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Commentary

The Perfect Storm: How to Prepare against Climate Risk and Disaster Shocks in the Time of COVID-19

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As governments tackle the coronavirus disease 2019 (COVID-19) recovery, broader institutional reforms should build shock-responsive systems for the future. The time is now to boost financial preparedness to climate risks and disasters.

In April, as the world was focused on battling the coronavirus disease 2019 (COVID-19) pandemic, the small Pacific Island countries of Fiji, Vanuatu, Tonga, and the Solomon Islands faced the approaching Tropical Cyclone Harold, an all too familiar threat. In Vanuatu, Cyclone Harold destroyed “up to 90 percent of homes, 60 percent of schools and—critically at this time of COVID-19—20 percent of health centres.”¹ Despite being badly hit by the destructive storm, the government restricted entry of foreign aid workers to prevent the novel coronavirus from coming to the country.² This was a painful reminder that climate risks and other natural hazards have not been locked down by the COVID-19 pandemic.

Although the pandemic is not limited to the poorest, they are particularly vulnerable. Commodity-dependent emerging markets are particularly affected by reduced demand for exports and disruptions to global supply chains. Even the current best-case scenario assumes that the “global economy would fall into a deep recession in 2020 and output of developing economies would shrink by roughly 2 percent.”³ Previous epidemics are testament to the potential long-term impact in countries with high fiscal vulnerabilities.

The most vulnerable countries are especially at risk of being overwhelmed by such compound shocks, which can lead to increased poverty and inequality for at least three main reasons:

- Government systems are overwhelmed: a disaster can further overload health and civil protection systems or force actions that risk a

drastic increase in cases, such as evacuations.

- Emergency funds are depleted, and fiscal space is limited: public decision makers could face difficulty in responding to additional shocks as budgets or contingent financing arrangements are depleted from large, unplanned financing.
- The economy is more vulnerable: the pandemic leaves some groups even more vulnerable to further shocks, such as firms suffering both asset and revenue losses or poor households with lost jobs and income.

Learning from Financial Preparedness against Disasters

A decade of supporting governments as they prepare financially for disasters has taught us some of the key actions that we can take to build systems for efficiently responding to future shocks. Although money by itself is never enough, reliable and quick funding is necessary for effective disaster response. Advance financial planning, linked to clear actions, is essential for effective preparedness. The following four core principles guide best practice in designing financial protection against disasters:⁴

- Data and analytics: to make sound financial decisions, governments need the right information. Appropriate risk information allows public and private decision makers to assess the costs of disasters and make informed investment decisions in allocating public resources.

- Timeliness of funding: speed matters, but not all resources are needed at once. Although rapid mobilization of funds is crucial to supporting relief efforts and early recovery, the government has more time to mobilize resources for reconstruction.
- Risk layering: no single financial instrument can meet funding needs for all risks. An efficient financial protection strategy combines instruments that match funding needs to events with different frequency and severity.
- Disbursement of funds: how money reaches beneficiaries is as important as where it comes from. Governments require dedicated mechanisms and expertise to effectively allocate, disburse, and monitor spending.

Financial preparedness demonstrated its effectiveness in the aftermath of Cyclone Harold. Tonga received a US\$4.5 million payout from the Pacific Catastrophe Risk Insurance Company within days after the tropical cyclone.

Policy Reforms to Establish Shock-Responsive Systems

Financial resilience, physical resilience, and social resilience should complement and reinforce each other. Risk-informed, targeted public investment in risk reduction and preparedness can strengthen physical and social resilience in a sustainable manner. Pre-arranged financing can be tied in advance to efficient disbursement channels to ensure that resources reach the right beneficiaries at the right



time. This can also promote preparedness and recovery, including through incentives—or requirements—to strengthen resilience. Ultimately, developing the capacity of people and businesses to manage risk reduces the need for public intervention.

But governments will always have to plan for and respond to some crises. Scaling up existing systems in a time of need can be an effective foundation for responding to shocks. Finance ministries play a critical role in recognizing the financial impact of disasters in budget planning, and fiscal risk management can drive improved risk management across the government.

A 2019 report to the G20 Finance Ministers⁴ outlined the key developments taking place in financial preparedness to climate risks and disaster shocks. These can be implemented as the building blocks for shock-responsive systems.

Integrating Planning for Physical Shocks in Fiscal Frameworks

In the end, every shock hits the government's bottom line, but COVID-19 has been extreme. Governments have mobilized unprecedented resources to implement their initial policy responses to the ongoing health and economic crisis. In advanced countries, monetary and fiscal measures have been far reaching and costly. Developing countries, however, often have less fiscal space and lower implementation capacity. Shock-responsive fiscal planning not only helps society get back to the status quo but also can build resilience against future shocks, including from climate risks and natural hazards.

