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Keynote speech

Assessing and acting on climate risks requires better data and taxonomy¹

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¹ This presentation was prepared for the conference. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the event.

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Keynote speech by Luiz Awazu Pereira da Silva

Hello everyone. I am honoured to have the opportunity to address this conference.

The BIS, as provider of secretariat for the Irving Fisher Committee on Central Bank Statistics (IFC), is proud to support the committee in this most timely event, co-organised with the Bank of France and the Deutsche Bundesbank.

I want to share with you today some personal messages on climate risk, the role of the international community and what all this means for your work as producers and users of data.

My quick summary is: **assessing climate risks and acting on them requires better data and taxonomy**; climate risks are large and material and there is urgency to act; for actions to be effective, filling data gaps – and better exploiting available data – will be crucial for calibrating the transition path, measuring progress and detecting unintended side effects. The existence of data gaps should not be an excuse for inaction. Rather, it means climate policies need, on top of better data to quantify risks, significant coordination across jurisdictions and across sectors, using multiple instruments and mobilizing adequate financing for the transition to net zero.

To start, physical risks due to climate change are real, significant and mounting; each of us can see devastating weather events around the world. Beyond circumstantial evidence, scientists in the latest IPCC report are telling us exactly that. True, weather is not climate. But various data sets are confirming worrisome trends: the increasing volume of weather-related economic losses in general, and uninsured losses in particular. Here is a first instance where measurement and data are necessary.

We need to assess better these climate-related losses that could become --some already are-- huge systemic losses that can derail entire economies, especially when these losses trigger other phenomena (eg., massive migration, etc.) that may occur much faster than we anticipated.

In addition, we need to assess where climate-related risks are creating financial markets failures. For example, there are entire regions of the World (red zones) where insurance is not available anymore. Data on these circumstances are key because the best science today tells us that we are on the path of a four (4) degree Celsius average temperature increase.

There is urgency to act. Urgency in addressing these risks arises because of their size, and their asymmetric and irreversible nature. Scientists are telling us that

global warming is not a process that will self-correct. The irreversible nature of some of the effects of climate change is also something that price discovery mechanisms alone have difficulties taking into account. So, a wait-and-see attitude today is a very risky proposition. It is also irresponsible and unfair to future generations. The prudent line is to deploy mitigation policies now.

At the BIS, one of our contributions has been to alert about this new type of systemic risk, we called it a **Green Swan**. A Green Swan is not the Black Swan conceptualized by Nassim Taleb for the Global Financial Crisis that can be seen as a very rare, unlikely or unexpected event (a so-called tail risk). A Green Swan on the contrary is certain to happen, what is unknown is when and how it will manifest itself. Green Swans have devastating consequences for our societies if we deplete the rest of our carbon budget. They will trigger much more than just financial losses or threats to global financial stability. Indeed, they can be life threatening.

The Covid-19 pandemic is perhaps an illustration of what we thought about climate change. The conditions leading up to it were slow moving, but when the adverse global effects materialise, they happen quickly.

In short, even though we don't have full information to quantify the cost of a climate Green Swan, we know enough by now that (a) it'd be more prudent to take action to reduce the chance of a climate Green Swan, and that (b) we need to shed light on the climate-related risks we are already exposed to.

But then, for acting effectively you need **better data** and **adequate taxonomies**. And then you need to **disclose this information** so that risks are properly mapped and priced.

Better data on climate risks is essential for evaluating the robustness of the financial sector, for performing adequate stress-tests and for designing the proper supervision procedures. Better data also provides relevant information for market participants to price climate risks in their portfolios and redirect accordingly their investments.

What constitutes better data in this context? In its May 2021 progress report on bridging data gaps, the Central Banks and Supervisors Network for Greening the Financial System (NGFS) has flagged several key areas of note:

First, firms' carbon emissions data are currently limited and lack granularity. There are also gaps in geographical data on asset locations. All these are needed for evaluating both transition and physical risks.

Second, there are significant data gaps in firms' plans for reducing emissions, their plans for offsetting carbon footprints and their transition targets. This forward-looking data is essential for assessing future climate risks since we know that their nature cannot be properly assessed with backward-looking data.

Indeed, knowing where we are and where we want to go with some degree of granularity is imperative. It means strengthening data gathering on these aspects. It also means better using already existing data.

These are key steps to enable the use by all economic actors of common Climate Scenarios for central banks and supervisors, such as the ones released by the NGFS in June 2021, which require a lot of data.

They are also essential for the work on portfolio design strategies aiming at alignment with different jurisdictions' official net zero emissions commitments.

Then, an **agreed upon taxonomy** is needed to effectively help finance the transition. We need a classification system that translates climate and environmental objectives into specific criteria to assess the sustainability of economic activities. Why is it critical? To guide investors, to avoid "green washing" and to facilitate trust and adequate pricing of risks.

A growing number of asset managers as well as central banks and supervisors find it increasingly important to have clarity as to what constitutes "green" investments and loans and what does not.

This clarity is a necessary condition for a smooth and meaningful transition to a "greener" financial system and economy, whether in terms of climate or other environmental aspects. For this reason, the stepping stone to good taxonomies ought to be clear identification of the policy goals (for example, the climate-related goals of the Paris Agreement). This principle would greatly help benchmarking investments project across taxonomies because they can be more easily related to the specified goals.

Taxonomies that are developed in a consistent manner across jurisdictions could also help market practitioners to reach a harmonised understanding about green objectives behind assets that are available in different jurisdictions. The collaboration of the EU and Chinese regulatory authorities to develop a Common Ground Taxonomy is a path-breaking effort in this regard. And the International Platform on Sustainable Finance (IPSF) launched in 2019 could facilitate harmonisation and consistency of taxonomies across more jurisdictions.

