Richard Doornbosch: Climate change - implications for the financial sector

Keynote speech by Mr Richard Doornbosch, President of the Central Bank of Curaçao and Sint Maarten, at the First Session of the Curaçao Climate Change Platform, Willemstad, 10 May 2022.

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Accompanying slides

Introduction

Gita Bhatt, the editor in chief of Finance and Development used a quote from Ernest Hemingway to characterize climate change.

In Hemmingway's novel The Sun Also Rises, a man is asked how he went bankrupt. "Two ways", he answers. "Gradually, then suddenly". We risk the same with climate change. Going "bankrupt", gradually then suddenly.

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Her excellency, deputy governor of Curacao, Mrs. Michele Russel-Capriles, his excellency, minister Cooper, her excellency minister Pietersz-Janga, his excellency Mr. Arkenbout and her excellency, the US Consul General, Ms. Margy Bond. On behalf of the CBCS a very warm welcome to this important event.

Dear Chairman, distinguished guests, good afternoon! It is my privilege to have been asked as a keynote speaker on this special occasion.

And I would like to share my deep sense of appreciation to the Chairman and organizers, for the generous introduction by Ms. Maduro, but in particular for organizing this first Curaçao Climate Change Platform (CCCP).

Climate change seemed for a long time a phenomenon that was always important but never urgent.

Since the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in New York on May 9th - yesterday, exactly 30 years ago - climate change has been on the international agenda.

And 15 years ago, I was working intensively in seeking international consensus when at the OECD in Paris in the run up to COP 13 in 2007.

But while the assessments of the International Panel on Climate Change have become gloomier and grimmer every time a new report was launched, this was only positively correlated with more and more words, much less so with action.

Climate Change - always important, never politically urgent.

This will have to change to avoid "bankruptcy". And it will change one way or the other. When mitigation action is too slow, countries will be forced to respond when it is too late to prevent a dangerous warming trajectory.

Should on the other hand countries around the world come together in time and manage to limit global temperature rise to the Paris objective of 1,5 degrees Celsius, the required change in the energy system and economy will be transformational, creating its own risks.

So, todays conference is timely. Climate change is by now both important and urgent.

Small countries and in particular small island states will be on the receiving end.

Having a very limited responsibility increasing global warming but being the hardest hit by its impacts. And with the least shock absorption capacity.

Curaçao and Sint Maarten need to understand the possible impact and think through how we can best prepare and manage the risks.

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In today's speech I will first shortly elaborate on climate change risks, and in particular how it impacts the financial sector. I will reflect on the implications for financial stability and why central banks should care. I will conclude by sharing with you our strategic agenda on climate change for the coming years.

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Climate change risks

The most significant potential effects of global warming are by now well known, rising sea levels, adverse effects on biodiversity, bleaching of coral reefs, increases in droughts and floods, and an increase in intensity and frequency of other severe weather events.

These physical consequences of climate change pose not only direct threats to lives and livelihoods - they also pose risks to the economy.

In 2015, a Stanford and University of California study estimated that if climate change were to be left unchecked, global incomes could decline by more than twenty percent by 2100. Per capita levels of income would fall in almost eighty percent of the countries.

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The Network on Greening the Financial System - a coalition of central banks around the world - has recently partnered with an expert group of climate scientists and economists to design a set of future scenarios.

These can be explored on their website (www.ngfs.net/ngfs-scenarios-portal) and provide financial institutions with a common reference point for understanding how the

combination of physical risk on the one hand, and transition risk related to climate policy and technology trends on the other could potentially impact the economy.

Just to illustrate. In their current climate policies scenario, so with no additional action, both average and extreme temperature changes are expected throughout the 21st century. Global warming of 1.5 °C could be reached in the 2030s and 2 °C around 2050.

Warming beyond these levels is projected to lead to a non-linear increase in severe and irreversible climate impacts (the "sudden" in the two ways the man went bankrupt).

- Heat stress is expected to rise in tropical areas leading to a sharp decline in labor productivity,
- Heatwaves will increase with a factor 50 and droughts will affect 8 times more people as compared to a scenario without warming.
- The damage to physical infrastructure is estimated to go up by 45% in certain regions as a result of an increase in the intensity and frequency of tropical storms.

