL TRANSFORMATION

RISKS

How the insurance industry
is fighting climate change and
transforming itself by doing so

LUDOVIC SUBRAN | ARNE HOLZHAUSEN



INSURANCE

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DEAR READER,

Welcome to edition 54 of the Capco Institute Journal of Financial Transformation.

In this edition we explore recent transformative developments in the insurance industry, through Capco's Global Insurance Survey of consumers in 13 key markets, which highlights that the future of insurance will be personalized, digitalized, and connected. Other important papers cover topics high on global corporate and political agendas, from ESG and climate change to artificial intelligence and regulation.

The insurance industry has been undergoing transformation in recent years, with insurers responding to the needs and expectation of tomorrow's customers, for products that were tailored, flexible, and available anytime, anyplace, and at a competitive price.

COVID-19 has accelerated such change, forcing insurers to immediately implement programs to ensure they can continue selling their products and services in digital environments without face-to-face interaction. New entrants have also spurred innovation, and are reshaping the competitive landscape, through digital transformation.

The contributions in this edition come from a range of world-class experts across industry and academia in our continued effort to curate the very best expertise, independent thinking and strategic insight for a future-focused financial services sector.

As ever, I hope you find the latest edition of the Capco Journal to be engaging and informative.

Thank you to all our contributors and thank you for reading.

A handwritten signature in black ink, appearing to read 'Lance Levy', with a stylized, flowing script.

Lance Levy, Capco CEO

HOW THE INSURANCE INDUSTRY IS FIGHTING CLIMATE CHANGE AND TRANSFORMING ITSELF BY DOING SO

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ABSTRACT

Climate change has a very simple effect: risk is rising in the world. This poses an existential challenge for the business model of insurance, the transfer of risk. Impact underwriting and impact investing describe the new mindset: the industry no longer only prices and transfers risk but tries to change outcomes from non-sustainable to sustainable ones. For that, public-private partnerships are essential, both on the strategic level, steering the transition with long-term policy guidance, and on the operational level, building adequate risk-protection schemes and supporting investment. But climate change is not the only challenge that threatens today's societies. Behind lurks the protracted issue of growing inequality, which could easily be exacerbated by climate policy. Consequently, a new social contract is urgently needed. Insurers can play an important role here too, not only as good corporate citizens but also by embracing the pivot to equality in their business models.

1. FROM TRANSFERRING RISK TO REDUCING IT: THE PIVOT TO SUSTAINABILITY

Sustainability is an age-old concept. In earlier times, it was essentially about preserving the natural balance as a basic prerequisite for human activity. With the dawn of the 21st century, this premise can no longer be upheld. For in the Anthropocene, as a result of unrestrained global industrialization, the natural balance has been destroyed. Sustainability is, therefore, mutating from an inherently conservative concept – the preservation of the existing – to a revolutionary one: restoring balance through radical changes to the way we live – how we get around, what we eat and consume, and, most importantly, how we produce the things we need every day.

Insurance, too, is an age-old concept. The idea of transferring and distributing risks goes back to the early days of trading centuries ago. However, like the idea of sustainability, it has reached a turning point where old concepts no longer work. Risk is only rising in the world, be it caused by natural catastrophes, extreme weather, or cyberattacks. This rising tide renders inadequate the mere transfer of risk. To stay relevant, the industry has to change accordingly, moving beyond pricing and transferring risk to changing outcomes from non-sustainable behaviors and processes to sustainable ones.

Its double role as risk underwriter and major investor puts the insurance industry in a unique position to drive this transformation and bring about economic, social, and environmental sustainability.

In underwriting, this requires the implementation of more impact activities. But impact underwriting is not just about having sustainable insurance solutions in the portfolio; rather, it is about actively shaping and contributing to society, having long-term impact. Take renewable energy as an example: global capacities will more than triple by 2050. Accordingly, the demand for insuring renewable energy installations against physical, development, or operational risks will rise. Risk consulting and risk service solutions support establishing new technologies or developing new territories. Mobility is another example: electric vehicles will dominate new car sales before long. Impact underwriting can support this transition by offering insurance solutions to the areas of mobility sharing, as well as autonomous driving, and can seize new opportunities in the sector coupling of vehicle batteries with the energy infrastructure. In a nutshell, impact underwriting means that insurers work together with their customers on adapting to climate change, increasing the resilience of their infrastructure, facilities, or supply chains.

