

Richard Doornbosch: Managing climate risk in the financial sector

Keynote speech by Mr Richard Doornbosch, President of the Central Bank of Curaçao and Sint Maarten, on the 2024 Caribbean Regional Technical Assistance Centre (CARTAC) Climate Risk Workshop, Panama, 21 February 2024.

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[Slides](#) accompanying the speech

SLIDE 1 Managing Climate Risk in the Financial Sector

Introduction

Good morning, colleagues, ladies and gentlemen, officials, and other participants in this CARTAC workshop on the financial risks of climate change.

It is my pleasure to be present here with so many fellow Central Bankers from the Caribbean, bringing together our experiences with the challenges of climate risk in financial stability. I would like to thank CARTAC and in particular Petr, Lisa, and Sally-Ann, for bringing us together around this important topic.

Managing Climate Risk in the Financial Sector

Different countries with different contexts and challenges presented by climate risk, are present here today. There is one thing we agree on. As countries, as central banks, and as concerned citizens of the Caribbean, when it comes to climate risk, we cannot sit still any longer.

But what can we do to help prepare and protect our beautiful but also vulnerable countries, for the future of climate change?

Most of us here know that the Caribbean region does not contribute significantly to climate change. But the Caribbean is -increasingly so- under constant threat from the effects of climate change. That became abundantly clear also during yesterday's presentations.

SLIDE 2 Warnings of Intensifying Climate Change

According to the IPCC sixth assessment report 2021, larger and more powerful hurricanes are projected to hit the Caribbean at an increasing rate as global warming continues. By 2100 it is projected that between 10 and 50% of the population living in small islands in the Caribbean will be affected by coastal inundation, both temporary and permanent.

The NOAA confirmed that Atlantic hurricane activity in the past 40 years has already become more intense. Their data analyses show that sea level rises, and increased storm surge levels will cause more coastal destruction and increased economic damage.

Storms may become less frequent, but when they do occur, rainfall and wind rates are expected to be up to 15% higher. Our beautiful reefs are deteriorating ever so slowly - but surely - because of warming oceans. There is only so much we can do about that.

The IPCC also predicts higher mean temperatures and more droughts for the Caribbean region in the coming years.

It is a sobering list. And as witnessed through the many climate records broken in 2023, there is much work to do ahead of us.

The international community is recognizing that we are set up for failure under current policies. But it is not coming to action with the persistence and unity needed to limit global warming to avoid irreversible damage to the environment, and to Caribbean states.

We will have to consider how to adapt to this reality and how to cope with the increasing risks. Until we get the job done of making our jurisdictions resilient for the changes ahead of us.

Challenges on the Road to Adaptation

SLIDE 3 Challenges on the Road to Adaptation

Another thing we agree on – and why we are here - is that the risks posed by climate change influence the bottom line of financial institutions. The IMF, the BIS and all major central banks are now convinced that climate risks will affect "the safety and soundness of banks and the stability of the broader banking sector."

As regulator and supervisor of the financial sector and mandated with the responsibility for protecting and enhancing financial stability, we seek to make our financial sector more resilient and sustainable. And this is the focus of our efforts on addressing climate risk.

Working from the perspective of a relatively small jurisdiction, on a subject that is as broad and widespread as it is technical and specialized, which is climate change, has a way of throwing up hurdles.

Difficulties range from insufficient multi-year measurements and data to feed analyses, to regulatory and legal frameworks – and antiquated technology - that take years to adapt, amid a limited supply of expertise and dedicated staff.

Our governments, which are the ones that must develop, implement, and enforce climate policy, face many of the same constraints. Adapting the economic and social structures for the probable effects of climate change is possible, but it is also a long, arduous, and resource intensive process.

As with many new endeavors, the key for us is to not wait until all these obstacles are overcome. We must go ahead and act now.

The immediate costs may be hefty and may even precede the benefits by many years. However, the cost of acting too late will be much larger.

Horizons for Planning and Action

SLIDE 4 Horizons for Planning and Action

In the face of escalating climate change, the imperative to safeguard our economies and livelihoods requires forward thinking. But when it comes to climate risk our conventional models get in the way.

Governments plan for their 4- or 5-year tenure – until the next elections. Usual "long term" planning in business and credit cycles runs around 3 to 5 years. Tackling climate risk requires a much longer horizon.

Climate effects are typically seen over periods ranging from 30 to 100 years. First signaled as a risk to our way of living some 40 years ago, predictions from then are coming into reality now.

