



**STATISTICS**

**51<sup>st</sup> Session of the UN Statistical  
Commission New York:  
Taking the Environment  
into Account**

**MARCH 2, 2020 (10:00 AM - 1:00 PM)  
CONFERENCE ROOM 4**

Louis Marc Ducharme

Chief Statistician and Data Officer, and Director  
of the IMF Statistics Department

# Three Examples of Policy Issues: Carbon Pricing<sup>1</sup>

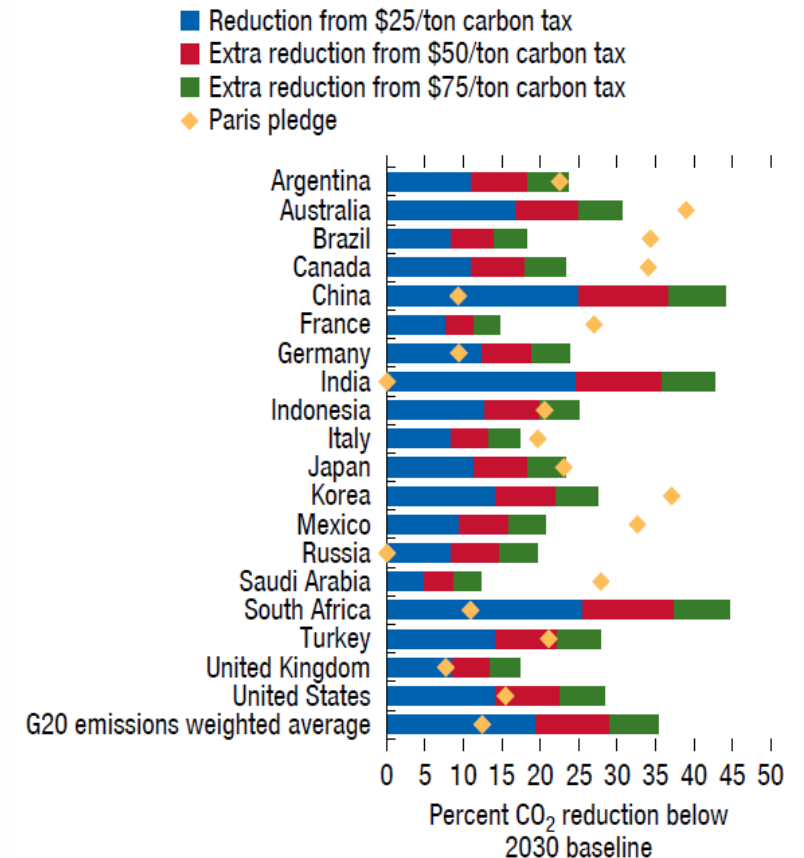
- “Of the various mitigation strategies to reduce fossil fuel CO<sub>2</sub> emissions, carbon taxes... are the most powerful and efficient...”

- The IMF Fiscal Monitor – How to mitigate climate change
- IMF research shows that the impact of carbon prices on CO<sub>2</sub> emissions differs from one country to another.
- Carbon Taxes will lead to higher energy prices – it will be important to understand the transition costs and distributional effects of these higher prices on households and businesses.

Tax	Coal		Natural Gas		Electricity		Gasoline	
	Baseline	%	Baseline	%	Baseline	%	Baseline	%
\$75	3.5	214	7.0	68	0.1	43	1.3	14
\$50	3.5	142	7.0	45	0.1	32	1.3	9
\$25	3.5	71	7.0	23	0.1	19	1.3	5

<sup>1</sup>Source: IMF Fiscal Monitor, How to mitigate climate change, October 2019

Figure 1.2 Reduction in Fossil Fuel CO<sub>2</sub> from Carbon Taxes in 2030, Selected Countries



