

DeNederlandscheBank

EUROSYSTEEM

“Discussing financial risks during wildfire”

Dinner speech by Frank Elderson at the FRBSF conference “The Economics of Climate Change”
San Francisco, 8 November 2019

At the conference ‘The economics of Climate Change’ the San Fransisco FRB invited Frank Elderson for a keynote dinner speech. Frank Elderson, chair of the NGFS and board member of De Nederlandsche Bank, showed how climate change – as a twofold driver of financial risk – is a serious topic for NGFS members around the globe.

The smell was inevitable. The smell of smoke.

The smell of wildfires. I have been to your beautiful state before. I remember seeing the magnificent Golden Gate Bridge rising up out of the San Francisco fog.

But now in Europe and around the world we see images of the bridge shrouded not in the famous fog, but in a smoky haze. And this smoke is so heavy that you can't only see it. You can smell it, even taste it. And it is the smell of an omnipresent catastrophe. Behind this smell are stories of despair.

It is the smell of the burning vineyards and buildings of the historic Soda Rock winery, which stood for 150 years. It is the smell of Marcella and James Shirk's home going up in flames, which they had lived in for the last 42 years. It is the smell of fire threatening the Rivas family home again. The same home they watched burn two years ago and painstakingly rebuilt. It is the smell of the smoke that has kept schools across the state closed for days and sometimes weeks. Interrupting the education of one in six children in California. It is the smell that has prompted enforced power outages, leaving thousands of families and businesses without power. It is the smell of entire destroyed communities, built on the wildland-urban interface because it is too expensive to build in town.

Of course, not counting the terrible mental anguish, there is also the heavy economic price to pay. Because the vineyard that has burned to the ground, next to providing us with the beautiful Californian wines we are probably drinking right now, provides work and attracts tourists. The elderly couple whose home has burnt to the ground don't have enough money for their retirement. The family whose house is threatened can't afford the insurance premiums.

And even if they decide to sell their house and leave, who will buy it? Every time the school closes, parents have to stay at home and can't go to work. And even if they work from home, how are you supposed to do that when you have no power? The financial losses from these fires are staggering — some estimates put them at \$400 billion in 2018, or almost a seventh of the state's gross domestic product.

Financial risks

A report by the insurer Munich RE found that the Camp Fire was the costliest natural disaster in the world in 2018 at \$16.5 billion. The world's largest reinsurance firm blamed global warming for \$24 billion of losses in the California wildfires. It warned that insurance firms will have to raise premiums to cover rising costs from extreme weather. That could make insurance too expensive for most people.

And insurance firms - as we know - form the buffer we as a society installed for unforeseen or too-large-to-cope-with-catastrophes. We can see them as the economy's shock absorbers. And if there's nothing to absorb the shocks, the system is in real danger. Extreme weather and its effects will of course not only affect insurance companies. The value of credits and investment of financial institutions at large in this area also vanished in the flames. So these wildfires, and the devastation they cause to lives and property, are unequivocally drivers of financial risk.

And this direct effect of the changing climate can occur via comparable channels too: strong winds and tornadoes can tear down buildings, heavy rain and hail storms could devastate greenhouses and crops and rising sea levels as well as droughts could endanger whole communities.

You see, we're getting to the point now where I should make clear why I'm enumerating what you probably already know. Both the reason we're gathered here and the reason I started with these facts: Leaving aside the terrible human cost...

It's about money. It's about financial risks. Financial risks for the inhabitants of your beautiful state, financial risks for the insurers, financial risks for small businesses and the banks who lend to them, financial risks for local authorities. In the same way that this smoke spreads to all counties in the state, these risks can spread to all corners of the economy. And this is but only one way the changing climate can be a driver for financial risks. Next to the physical risk that climate change is causing, there is also a transition risk channel.

As governments have prime responsibility for climate policy, not all but many of them all over the world are developing new regulations to transition to a low-carbon economy. Have financial institutions properly priced in all the effects of new rules and regulations?

Financial institutions have significant exposures to companies that emit high levels of CO₂. Financial institutions such as pension funds and banks, are vulnerable to their carbon-intensive assets suffering a sudden loss in value. Here again, risks are already unfolding. A good example is Dutch legislation in the real estate sector. From 2023 onwards, office properties in the Netherlands will be required to have an energy efficiency label of at least C, resulting in stranded assets, in the form of those offices with an energy label lower than C.