To stretch our risk frameworks this far into the future, we must supplant the limits imposed by the used 4-year political cycle, the typical business cycle, and the credit cycles we as central banks are monitoring.

In our strategic agenda CBCS 2025, launched early 2022, we aim to address climate change issues by working on three pillars:

1. We want to expand cooperation and dialogue with local and international institutions and boost our climate expertise and knowledge.
2. We will broaden and update our data and information on the subject by researching climate risks and surveying the financial sector.
3. We will develop a roadmap towards a supervisory framework for climate change.

Our strategic actions aim to ensure that the financial system in Curaçao and Sint Maarten is resilient to climate risk. By taking a risk management approach to climate change it will not only benefit the health of the financial system. Doing so will over time also steer investments towards sustainable energy, and a resilient physical infrastructure and built environment.

In coming together during workshops like these, we foster dialogue on these challenges and more, we can learn from each other and leapfrog our efforts.

Initial study IMF: Projected Impact of Climate Change on GDP and Consumption in a small Caribbean State

SLIDE 5 IMF Study: Projected Impact of Climate Change on GDP and Consumption

As part of our first pillar on the CBCS strategic agenda, we requested the IMF - in the context of the article IV consultations - to do an initial study on the impact of climate change in Curaçao and Sint Maarten. For this analysis they used their dynamic general equilibrium model developed specifically for this purpose.

The IMF analysis emphasizes that our jurisdiction - particularly Curaçao - is vulnerable to what they call slow-moving physical climate risks.

1. With average temperatures increases of around 2 degrees Celsius by 2050, Curaçao and Sint Maarten can expect loss of biodiversity, negative impact on health and productivity, and deterioration of coral reefs.
2. More extreme rainfall and more intense tropical cyclones are expected. Sint Maarten already knows what it means to be hit by a category 5 "plus" hurricane. Curaçao could become more vulnerable to flooding.
3. With the projected sea level rise of 0.5-0.6 meter and up to 1.2 meters, which is likely to impact beachfront real estate and bustling business and administrative areas, putting estimates at a permanent loss in GDP of between 7.5% and 14%.

Slow-moving, as we can appreciate, does not mean less dangerous.

Perhaps to a lesser extent, Curaçao and Sint Maarten must also consider transition risks from climate change. Our heavy reliance on energy imports would place our small economies at the mercy of global oil price fluctuations and foreign climate tax policies.

A clear medium-term national adaptation strategy remains essential to ensure that all stakeholders are adequately prepared. We need to understand what elements should be part of a national adaptation strategy, the role for the public and private sector, and how to prioritize against other competing demands.

Close cooperation in international and regional settings is bound to improve our capacity to analyze and assess the impacts of climate change, informing our national adaptation strategy.

That's why we are here today.

Building our Data and Research: Preliminary Findings of our Climate Risk Survey

To work on our adaptation strategy, we need information. Hence the second pillar on our strategic agenda: improving our data and analyses on climate risks' impact on the financial sector.

SLIDE 6 Building our Data and research: Preliminary Findings Climate Risk Survey

An increase in large climate events will in all probability translate into risks to financial institutions. Damage to infrastructure, telecommunications, real estate, and insured properties may directly impact operations, loans, profitability, and underwriting costs, of banks and insurance companies.

Hurricane Irma made landfall in Sint Maarten in 2017 and left a total estimated loss and damage of over USD 2 billion in its aftermath. About double Sint Maarten's GDP.

As Central Banks we will want to quantify climate risk, look at its probability and impact, and find ways to measure exposure of the financial sector.

We need to know how individual banks, insurance companies and pension funds in Curaçao and Sint Maarten are affected. What are effective measures to remedy these risks?

Up until recently, many banks may not have been very compelled to consider the consequences of climate change in their policies and operations.

Banks and insurance companies need to proactively identify the extent of climate change risks that impact their financial results. But there are many gaps in the available data. We need more granular data and analysis of effects and consequences of climate change.

Going into 2024, the CBCS conducted a survey to start tackling some of the data gaps and obtain a baseline for our climate risk research project. With the responses from banks, pension funds, and insurance companies, we hope to improve our understanding of the exposure of financial institutions to physical climate risks.

SLIDE 7 Preliminary Findings Climate Risk Survey - 1

We asked institutions how they would rank several physical climate risks within their organizations. The size of the words in this word cloud indicates how highly banks, insurance companies and pension funds ranked these climate risk.