Impact insurance, however, does not have to stop with underwriting. Claims are important as well. Sustainable insurance-claim regulation can allow for upgrades to eco-labeled appliances and machinery, and, due to a life-cycle analysis of the emissions associated with a product, appliances could be repaired instead of replaced. In a nutshell, impact claims means to evolve from compensating financially to rebuilding and renewing in a much more sustainable way. Both impact underwriting and claims establish insurers as change agents for sustainable outcomes.

Similarly, when it comes to impact investing, insurers occupy a crucial role. There are two reasons for this: first, their investment horizon is long term. They are not subject to the “tragedy of the horizon”, as defined by former Bank of England governor Mark Carney, but automatically take the (very) long term into account in their investment decisions because of their own commitments, which extend over decades. Their investment strategy is geared towards achieving long-term current returns, not short-term increases in value. Interim fluctuations in value hardly play a role here because, unlike banks, they do not generate any short-term liquidity requirements. Secondly, insurers’ investment calculus is comprehensive, their perspective resembling that of a public good maximizer (the so-called social planner). This is because the large number of assets in their portfolios means that they are interested not only in the profitability of the individual investment, but also

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Insurers need to transform from being institutions that transfer risk to ones that change outcomes.

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in the cost to the other assets by which that profitability is achieved. For example, if a company increases its profitability by emitting more greenhouse gases, it increases the likelihood of climate damage to other companies. In this way, a broadly diversified portfolio leads to congruence of goals: what makes a society as a whole prosper and grow sustainably is also reflected in the balance sheets of institutional investors. In a nutshell, impact investing takes the 360 degree/100 years approach.

However, for insurers to fulfill their new role, for successfully transforming from being institutions that transfer risk to ones that change outcomes – nothing less than changing from being conservative to being revolutionary – a societal consensus is needed on the direction, extent, and speed of the green transformation. Even in the 21st century, the political revolution precedes changes at the material base. Without reliable, long-term policy guidance, institutional investors like insurers cannot live up to their ambitions and aspired roles.

2. PUBLIC-PRIVATE PARTNERSHIPS ARE THE NAME OF THE SUSTAINABILITY GAME

These public-private partnerships, however, should not stop at forging a broad social consensus and support for the green transition. They also have to encompass the operational level for a simple reason: if the risk in the system increases over time, it is in the end the public sector that ends up holding most of it, an outcome that can hardly be described as sustainable.

The COVID-19 crisis and the recent flooding in Germany are a case in point: the dimensions of damage were simply overwhelming. The state had to step in as the rescuer of last resort, and ad-hoc measures to save lives and livelihoods were clearly inevitable. Still, they created some negative consequences. And that is not to mention the resulting debt mountains and the increasing entanglement of the state in the private sector. The behavioral consequences might even

count more as unprecedented measures can set a dangerous precedent: the expectation that the state will always act as the safety net protecting households and companies from all big risks – whatever it takes. This goes far beyond pandemics but may also include climate change, cyberattacks, and old-age poverty. It could herald the return of the almighty state, which renders self-responsibility and own efforts to mitigate risks obsolete. But it goes without saying that without self-vigilance, risks are only to grow bigger and bigger.

For that reason, it is so important to build ex-ante public-private risk-protection schemes. There already are some in place – for example, for flooding (U.K.) or terrorism (U.S.) – but this should be done more systematically across all possible systemic hazards, be it pandemics, natural catastrophes, or cyberattacks. As long as all participants retain skin in the game, they have a strong self-interest in taking preventive and preparatory measures. In such a system, private insurers could form a kind of plumbing system: they check the claims and make the payments. And unlike the state, which is used to putting up protective umbrellas with guarantees but struggles to distribute funds quickly, directly, and un-bureaucratically, insurers have the necessary know-how, processes, and structures. Financial support is not only promised quickly, but also provided efficiently and precisely.

