



## **Disaster Risk Management Steering Group**

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### **Opening remarks by**

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Good morning. My name is Erwann Michel-Kerjan and I'm here today in my capacity as chairman of the OECD Secretary-General Board on Financial Management of Catastrophes, a role I have been serving in since 2008. Let me start by thanking the Mexican Presidency and Finance Ministry for their leadership in putting disaster risk management on the agenda of the G20, and this steering group for the great work it has already done and for bringing in organizations that have been doing a lot of work in that space whether in **industrialized countries** as in the case of the OECD, or in **developing countries**, as the World Bank and the UN have done for several years now.

### **I. Introduction: Disaster Risk Management (DRM) Has Moved from Emergency Management to Risk Financing and Governance as Well**

The past decade has brought many large-scale catastrophes, including natural disasters, man-made disasters and economic crises.

These disasters have tested the resilience of societies; I've seen the topic rise high on the agendas of prime ministers, presidents and rulers in a growing number of countries.

While a lot has been done on emergency management, the past decade has clearly shown that we have entered a new era of catastrophes and that we need to really get our act together in a way we have not done yet. The financial component of disaster risk management is becoming a strategic one. Indeed, disaster risk management, which had typically been handled mainly by emergency offices, is now the concern of Finance Ministers too because of the large economic impacts recent disasters have inflicted. The current fiscal situation in many countries has intensified this trend.

Because the topic has become more strategic, there is a great momentum today that I don't think we ever had before, but also a lot of questions about how to do it *right*.

Here it is not a matter of presenting a successful pilot that has worked in one part of a country, but to very systematically quantify, prevent, manage and *finance* future catastrophes on a national scale and in many more countries, and do it for the long term.

It is also important – and I think the G20 can be a great catalyst here – for Finance Ministers and their staffs to be able to compare notes internationally: how are Finance Ministers of countries similar to mine handling these issues? Are we lagging at home or are we advanced? If we are leading in that space, how could others learn from good practices?

To respond to this growing concern, the OECD has devoted a lot of time and energy over the past ten years to advance economic knowledge about what can be done, what works and, very importantly, **what does not work**.

In 2006, Secretary General Angel Gurría established the OECD High Level Advisory Board on Financial Management of Catastrophes – a unique group whose role is to advise top management of the OECD and the government and private sector of its now 34 member countries on these issues. In 2010, the Council of the OECD, the highest administrative body of the organization, passed a recommendation on good practices for mitigating and financing of catastrophe risks in OECD countries.

The OECD framework that was requested by the Finance Ministers of the G20 and that we present today provides a lot of such information; Andre Laboul and Timothy Bishop as well as members of the OECD Board will discuss this in more detail today. I'd like also to note here that other parts of the OECD have done work on risk governance as well.

Let me say a word on **risk assessment** and **risk financing** then turn to the question I was invited to answer: “What can finance ministers do?” And that's obviously the operative question between now and November, and then after this G20 as well.

## **II. How Finance Ministers Can Use Advanced Probabilistic Catastrophe Risk Assessment**

There have been fantastic developments in the past few years in our capacity to undertake **large-scale probabilistic risk assessment**; so instead of simply looking at two cities and comparing how these two cities manage similar catastrophes, which was often done, today we can actually look at the entire country, collect data on buildings, the infrastructure, etc., and model the damage that these exposed buildings are likely to sustain during large-scale disasters. As a matter of fact, we can model **thousands, if not hundreds of thousands of possible scenarios** and be extremely granular in assessing what the risk really is.

Dr. Robert Muir-Wood, who is one of the world's experts in this matter and also serves on the OECD Board, will tell us more about it in the next session.

What is interesting here is that it is then possible for a **Finance Minister** to do several things. These models give a Finance Minister the information needed to:

- a) know the annual average expected loss from different types of disasters and also **worst case scenarios**, both of which are very important for **budget planning**
- b) help **prioritize spending** on risk management based on probabilistic cost-benefit analyses
- c) help during **disaster time**: new models can tell a Finance Minister a few hours after a disaster happened how much it will likely cost in direct losses and where, what part of the country, what industries, if proper risk assessment quantification has been done beforehand.

Recently, these probabilistic risk assessments have also been used as **input** into **macro-economic models** to show how the **entire economy** is going to react to a given shock (whether through simple **input-output models** or more sophisticated computational general equilibrium, or CGE, models).

These more advanced technics can also be very powerful in **quantifying interdependent risks**: how an event in that part of the economy will impact other industry sectors, or more globally how a disaster in one part of the world can impact your economy in the next few weeks and months. Better understanding these interdependencies in risks is critical to any Finance Ministers; **well, today we have the tools and expertise to do just that.**

The good news here is that this can be applied to G20 and non-G20 alike and be summarized into a dashboard a Finance Minister, and other decision makers, can have in front of them.

While qualitative risk assessment and analysis are critical, it is important to stress the need for comprehensive data on hazards, exposure, vulnerability and risk-sharing arrangements) for proper risk assessment and financial management strategies; this can be a challenge in some countries. Unfortunately, to date, **only a few countries have used these new probabilistic assessment techniques to their full capacity.**

### **III. How Finance Minister Can Integrate Catastrophe Risk Financing in their Portfolio of Responsibilities**

Let me turn to **risk financing** now, which is discussed in a very detailed manner in the proposed OECD framework.