Policies like this prompt institutions to hold a mirror up to themselves, to take stock of the assets they hold and how their value will be affected by future climate policies. To us, in the Netherlands, in Europe, and many other places around the world, facts like these have made us consider that climate-related financial risks and their drivers are of primary concern for central banks and supervisors alike.

This might seem trivial to you now, especially after the presentation and discussions we heard today. But it has not been an easy road, connecting the dots between finance and climate change. We all felt this was a thing worth doing.

Yet this was not an easy thing. It was not easy to convince our colleagues that climate change was a word that central bankers should even have in their vocabulary. It was not easy to convince our banking supervisors that they should discuss climate related risks with the banks under their supervision. It was not easy to persuade our European colleagues to include climate risk in the ECB's risk map. It was not easy to hammer home the fact that climate risks are also very real financial risks.

And look where we are now. A large group of central banks in the world have woken up to the need to align finance with sustainability. Here I stand as the first chair of the Central Banks' and supervisors Network for Greening the Financial System. The NGFS.

We started as a small scale initiative of the Banque de France with eight central banks, five from Europe and other members from China, Singapore and Mexico. In just under two years we have expanded to almost 50 members. 48 to be precise as of today. And not only central banks and supervisors, but also international and standard-setting bodies like the Basel committee on Banking Supervision and IMF are on board as observer. As are the World Bank, the OECD, the BIS. Last month, the NY State Department for Financial Services joined, and this week IOSCO.

The Network now spans five continents, representing half of global greenhouse gas emissions and with responsibility for supervising over three quarters of the global systemically important banks and two thirds of systemically important insurers. So we have a collective leverage that is incredibly powerful.

What the network does? Our mission is very clear: to exchange experiences, share best practices, contribute to the development of environmental and climate risk management in the financial sector and to mobilize mainstream finance to support the transition toward a sustainable economy. It's been less than two years since we laid the first stones of the NGFS. But in that time the network has grown from strength to strength.

A year ago we published a first progress report in which NGFS Members acknowledged that climate-related risks are a source of financial risk and with that, it falls squarely within their existing mandates to work on this.

The second big milestone was the report "A call for Action" which we published last April. We issued recommendations to provide all central banks, supervisors and the financial community with deliverable goals that will help to ensure a smooth transition to a low-carbon economy.

Our first – core - recommendation is to integrate the monitoring of climate-related financial risks into day-to-day supervisory work, financial stability monitoring and board risk management. Supervisors are encouraged to integrate climate related risks in their supervisory framework and assess strategic resilience of their firms to climate change policy. Firms are encouraged to take a long-term, strategic approach to the consideration of these risks and to embed them into their business-as-usual governance and risk-management frameworks.

Second, lead by example, specifically central banks are encouraged to integrate sustainability into their own portfolio management. This is about practicing what we preach and we already took action. Two weeks ago during the Annual Meetings in DC we published a guide on Integrating Sustainable Responsible Investment in Portfolio Management.

Other recommendations are on the data gaps and capacity building. We need to collaborate to bridge the data gaps to enhance the assessment of climate-related risks. Public authorities should share and if possible make publicly available any climate-risk data.

Fourth, build in-house capacity and share knowledge with other stakeholders on management of climate-related financial risks. An important element to achieving effective consideration of climate risks across the financial system is to support internal and external collaboration.

The success of these recommendations relies on two important factors, which lead to two broader calls to action on disclosure and classification of climate-related financial risks. First, to support the market and regulators in adequately assessing the risks and opportunities from climate change, robust and internationally consistent disclosure is vital. The market and policymakers must continue to work together to determine the most decision-useful metrics for climate-related financial disclosures.

Second, we encourage regulators to develop an adequate classification system – a taxonomy - to identify which economic activities contribute to the transition to a green and low-carbon economy. This taxonomy is not only essential for the financial sector. Will it also be useful for central banks' monetary policy? Ms Christine Lagarde, the newly appointed president of the ECB, recently said that once a taxonomy is agreed upon, the ECB will need to assess whether and how it can apply to the ECB's Purchase Program APP.