The same logic for public-private partnerships applies for investments. The requirements for creating a sustainable economy are gigantic: the transformation of our energy system toward climate neutrality alone will account for about 2% of global value added annually for the foreseeable future – equivalent to about €1.5 trillion. This is clearly beyond the means of the state. Mobilizing private capital is key – and the good news is that there is plenty of it: the supply of capital is not the bottleneck of the green transformation. Private households worldwide have around €200 trillion in financial assets; insurers and pension funds account for just under 30% of this.

Demand for capital has been rather subdued in recent years; this applies to both public and private investment. However, a paradigm shift is taking place as a result of the pandemic: governments are massively increasing their spending on infrastructure, exemplified by the Biden Plan in the U.S. or the NextGenerationEU Fund, a large part of which is to flow into the green transformation. But there are also signs of a turnaround in the private sector. Many companies, spurred by

the prospect of rising demand when the economy reopens, have significantly increased their investment plans. The post-COVID-19 recovery thus offers a great opportunity to make decisive progress on the road to climate neutrality.

To further increase and stabilize demand for sustainable investments at the necessary elevated level, it is essential to create a level playing field for these investments. A prerequisite for this is that the pricing of greenhouse gases is oriented to the market and works across national borders.

The expected development of levies and costs for greenhouse gas emissions is a central steering element for investments. Price signals and the long-term development paths of CO₂ taxes or emissions-trading systems must be consistent with climate policy goals. However, even under these conditions, some investments – due to path dependencies and long investment cycles (especially in sectors with very high CO₂ abatement costs, such as metals, cement, or chemicals) – may currently be postponed for market reasons, even if they would be socially beneficial in the long term.

This could be remedied by further suitable public-private partnerships; for example, long-term customer contracts with industry in the form of government-backed contracts for difference, so-called carbon contracts for difference (CCfD). This significantly reduces price and volume risks for investments in the energy turnaround by making operating costs – independent of short- to medium-term fluctuations in CO₂ prices – much easier to calculate. This enables favorable capital backing in line with regulatory requirements: if, for example, capital costs are reduced from 7% to 5% because part of the risk is shouldered by the state, projects can do with 20% less own capital, increasing the financing capacity of institutional investors.

This example touches on two key issues of a sustainable capital market and the role of institutional investors in it: adaptation pathways and capital requirements. The big transformation is not simply about implementing a green investment policy, i.e., portfolio shifts into “clean” companies such as manufacturers of electric cars or solar panels. That would be far too simple – and would likely lead to a green capital market bubble. It is much more important to mitigate emissions in the existing portfolio, i.e., to provide capital to companies with emissions that are still too high today, enabling them to meet their science-based reduction targets in line with the

1.5 degree target. This implies that not all investments will be 100% green, i.e., emission-free, overnight, but they must be on the defined adaptation path. Again, it is all about changing outcomes.

In turn, the regulatory requirements for risk capital adequacy are a key factor in the provision of sufficient capital, which brings the regulatory framework for insurers, namely Solvency II, into focus. A decidedly conservative approach is emerging in the current revision. In particular, changes to the extrapolation method for the risk-free yield curve and the volatility adjustment could lead to the creation of artificial (i.e., irrelevant in the context of the business model) volatility in solvency ratios, which would compromise the capacity to hold long-term investments without an economic rationale. This would be counterproductive. The result could be pro-cyclical investment incentives and “de-risking” of the portfolio. This would cause a reduction rather than an increase in long-term investments, which would not least affect investments in sustainable infrastructure and in 1.5-degree target-compliant industry adaptation pathways.

The revision of Solvency II must first and foremost avoid weakening insurers’ positions as long-term investors. At the same time, other opportunities to strengthen them should

be exploited. These include, for example, so-called “credit enhancement” arrangements that enable project promoters to improve the quality of their bonds, thereby making them more attractive to institutional investors. It is another example of a public-private partnership on the operational level in which the greater risk-bearing capacity of public institutions and the expertise and availability of private capital form a winning combination.

3. FROM EMISSIONS REDUCTION TO SOCIAL JUSTICE: REPAIRING THE SOCIAL CONTRACT

Climate change is an existential threat. Mastering it at the operational level, i.e., reducing greenhouse gas emissions fast enough to meet the 1.5 degree target, is in itself a paramount challenge. The even bigger challenge, however, lies elsewhere.