Designed properly, taxonomies can help to raise market transparency by reassuring investors that their funding is contributing to the specified goals and ensuring that assets that cannot achieve these objectives are clearly identifiable to investors.

Taxonomies should provide a strong signal about the non-financial benefits of a given asset, and thus mitigate "greenwashing", ie a false or misleading signal of environmental benefits.

Finally, in order for climate risk data to be effective, the information needs also to be properly **disclosed**. This is the recommendation of the FSB Task Force on Climate-related Financial Disclosure (TCFD), for all firms and economic sectors.

Proper disclosure of climate risk related information is especially pertinent for the actors in the financial sector because they need to be able to adequately manage and price climate risks on an ongoing basis in their day-to-day operations – not just when there is a regulatory stress testing exercise. This requires proper procedures that can also help to improve lending, investment and insurance strategies, taking advantage of common climate scenarios.

Therefore, a number of parts such as data, taxonomies and future commitments are needed to be put in place, known and disclosed simultaneously to quantify physical and transition risks and to be capable of envisaging a transition toward net zero.

Against this backdrop, more official guidance based on these three elements – data, taxonomy and disclosure – will bring the benefits of an orderly transition.

Uncertainty on the transition path could lead to severe financial instability, a kind of climate Minsky moment. Transition risks could be somehow increasing if precisely data is missing, directions are unclear and adaptation plans are neither clearly stated nor coordinated. A rise in transition risks could unfortunately trigger at some point a disorderly overshooting that is very frequent in financial markets.

For example, in the absence of specific regulatory guidance, many asset managers and pension funds may start anticipating and begin divesting from certain types of assets. Indeed, reputational pressure seems to be mounting. That can trigger potentially large financial swings. The role of public guidance would be to support the efforts to fill data gaps, homogenise the green taxonomy, indicate direction and facilitate the creation of a path of gradual adjustment that is sustainable, reasonable and agreed upon.

An important part of this public guidance should take the form of a trajectory for the carbon tax. Another is to facilitate the emergence of reporting standards on emissions by corporates as mentioned earlier. All this data will help to properly map climate risks. We know it is critical because the Global Financial Crisis has shown that even small pockets of high credit risk can paralyse the global financial system.

Therefore, better data on climate risks, disclosure and a homogeneous green taxonomy, will enhance policies to address climate change. All this is very important because these policies require coordination between all actors in society and all countries; there is no single “silver bullet”. Climate change is a global negative externality. Therefore, we are increasingly aware that to tackle the complexity of global warming, no single country, no single agent can do it alone. Rather, the move to net zero requires cooperation between various agencies in Government including the Treasury, the private sector and civil society. The central banking community is playing

its part through the NGFS. The private sector has been very active too, for example with a new alliance called the “Glasgow Financial Alliance for Net Zero”.

A coordinated approach by many actors will operate using several instruments. As mentioned earlier, the instruments include carbon tax, better measurement and disclosure of risks, improving taxonomy of green financial instruments, developing new technologies, new investment instruments, financial techniques to design portfolios toward net zero, fostering research, etc. Institutions like the BIS are contributing in areas where we have expertise: integrating climate risks into financial stability frameworks, developing standards, and also working on concrete banking products that helps finance green projects, among others. One example is the BIS Innovation Hub’s first green finance project, Genesis, which explores the tokenisation of government green bonds in small denominations to give greater access to retail investors, combined with real-time tracking of environmental outputs.

Cooperation needs also to be international. That is for two reasons. First leakage is a major threat to de-carbonizing the economy. If a country has an ambitious carbon price trajectory but does not apply to its imports, it defeats the purpose. Second, the transition to net zero requires financial and technological resources that many developing countries do not have.

Indeed, climate policies have distributional impacts and present difficult political economy challenges. The challenges of the political economy of successful structural reforms are immense and climate policy can be seen as the mother of all structural reforms. To be successful it has to change relative prices to impact the composition of consumption, investment and public spending all together in the global economy and within a very tight timeframe of a couple of decades before we reach dangerous tipping points.

Finally, financing the transition to net zero could become a Schumpeterian creative-destruction process. Using private-public cooperation to mitigate climate risks can produce better odds of making the post-Covid recovery more sustainable and more inclusive. It may also contribute to enhance the innovative process of moving toward a net zero carbon economy through massive investments in new technologies and in alternative energies. It will be also critical to be able to develop practical methodologies to align financial portfolios with the 1.5 degree ambition and show a feasible transition path to achieve that.

In addition, the transition to net zero needs new investment resources. Public and private investment funds, making resources available to developed and developing nations can complement efforts by multilateral, regional, national development banks. Both have an important role to play in the transition, as well as the whole private financial sector. During the industrial revolution in the 18-19th century, the private

financial sector financed the evolution from agrarian to industrial societies. Given the huge financing needs of the transition to net zero, it has an important role to play in the transition to a low carbon economy working with the right combination of policies and with the public sector.

To conclude: Climate change is an urgent and critical issue. It needs coordination, determination, cooperation and consensus building. Consensus is needed because fighting climate change is the mother of structural reforms and we know from experience that reforms always have significant redistributive consequences.

This conference is an important reminder of the need to bring the best minds together to continue working on data, taxonomies, using common climate scenarios and disclosure procedures in order to better quantify climate risks and ensure an orderly transition preserving financial stability. The coming COP26 in Glasgow is an opportunity to re-affirm commitments, mobilize resources, work on these challenges, propose and implement practical solutions.

Thank you.