We need to look at regional studies to assess the impact of different scenarios specifically for Curaçao and Sint Maarten. The NGFS website provides estimates for some countries in the Caribbean such as Puerto Rico, Antigua and St. Kitts and Nevis.

These show similar results. for example a median estimate of an increase in damages of about 10-15% in 2055 associated with warming of 2 degrees.

However, we don't need to look that far to get some estimates of potential damages. Hurricane Irma in 2017 in Sint Maarten caused a cumulative contraction in GDP of more than 12%.

The Economic Commission for Latin America and the Caribbean (ECLAC) estimated the total direct physical damage at more than 200% GDP.

One of the reasons why I am pleased with the Platform launched today is that it provides an opportunity for us to learn from the experts.

Where can we find reliable climate change assessments for Curaçao and Sint Maarten? What is the likelihood that the hurricane belt will change trajectory over time, increasing the risks for the Leeward islands?

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Risk management in the financial sector

Although environmental scientists are in the lead when assessing impacts and designing possible climate scenarios, the financial sector is at the heart of the management of climate risks.

Banks finance climate exposed projects, insurance companies need to evaluate and adjust premiums for their products, and pension funds will be the first to deal with stranded assets given their long-term investment horizon.

Pension funds can also be a positive force for change, driving green investments.

Financial supervisors distinguish climate change risks in two main categories: physical risks and transition risks. And a so called 'subsequent' that is liability risk.

a. Physical Risks:

Physical risks, arise from increased damage and losses from physical phenomena associated with both climate trends (for example sea level rise) and events (for example natural disasters).

The potential for physical climate risks may change in non-linear ways, such as a coincidence of previous un-correlated events, resulting in unexpectedly high claims burdens for the insurance industry.

Beyond insured losses from physical climate damages, climate trends and shocks can pose disruptions to the economy, and the wider financial system.

At the macro-economic level, uninsured losses may affect resource availability and economic productivity across sectors. This may have cascading impacts across the financial system, including on pension funds, investment companies and banks.

b. Transition risks

The other important risk category related to climate change - and in a way the other side of the coin from physical risk - is what we call transition risk.

Transition risks, arise from disruptions and shifts associated with the transition to a low-carbon economy when countries take action to mitigate emissions.

Transition risks may be driven by policy changes, market dynamics, technological innovation, or reputational factors.

Key examples are regulatory reforms in carbon-intensive sectors, in particular in energy, transport, and industry.

Transition risks can be both negative as positive as regulatory reform will create winners (pushing green energy) and losers (punishing fossil energy).

c. Liability risk

Lastly, but of no less importance, is the liability risk that may originate from climate change. This includes the risk of claims under liability policies, as well as direct claims against insurers for failing to manage climate risks.

Liability risks could arise from management and boards of insurers, pension funds and banks not fully considering or responding to the impacts of climate change, or from inappropriate disclosure of current and future risks.

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Today, much of economic activity is already impacted by a changing climate, and future extreme weather events are foreseeable, if not predictable.

This is relevant for risk management in the insurance industry, for pension funds and in banking as we have seen.

While a range of methodologies is currently in use and being developed, challenges remain in the identification and estimation of these risks and possible losses, which are related to the long-term nature and unpredictability of climate change.

This provides challenges to integrating climate change risks into risk management practices. Finance entails transferring risk for a price and making investments that are believed to provide good returns for the risks taken.

Identifying and evaluating risks is perhaps one of the key competencies of the financial system.

Whether entities are:

- lending to consumers. businesses. or even countries on the basis of creditworthiness;
- providing working capital to start-ups on the basis of business viability (and possibly collateral);
- or investing in infrastructure funds or other vehicles that aggregate and diversify risks.

Climate change and central banking

This brings me to the role of central banks as supervisors of the financial sector. It is evident that climate change will create profound risks to financial stability.

This makes it part of the core mandate of prudential regulators as they are responsible for protecting the policy and deposit holders of these financial institutions.

At the same time, central bankers are not policy makers. Governments will need to drive the transition to a low carbon economy and investments in climate resilience.

The role of financial regulators is to ensure risks are adequately measured. As without information, managing risks is impossible.

That is why the first step by central banks around the world - gathered in the Financial Stability Board - was to create a Task Force on climate related financial disclosures.