The real Achilles’ heel of most societies is not greenhouse gas emissions, it is growing inequality, the increasing polarization into different groups with particular interests, fostered by social media. The keywords for this are identity politics and populism: what counts is belonging to one’s own group or bubble; exchange or even reconciliation with others hardly takes place anymore. The sad irony: social media has brought the social contract to its knees.



The problem is that climate policy is likely to reinforce this polarization. Politicians still give the impression that the green transformation is a great opportunity for everyone. But the reality is that we have long since passed the point in time when a gradual and largely smooth transformation of the economy would still have been possible. Today, radical, rapid action is needed to achieve the Paris goals; in other words: we need a shock therapy.

In the long run, the net zero economy will very likely provide as much material prosperity for all as today's fuel-based economy does; living conditions and circumstances should even be significantly better. But along the way there will be dislocations, many workers will lose their jobs, many companies will go bust, and many investments will lose their value. This unequal distribution of the resulting adaptation costs could further exacerbate inequality.

Moreover, climate policy measures, such as the mandatory energetic renovation of existing buildings or carbon taxes, come with a hefty price tag that can be more than challenging for low-income households. It is, therefore, essential to use the revenues from carbon-pricing policies to compensate for financial hardships and secure a just transition. This can be done in different forms, for example, as direct lump-sum

transfers like the so-called climate bonus or as a stabilization of electricity prices, which would also particularly benefit lower-income households.

But reducing inequality and restoring social justice go far beyond engineering social transfers in the name of a just green transition. What is required is nothing less than a new social contract to stop undermining the social fabric further and fueling greater political bifurcation and populism down the road.

This, however, is a mammoth task – for the public as well as the private sector. Simply relying on more government and social benefits is certainly not enough, and could even be counterproductive: the antagonism between the so-called establishment and anti-establishment would only intensify. This is especially true of the universal basic income, which would cement social dependence and ignore the dignity of one's own performance. The guiding principle of a new social contract should not be alimentionation but rather resilience, the ability to bounce back after setbacks. Massive investments must be made in this resilience, e.g., through an expansion of educational opportunities at all levels. The ultimate goal is to reduce inequality, not by giving mildly, but by strengthening the capabilities of each and every individual.



In this process, all companies (and not only insurers), as modern social units, have an important role to play. They represent the few social places – after “cancel culture” has increasingly taken hold at universities – where people with different convictions and cultures, experiences, and values come together to achieve success together. Precisely this diversity is the key to build a successful company, which can thus act as an important role model for an inclusive society.

But for the finance industry, and insurers in particular, being a role model is not sufficient. Insurers should spearhead the pivot to sustainability and equality by embracing wholeheartedly the concept of ESG (environment, social, governance) in business models. And not only the macroeconomically connoted “E”, but also the more microeconomic “S”, which means in essence equality of opportunity. This entails new forms of cooperation between social policy and corporate responsibility to ensure that as few as possible are left behind during the green transition. For example, new insurance products could

be tailored to the specific needs of low-income customers, customers with disabilities, elderly customers, and minorities, enhancing the provision of inclusive and accessible insurance (micro insurance).

4. CONCLUSION

Fighting climate change is the challenge of the century. But cutting greenhouse gas emissions is only one half of the task. Paraphrasing Matthew 16:26: for what will it profit a man if he saves the climate and forfeits social justice? Repairing the social contract is as important as achieving net-zero. This requires public-private partnerships at a new scale. And insurers will have to play a crucial role in both parts. In doing so, the new insurance model will be born: insurers can become the standard-bearer of change, actively reducing risk in the system by impact underwriting and investing, and thus leading the pivot to sustainability.

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Capco, a Wipro company, is a global technology and management consultancy specializing in driving digital transformation in the financial services industry. With a growing client portfolio comprising of over 100 global organizations, Capco operates at the intersection of business and technology by combining innovative thinking with unrivalled industry knowledge to deliver end-to-end data-driven solutions and fast-track digital initiatives for banking and payments, capital markets, wealth and asset management, insurance, and the energy sector. Capco's cutting-edge ingenuity is brought to life through its Innovation Labs and award-winning Be Yourself At Work culture and diverse talent.

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