Source: IMF staff

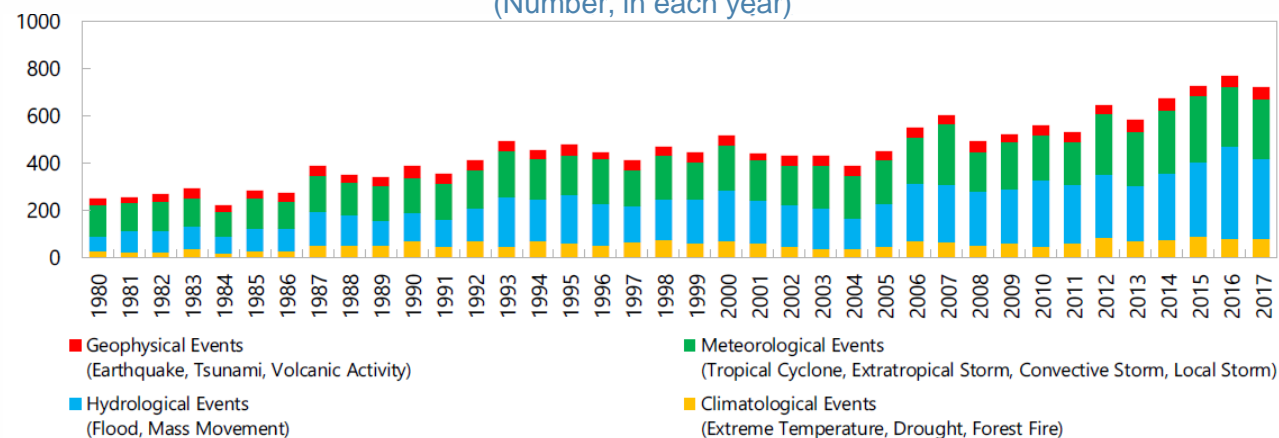
# Three Examples of Policy Issues: Financial Resiliency<sup>2</sup>

The IMF's Executive Board recently endorsed the recommendations that countries prone to natural disasters develop a Disaster Resilience Strategy (DRS). The Disaster Resilience Strategy has three pillars:

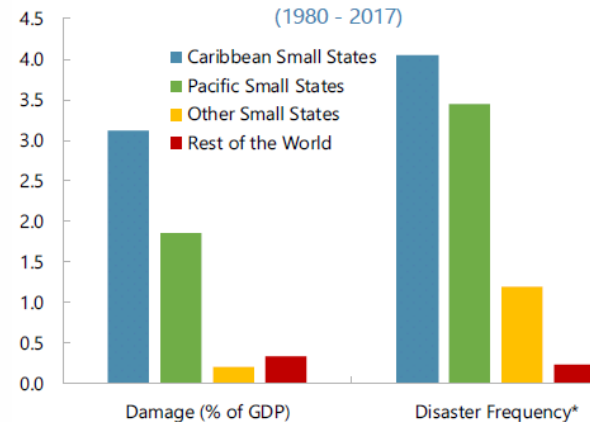
- building infrastructure and making other investments to limit the impact of disasters;
- building financial resilience by creating fiscal buffers and using pre-arranged financial instruments to protect fiscal sustainability and manage recovery costs; and
- planning for post-disaster resilience through contingency planning and related investments ensuring a speedy response to a disaster.

<sup>2</sup>Source: IMF Board Paper, BUILDING RESILIENCE IN DEVELOPING COUNTRIES VULNERABLE TO LARGE NATURAL DISASTERS June 26, 2019

Panel A. frequency of Natural Disasters: 1980-2017  
(Number, in each year)



Panel B. Average Annual Effects of Natural Disasters  
(1980 - 2017)



Source: EM-DAT, WEO, and IMF staff estimates.  
\*Frequency is the annual of all natural disaster incidents from 1980-2017 pe 10,000 Km sq. of land area.

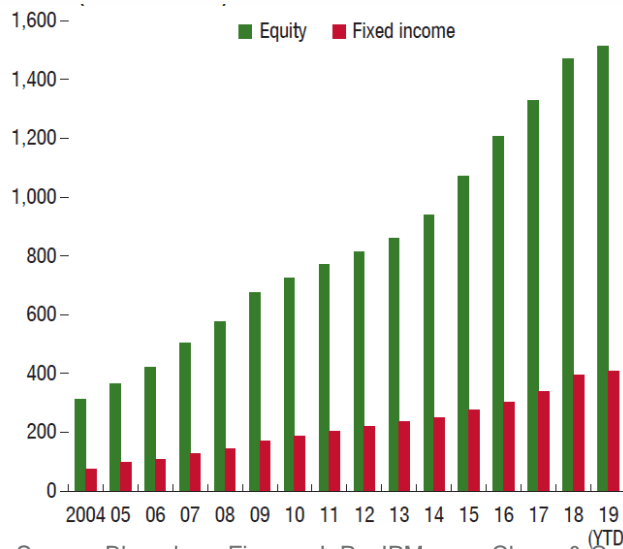
Panel C. Top Ten Natural Disasters: 1980-2017

Country	Year	Event	Damage (% of GDP)
Dominica	2017	Storm	226
Grenada	2004	Storm	184
Maldives	2004	Earthquake	179
Mongolia	1996	Wild Fire	158
Samoa	1991	Storm	157
Samoa	1990	Storm	145
St. Kitts & Nevis	1998	Storm	137

