Impact Appraisal for Sovereign Disaster Risk Financing and Insurance: Towards Better Evaluation and Evidence

At a Glance:

- The UK Department for International Development (DFID), the World Bank (WB) and the Global Facility for Disaster Reduction and Recovery (GFDRR), are partnering to improve evaluation and evidence for sovereign disaster risk financing and insurance (DRFI).
- The increasing frequency and severity of climate extremes has forced governments to consider new ways of meeting the financial consequences of natural disasters. This growing interest in implementing sovereign DRFI programs has resulted in tremendous growth in the number and type of financial and budgetary instruments available, ranging from disaster reserve funds and lines of contingent credit to insurance instruments.
- However, evidence as to which DRFI strategies provide the most cost-effective impact on development and disaster-affected individuals remains limited.
- This project, managed by the WB-GFDRR Disaster Risk Financing and Insurance (DRFI) Program expected to run from 2013-2016, aims to meet this need by developing a methodology to evaluate a range of DRFI programs and provide quantitative results based on five country-specific case studies. The results will help better target and prioritize future investments from national governments and international donors in sovereign DRFI programs.
- The team will work with a range of organizations and experts to harness the knowledge and expertise of World Bank partners, and promote innovative thought and leadership in an area that is rapidly becoming a key priority for many governments.

Background

The frequency and severity of humanitarian disasters will continue to grow in the coming years and at an accelerated pace. Climate experts predict that by 2015, 375 million people a year will be affected by climate related disasters, up from 263 million in 2010. To respond to the growing risk arising from natural hazards, the international community needs to develop and operationalize innovative ways of managing risk.

Low-income countries and donors are becoming increasingly interested in sovereign DRFI as a way to increase financial resilience to disaster events. If funds can be mobilised and executed quickly enough, public expenditure in the wake of a disaster can be high impact, saving lives and reducing the human and economic costs. In many low-income countries, however, ad hoc post-disaster public spending can be slow and unable to support relief and recovery needs at sufficient speed and scale. Access to cost-effective and rapid funds immediately following a disaster and the means to wisely distribute the funds can speed recovery, protect assets, minimise budget disruption and reduce the economic and human cost of the event. Moving to an ex-ante (forward-looking) approach to sovereign DRFI can achieve this through improving budgetary mechanisms and promoting better use of appropriate financial instruments. This is a priority for many governments, and demand for support in this area of disaster risk management is increasing rapidly.

There is a need for better evidence to guide support in sovereign DRFI programs, to maximise their impact and reduce the human and economic cost of disasters. There are very few evaluations of sovereign DRFI programs. Those that exist are not consistent in their methodology, and typically do not directly address the impact of programs on poor people. Without tools to objectively appraise potential programs and better evidence on what works, increasing investments in sovereign DRFI programs and instruments may be poorly targeted.

Both DFID and the World Bank are committed to better evaluation, evidence and innovation in sovereign DRFI. This project complements DFID and the World Bank's drive to develop and implement evaluation tools to identify impact of projects or policy initiatives. The project will utilize the World Bank's strong network of partner organizations to provide the required technical thinking, while also drawing on DFID's strong culture of learning and evaluation.

Impact Appraisal for Sovereign DRFI Project

Extreme disaster events are by nature rare and any backward-looking evaluation methodology relying solely on recent historical disaster experience is unlikely to reflect future disaster risk accurately. To overcome this, the project will take a forward-looking *impact appraisal* approach, evaluating selected sovereign DRFI programs based on a large number of simulated scenarios. Probabilistic disaster risk models will be used to present the relative likelihood of different events and the developmental consequences of such events. These will be estimated drawing on theory and evidence from public finance, financial economics, actuarial science, development economics, and post-disaster needs assessment.

The project seeks to understand whether forward-looking impact appraisals can help effectively target support for disaster risk activities. It aims to understand whether it is possible to develop a conceptually sound, quantitative impact appraisal tool that:

- Takes into account the probabilistic nature of the impact of sovereign DRFI programs rather than being too heavily influenced by recent disaster events;
- Quantifies trade-offs between many of the key dimensions of a sovereign DRFI program;
- Generates results that are sufficiently robust to model and parameter uncertainty but are still able to guide evidence-based decision making;
- Can complement more qualitative measures of impact; and
- Results in headline figures on the impact of sovereign DRFI programs on development and poverty that are meaningful for decision makers.

Project outputs have been designed to enable decision-makers to understand when sovereign DRFI programs are (and when they are not) effective components of a comprehensive approach to managing the financial risk associated with disasters. This project will include conceptual work, development of an operational framework, and five case studies. The project will first develop a methodologically robust conceptual framework, before applying this framework to the five country case studies starting in 2014.

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