Financial markets need clear, comprehensive. high-quality information on the impacts on climate change to price risks. Companies have to disclose according to standards what they are emitting and how they plan to transition to a low carbon world.

Another step central banks are taking is to use stress tests to evaluate the risks of the transition to a low-carbon economy to financial institutions and financial stability.

Mark Carney - at the time in 2015 - governor of the Bank of England suggested that with better information as a foundation a virtuous cycle of better understanding of tomorrow's risks, better pricing for investors, better decisions by policymakers, and a smoother transition to a lower-carbon economy could be created.

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Strategic agenda CBCS

So, what will the CBCS do? In our strategic agenda CBCS 2025 one of our six objectives is on climate change.

We are going to:

1. seek collaboration and dialogue- hence our enthusiasm for this Platform;
2. do research on climate risks specific for Cura<;ao and Sint Maarten;
3. assess the impact on our financial sector and
4. adjust our supervisory approach along the way.

Let me elaborate on all four.

Our objective is to ensure the financial system in Curaçao and Sint Maarten is resilient to climate-related risk and well positioned for the transition to a sustainable economy.

In order to achieve this, we need to better understand the risks, complexities, and challenges. For this we need an open dialogue, information sharing, and transparency. Or co-design as the chairman might call it. We are taking a first step today in Curaçao and will need to do something similar in Sint Maarten.

Climate change is inherently a cross-border and cross-sectoral challenge. On an international level we will start our cooperation by chairing the climate risk working group of the Caribbean Group of Banking Supervisors (CGBS) with the participating jurisdictions of Trinidad and Tobago, Suriname, Jamaica, and Guyana.

We are also considering to join the Network for Greening the Financial System (NGFS), I spoke about this group of Central Banks and Supervisors earlier. The network is sharing research and best practices to improve the financial system's resilience to climate-related risks.

Going forward, we seek to increase our understanding of climate risk specifically in Curaçao and Sint Maarten. We will conduct a literature research of relevant regional studies and data basis that could inform scenario analysis.

Thirdly, we intend to gather information from the financial institutions by periodically conducting an updated survey. The survey intends to stimulate awareness among the institutions that climate change and its associated risks have the potential for serious financial and economic consequences and to obtain information on the risks identified by the board within their respective institutions.

Thereafter, we will analyze the results and discuss and address the findings with the sectors' representative organizations.

We aim to establish a dialogue group that will consist of representatives of the CBCS' supervision, policy and monetary departments, and representatives of the banking, investment institutions, insurance, and pension funds sectors.

We are convinced that climate risk drivers can, to a large extent, be captured in traditional financial risk categories, but additional work is needed to better estimate these risks and develop in the fourth and final phase of our current strategy a regulatory framework.

While a range of methodologies is currently being developed and tested, challenges remain in the estimation process, including data gaps and uncertainty related to the long-term nature and unpredictability of climate change.

The framework should serve as a general basis for the identification, assessment, and supervision of climate risks within the financial sector.

In developing our regulatory framework, we will review good practices from the European Banking Authority's (EBA). The way EBA sets policy recommendations to integrate Environmental, Social and Governance (ESG) risks into business strategies & business processes, internal governance and risk management framework is valuable.

The basis for better climate risk management is better climate information. More complete, comparable, and consistent information and disclosure about climate risk will promote better decision making and a more resilient financial sector.

Finally, I should mention that the coming four years we will also review the sustainability of our own operations and how to reduce our ecological footprint.

As a first step we are upgrading our solar panels this year, phase out single use plastics and our (few) company cars will start driving electric as of next year.

Conclusion

That brings me to my conclusion.

After two years of COVID-19 we will have to come to grips with an even bigger challenge. A challenge that is even more important and more urgent to the world.

The tragedy is that there might continue to be seemingly more pressing issues to deal with - until it is too late.

Therefore, small countries, that cannot make a significant impact on the course of climate change mitigation, will have to prepare to live with its consequences.

The Curaçao Climate Change Platform launched today is an important step in doing so.

We should work hard to make sure it doesn't end as it did with the character in the book of Ernest Hemmingway. Climate change will be gradual and then sudden. We have to be prepared.

THANK YOU.