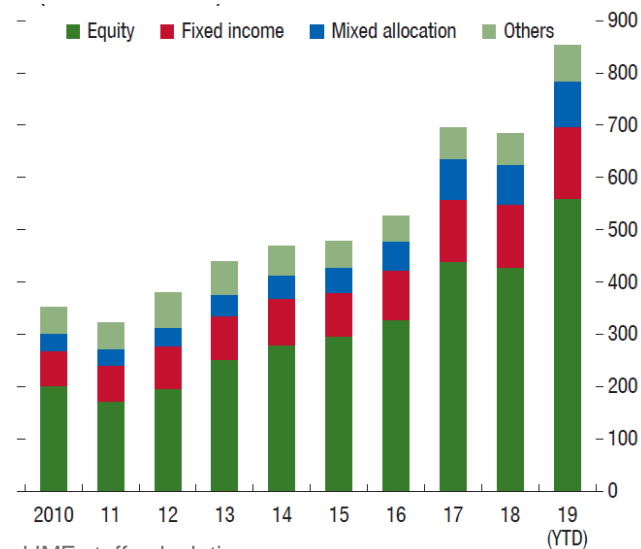
# Three Examples of Policy Issues: Sustainable Finance<sup>3</sup>

- Sustainable finance is becoming increasingly important for borrowers and investors.
- Environmental issues can have a material impact on firms' corporate performance and risk profile and on the stability of the financial system.
- Environmental, social and governance (ESG) funds (while still only 2% of total mainstream funds) are rising fast. Institutional investors are also divesting from fossil fuels

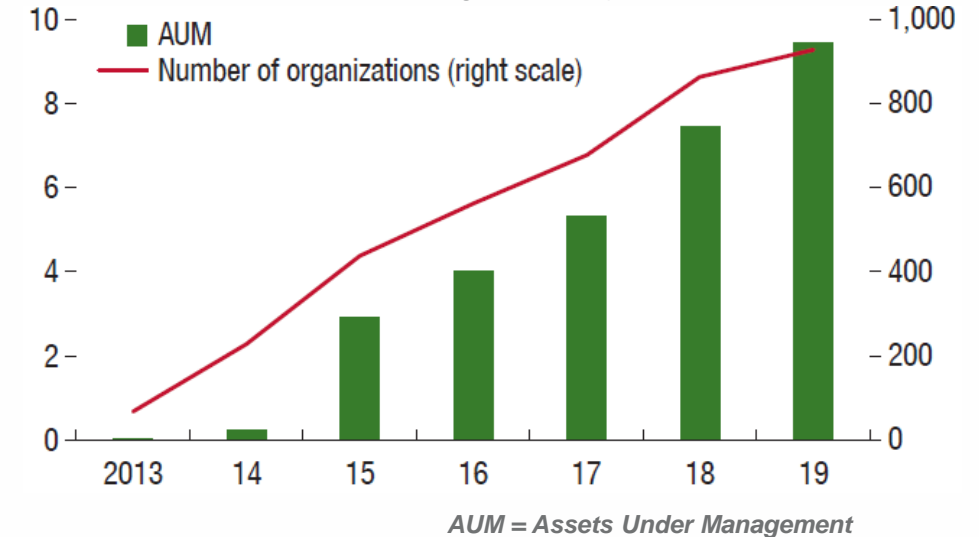
1. Funds with an ESG Mandate by Asset Class (Number of Funds)



2. Asset of ESG-Listed Funds (Billions of US dollars)



3. Institutional Investor Fossil Fuel Divestment Pledges (Cumulative; left scale: trillions of US dollars; right scale: number of organizations)



Source: Bloomberg Finance L.P.; JPMorgan Chase & Co.; and IMF staff calculations.

Note: In panels 1 and 2, 2019 data are as of September 2019, ESG = environmental, social, and governance; YTD = year to date.

<sup>3</sup>Source: IMF Global Financial Stability Report: Lower for Longer, Chapter 6: Sustainable Finance, October 2019

# Taking the Environment into Account

- The first thing we need to do is mainstream **System of Environmental-Economic Accounting (SEEA)** so that policy makers and analysts see SEEA in the same way they see the BPM, SNA, GFS and MFS – as an indispensable tool in policy formulation and macroeconomic-environmental analysis.
- Second, we need to make the environment more visible in our existing data products. “Green” and “Clean” need to be built into our classification systems – industries, products and most importantly for the Fund – financial instruments all need to all take on a green hue.
- Finally, we need to think globally. Ecosystems are global resources offering global eco-services – the environmental policies and consumption behavior in one country impacts all countries.



Data not available

The timeliness and frequency of our environmental data needs to increase



We need to expand our classifications to become more granular.

<b>Nonproduced nonfinancial assets</b>	...
<b>Land</b>	...
<b>Mineral &amp; energy resources</b>	...
<b>Other naturally occurring assets</b>	...
<b>Intangible nonproduced assets</b>	...

We need to work with countries to help them quantify their environmental assets – especially those assets that have global implications.