Several countries have already established dedicated fiscal risk-management units, which also account for the impact on the government's balance sheet from physical shocks, in addition to traditional sources of fiscal risk. The continued integration of such planning in macro-fiscal tools (such as macro-models, fiscal risk statements, debt sustainability analysis, public expenditure reviews, public investment diagnostics, and poverty diagnostics) will be a key driver for building resilience holistically.

Pre-arranging Funding to Respond to Future Crises Holistically

Mechanisms of pre-arranging funding for natural disasters have evolved over the past decades. The COVID-19 pandemic demonstrates the importance of adapting

these financial instruments to more efficiently retain and transfer all sources of risk. Over time, financial instruments for such new risks, including from pandemics, will mature to be more efficient and appropriately utilize more complex financial structures, triggers, and targeted contingency plans.

This should lead to integrated financial protection strategies against all sources of risks, including from hydrometeorological and geophysical hazards, health shocks, cyber risks, and risks of conflict, famine, and displacement. This needs to account for how these events can interact and create compounding shocks to the government.⁵ Appropriate financing for such risks requires experimentation and innovation in data collection, risk modeling, the structuring of financial mechanisms and market-based instruments, the testing of forecasts and triggers, feedback loops, and disbursement channels.

Linking Funding to Shock-Responsive Systems

Rapid access to funding after a shock is critical. But, just as importantly, funding needs to be connected to appropriate systems for effective, timely, and transparent spending. This applies whether the funding is from the budget, international partners, or financial markets. Experience suggests that social safety nets and the management of public assets have significant potential to be directly linked with risk-financing instruments and become shock responsive.

Shock-Responsive Critical Public Services. Damage to public assets and infrastructure is one of the largest drivers of disaster losses,⁶ and these losses are growing. Asia alone needs to invest US\$26 trillion in new infrastructure by 2030 to maintain its economic growth and pace of poverty reduction.⁷ Beyond the initial investment in high-quality infrastructure, managing this growing exposure to shocks efficiently requires investing in sufficient operations and maintenance throughout the life of the assets, as well as financial mechanisms to absorb losses that cannot be avoided. Self-insurance and market-based risk transfer help governments smooth expenditures on asset rehabilitation and reconstruction. When linked to strong pre-agreed disbursement protocols, this also increases transparency and disci-

pline in spending. Mexico's disaster fund FONDEN is an early example of such a mechanism. A mandatory annual budget allocation is managed by a dedicated fund for infrastructure rehabilitation in line with clear rules, and it then protects itself through a combination of risk-transfer products for especially bad disaster years. This mechanism has contributed an estimated 2%–4% to local gross domestic product after disasters.⁸

Shock-Responsive Safety-Net Programs. The COVID-19 response has shown how difficult it can be to ensure that funds reach households, even after the money has been appropriated. This has been a challenge in all countries but is even more difficult in the least-developed countries, including Africa. Enhancing existing safety-net systems, such as conditional cash-transfer programs, with clear and predetermined rules to serve as immediate disaster response mechanisms has shown positive results.⁹ The rules indicate in advance when a safety net will provide more assistance, along with the pre-defined triggers, the beneficiaries, and the amounts. Once the government sets these decision points, the finance ministry can quantify the risk, estimate the contingent liability, and link payouts from financial products directly to social transfers. For instance, Kenya is linking the National Drought Emergency Fund to its existing Hunger Safety Net Program for drought response and is further enhancing this system with risk transfer for more severe events.

A Shock-Responsive Global Financial Architecture

As governments establish shock-responsive systems, we can also ask whether the current international financial architecture is ready to support a transformation in the way we finance climate and disaster shocks and other crises. This requires work on two fronts: the appropriate financial instruments and the supportive institutional environment.

To test new financial solutions, the Global Risk Financing Facility¹⁰—jointly established by the World Bank and the governments of Germany and the United Kingdom—is providing over US\$250 million in grants to help integrate financial preparedness mechanisms in large investment programs. But further work is needed to evaluate how financing for the

pandemic response, and economic recovery, has been mobilized. This is the right time to ask whether the financial products offered by international partners are still fit for purpose to help countries efficiently manage the financial impact from physical risks and crises.

More work is also required on institutional reforms. A 2017 review of the World Bank's crisis response and efforts to help build resilience to systemic shocks found that "governments should be more purposeful in leveraging crises to undertake structural reforms. Reforms undertaken as part of the crisis response helped to build resilience in some cases, but in others, these reforms were not sustained after the crisis passed, and in those cases, the underlying political commitment to the reforms was often inadequate."¹¹ Institutional structures to monitor, plan for, and respond to risks holistically will help mainstream risk management into countries' development programs, for example, through the establishment of national risk boards.¹²

Disasters and climate shocks will not stop while countries tackle the health and economic impacts of COVID-19. Leadership by finance ministers can enable institutional reforms to establish a whole-of-government approach to plan-

ning, financing, and establishing shock-responsive systems. It is now time to boost shock-responsive systems for the future.

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