It is not surprising that all institutions indicate that hurricanes present the largest climate risk to their businesses.

Institutions were surveyed on their climate risk management strategies, insights, and gaps. We asked to provide numbers or estimates on their exposures to climate risks, for loans and insured objects. We also asked what role the institutions see for the Central Bank in climate risk.

SLIDE 8 Preliminary Findings Climate Risk Survey - 2

Preliminary findings show that on average 46% of banks, insurance companies and pension funds examine the possible impact of climate risk on their operations.

SLIDE 9 Preliminary Findings Climate Risk Survey - 3

About half of all respondents indicated to have included mitigating climate risk in their risk management framework. We will follow up on this result by asking institutions to share with us in more detail how they have done this.

Overall, respondents indicated that most or all their real estate objects on especially Sint Maarten are sensitive to climate risk.

SLIDE 10 Preliminary Findings Climate Risk Survey - 4

Among the general insurance companies, more than 80% have experienced increases in premiums and tightening of conditions by reinsurance companies.

When asked to give an estimate of their exposures (loans, mortgages) to climate risk most institutions did not provide estimates. This points to the need for guidance and, eventually, requirements for climate risk reporting and disclosure.

SLIDE 11 Role for our Central Bank

When asked what roles institutions see for the central bank in mitigating climate risk, most respondents agreed that the central bank should develop a supervisory framework and issue guidelines on integrating climate risk management in governance and risk management.

In second place came developing climate stress testing and reporting mechanisms for climate risk exposure.

The collection of data and research into the effects on financial stability in the monetary union are a starting phase for us. As this improves, we can finetune the task of ensuring that financial institutions have the capacity to identify, measure, monitor, and control climate risks.

Ultimately, the supervisory framework will include guidelines and requirements to promote an improved climate risk dataset and analyses.

Working towards a Climate Risk Supervisory Framework

SLIDE 12 Working towards a Climate Risk Supervisory Framework

Regulatory and standard-setting organizations in large economies guide the financial sector on how to assess the impact of climate risk on their portfolios and how to assist their clients to invest in measures to make them more resilient to climate events.

The plans for developing a supervisory framework for climate change include tools to ensure that the financial sector has a good understanding of the climate-related risks they face, and guidance on climate risk disclosure and integrating climate risks into risk management frameworks.

With better awareness and improved knowledge, financial institutions can foster the growth of green finance, by providing price incentives and guidance to promote investments towards sustainable and environmentally friendly projects. All are ingredients for our Roadmap towards a supervisory framework.

In this regard we are keen to further join efforts with you as regional supervisory authorities with assistance from the IMF's CARTAC. Shared goals are developing a robust and relevant in the Caribbean small state context - supervisory framework for climate change. And equally relevant climate stress testing models.

Partnering with International, Regional and National Organizations

SLIDE 13 Partnering with international, regional, and national organizations

It will take a collaborated effort of local, regional, and international organizations for the climate risk efforts to gain momentum.

Caribbean banking supervisors must join forces to find the right mix to address climate risk and promote green financing within our Caribbean region.

Whenever possible, we collaborate with like-minded across the Caribbean. As part of the Caribbean Group of Banking Supervisors, the CBCS is coordinating the technical

working group on climate risk with four other jurisdictions (Trinidad and Tobago, Suriname, Jamaica and Guyana) that have expressed an interest in joining the referenced working group.

Currently as CBCS, we are in the process of submitting our application to the Network of Central Banks and Supervisors for Greening the Financial System, the NGFS. As a member we hope to find guidance and consultation to help solve some of our challenges. At the same time, we are growing our network of like-minded supervisors and regulators.

Although much research remains to be done, I am confident that regional collaboration will contribute significantly to speeding up the processes.

Time for Action

SLIDE 14 Time for Action

The reality is, that the world is for now on a "too little, too late" scenario to limit global warming to 2 degrees Celsius. On the one hand we cannot accept this outcome. We must join the strong call from the honorable Prime Minister Mia Mottley, who has voiced the call for action most eloquently and forcefully.

The international community and international financial institutions must take action urgently and include financial and policy support to vulnerable island states in their transition programs towards net-zero. On this we must be clear and specific in stating what is needed to make our economies resilient to climate change.

On the other hand, we cannot wait until the world and the international community is finally doing what it should be doing. We have to prepare for the "too little, too late" and "hot house world" scenarios at the same time. We must take an insurance approach and help prepare our economies and livelihoods for the climate challenges that are to come.