Here the picture is quite different for each country in the sense that risk financing solutions often have to be developed to meet the specificities of your country; for instance, **poor countries typically have no other choice after a disaster than to rely on international donors.** As you move along the economic development curve those countries are developing more insurance-based solutions to **transfer part of the loss to more diversified players**, be they insurers,

reinsurers or investors through alternative risk transfer instruments; **Mexico has done this twice now to cover some of the government's costs related to disaster emergency measures<sup>1</sup>.**

The idea here is obviously to try to lower the **exposure on your budget: catastrophes have become de facto government liability**. I think it is fair to say that many countries have just started to realize this and begun to **quantify how large that liability actually is**. This is a big issue in the United States today, for example.

Here, there are many questions:

- For instance, should the cost of insurance coverage be risk-based? Well I think it should. But it is also important to realize here that **government officials** often have to **deal with the affordability issue** that arises when we use a risk-based premium rule: What do you do when **people or small businesses** cannot afford to pay for high insurance premiums because they don't have the means? What incentive system and compensation scheme do you implement?
- Another key question is **what is the optimal risk-sharing between the public and private sectors?** Should governments be in the insurance business at all and, if so, to what extent and in what capacity?
- **Should risk financing protection** for homeowners, businesses and public infrastructure **be mandatory?** If so, how do we assure this requirement is actually met? The new law passed in Turkey last month to increase earthquake insurance penetration by requiring proof of insurance to access water and electricity when you move in a new residence is innovative in that regard.

Disaster risk financing is at a crossroads and certainly **our being here today illustrates the growing need for answers**. The last thing I will say about risk financing here is that **there is no one-size-fits-all solution**. But often, leadership consists of pre-designing catastrophe risk financing programs during calm times, which will be **much cheaper** than simply relying on ad hoc decisions during disaster time.

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<sup>1</sup> See Michel-Kerjan, E., I. Zelenko, V. Cardenas., and D. Turgel. (2011). *Catastrophe Financing For Governments. Learning from the 2009-2012 MultiCatProgram in Mexico*. Joint OECD-Wharton Risk Center-World Bank white paper. OECD Working Papers on Finance, Insurance and Private Pensions, No. 9, OECD Publishing.

#### **IV. Five Proposals for the G20 Finance Ministers**

**It is important for me to remind all of us gathered here today for this G20 steering group meeting that several Presidents and Prime Ministers have either seen their party lose an election or had their legacy tarnished in recent years because they mismanaged these crises. You don't want to be the next one.**

As I already alluded to, Finance Ministers have a tremendous role to play in this new environment. Let me share with you five concrete proposals that I recommend for Finance Ministers.

I'd be happy to discuss these in more detail with the steering group and G20 representatives. These are based my personal reflection and do not necessarily represent the position of any organization.

1. **Engage your country in a national catastrophe financial risk assessment** to ensure that the fiscal angle is adequately addressed, particularly giving adequate consideration to financial vulnerability to disasters.
2. **Promote better catastrophe risk data collection and transparency within your country** to ensure fact-based decision-making. This year, the OECD country survey designed by our Board revealed that the collection of data on disaster losses and exposures remains a weak link in the DRM cycle. In other words, many countries actually do not even know how much they spent to recover from recent disasters and who benefits from taxpayers' money given by the government post-disaster.
3. **Engage in catastrophe risk stress testing similar to what banks have been doing since the financial crisis**; here it will be important to design these tests properly. For instance, a country exposed to earthquake could put a team of experts together to evaluate how losses from a 1000-year return period event would affect the economy (immediate, short- and long-term effects) and who will bear the financial responsibility of that loss.
4. **Promote effective coordination and prioritization of DRM policies and programs as well as resource allocation across different ministries.** As disaster risk management evolves to become more strategic, more stakeholders have some responsibility in ensuring that national DRM strategies are properly designed and implemented. This will require leadership and a coordination capacity that Finance Ministries often have. This ministry is also a natural candidate to work closely with the private sector (insurance, reinsurance, financial markets) that plays a critical role in G20 countries in sustaining financial resilience to disasters.

5. Support an **“OECD-G20 Peer Review” of disaster risk financing policies by individual G20 countries**. Every year since the financial crisis, the IMF and G20 lead a peer review of policies pursued by individual G20 countries to determine whether they are collectively consistent with more sustainable trajectories for the global economy. The IMF/G20 Peer-Review allows Finance Ministers to coordinate actions on economic policy. I would propose that starting next year, the G20 and the OECD work together to undertake the OECD-G20 Peer Review of disaster risk management policies by individual G20 countries. Within the peer-review reporting timeline, each G20 member country would list its top risks, how they have quantified them, how they have approached risk financing of these big risks and what they plan to do with limited resources in the next five to ten years. **This would allow Finance Ministers to have a much-needed international outlook, compare notes with their peers, and also to measure progress over time.**

Let me stop here. Again, on behalf of the OECD we look forward to a very productive day and on-going interaction with you all today and in the coming weeks to make this 2012 G20 a success.

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