Actually putting climate-related risks on the agenda and coming to these recommendations, maybe has been the easy part. Now we come to the hard part. As I said, it is still a challenge to get our hands on quality, transparent and disclosed data. Eventually we aim to translate the 'exposure at physical- and transition risks' into PDs (probability of default), LGDs (loss given default), and finally into expected- and unexpected losses.

There are various initiatives that try to close this gap, originating from both supervisors and the private sector and we definitely are making progress, but it still remains a challenge for us. That's why we need to keep up our efforts. Our next steps will be to publish further technical documents:

- a guide for supervisors on how to supervise climate-related risk
- a guide on Environmental Risk analysis for the sector
- and research on whether there is evidence for a green-brown differential including development of high-level scenarios for supervisors and central bankers

We recognise that the challenges we face are unprecedented, urgent and analytically difficult. The stakes are undoubtedly high, but the commitment of all stakeholders in the financial system to act together on these recommendations will help – as Mark Carney from the Bank of England put it - avoid a climate-driven "Minsky moment".

We need to be at the point where central banks and supervisors see scenario analysis and stress testing of these risks as a given. The point where the board and senior management of institutions engage in managing these risks, not because we tell them to, but because it's a fundamental part of their prudential responsibility.

Opportunities

So yes, the gloom and stories of despair may continue if we do nothing. But all over the world people, institutions, governments and companies are stepping up to the plate. Because we need to. And because with change, comes opportunity.

Opportunities for businesses and professionals. Many of these opportunities have already been seized, especially here, despite – or thanks to? –the fact that the wildfires blaze and herald the need to change. California, the world's 5th largest economy, is a global leader in climate change mitigation efforts with bold climate goals and actions. Its climate goals include:

- reducing greenhouse gas emissions to 40 percent below 1990 levels by 2030

- providing 100 percent of the state's electricity from clean energy sources by 2045
- reducing methane emissions and hydrofluorocarbon gases by 40 percent
- and adding 5 million zero-emission vehicles to California's roads by 2030

Renewable energy in California has matured: Solar and wind are cost-competitive with fossil fuels. California is the clear leader in clean tech patent registration in all major clean technology categories. For every one patent registered in Texas, the state with the second-most patents registered in 2018, California had 3.5 patents. And 58 percent (\$3.4 billion) of all US investment in clean technologies was invested in California.

Innovations from industry large and small are helping us to mitigate these dangers and transform our economy. And of course it is not only the state of California that is stepping up: it is estimated that by 2021, one quarter of total store sales in the U.S. (\$150 billion) will be sustainable products. The number of companies across the world who issue some form of sustainability report continues to increase. Sustainability reports are now issued by 94% of the world's 250 largest companies.

And this month the issuance of green bonds burst through the \$1tn mark worldwide. Not only is there a rising volume, the demand still exceeds the supply. When the Dutch Government issued its first sovereign green bond last May, it was the first country with a triple A rating to do so and it was many times oversubscribed. The green bond market currently constitutes under 1% of the total bond market.

So we can clearly state that a lot has been done. And there is still a lot to be done. So every small and private initiative is worthwhile. Every initiative by a US state is valuable. Every global action can really make a difference.

So let us focus not on the stories of despair, but on the silver lining: Focus on the steps we are already taking to protect our financial system from catastrophe. And if we need any inspiration - what better example do we have than the brave men and women who together form the fire service? The teams of first responders who run towards the smoke, while everyone else runs away. Their heroic sacrifice. Their unwavering commitment to the noblest of causes: protecting people's lives, their homes, their businesses and even our artistic heritage from devastation.

As custodians of the financial system, how can we follow their example? How can we emulate them? We are lucky we don't have to put our lives on the line. But everyone here today can take inspiration from these heroes. Cooperating as a team in their unfaltering dedication. Their adaptability to new and deadly risks. Their tireless singularity of purpose, in the diversity of their team. Their willingness to stand in the way of impending catastrophe together. And their resolve to never give up, until the job is done.

That's the mindset we need. That's the dedication we need. That's the cooperative spirit we need. I cannot think of a more fitting example to follow for us as the financial system's fore department: to stand together when crisis hits, and to do all we can to prevent it.

Thank you.