

**POLICY BRIEF:
RISK TRANSFER MECHANISMS FOR
CLIMATE ADAPTATION FINANCING:
*POLICY TRENDS AND OPTIONS***



KEY MESSAGES FOR POLICY MAKERS

1. Natural disasters and climate change impacts have caused huge financial losses to all sectors, but it is the public sector that suffers and absorbs the largest portion of these losses. Some of these losses are bigger than what governments can afford, wiping away years of development gains and putting pressure on meagre public funds.
2. The cost of financing and absorbing the impacts of disasters and climate change is huge and rapidly increasing and has become, and will continue to be a heavy burden on the government.
3. The government, in areas that are prone to natural disasters should establish, use and promote the use of different types of mechanisms to transfer risks to the capital markets in order to protect itself, the public funds and the private sector from suffering huge financial burden due to major disaster events.
4. The government should lead in using risk transfer mechanisms as part of its own risk reduction and climate adaptation strategies. The government should use appropriate risk transfer mechanisms in all public investments as financial protection in case of disasters and climate change impacts.
5. The government must ensure the availability of different types of risk transfer strategies that shall protect the public and private sectors from huge financial losses due to disasters and climate change.
6. The governments should establish an enabling environment and supportive policy and regulatory framework that shall allow the development of viable and competitive risk insurance markets. This market should offer different types of risk transfer mechanisms that can cater to the varied risk protection needs of all sectors including the poor and vulnerable.

BACKGROUND

Natural disasters and climate change impacts have caused heavy damages and losses to all sectors. It is the public sector however that absorbs a large portion of the financial costs of disasters. Damages to public buildings and critical infrastructures for example, are considered contingent liabilities of the government which they are responsible to repair or replace. In addition, the government spends huge amount of money for emergency response and relief, as well as in efforts for recovery and reconstruction. Oftentimes, these losses are disproportionate to the total annual financial allocation of national and local governments and guzzle up funds allocated for social services and development projects. Swiss Re (2012) estimates that natural disasters caused US\$126 Billion in economic losses in 2011, and US\$186 Billion in 2012 worldwide. A big chunk of these losses are shouldered by the public sector. The Thailand floods of 2011 for example, resulted in US\$46.5 billion of economic losses and required the Thai government to spend almost 5

per cent of its annual revenues for response and recovery efforts (World Bank, 2012). ASEAN countries suffer annual damage of over US\$4.4 billion each year because of disasters—an amount equivalent to more than 0.2 percent of the region’s total GDP (World Bank, 2012).

BOX 1. Losses and Lessons from Thai Floods of 2011

Thailand is considered a low risk area from typhoons. But from June 2011 to October 2011, five consecutive typhoons entered Northern Thailand bringing heavy rainfall up to 40% above normal average of the same period, which by definition is considered an extreme weather event. The extreme weather events caused severe flooding in the Northern provinces that spread southward and inundated 65 of Thailand’s 77 provinces. The flood lasted for five months causing 813 deaths, 13.5 million people were affected, 2 million people evacuated, 1 million homes destroyed. The total losses amount to US\$ 46.5 Billion and is officially considered the most expensive flood event in history in terms of economic losses. The government spent US\$25 Billion for relief and recovery. The business sector suffered a staggering loss amounting to US\$7.4 Billion. Over 1,215 factories in 7 major industrial estates were submerged to floodwaters causing unprecedented losses mainly due to business interruptions in the global supply of electrical, computer, automotive parts and products. The insurance industry paid out US\$10 Billion of insured losses which greatly aided the financial burden of the public and private sector and supported the recovery efforts in the country.

Source: Department of Disaster Prevention and Mitigation (DDPM) Thailand Ministry of Finance (Thailand) 2012. Report on the worst flood in Thailand 2011 Iglesias, Gabrielle 2012. Lessons on Resilience from the 2011 Central Thailand Floods Munich Re 2011. Topic Geo 2011

Natural disasters have always caused negative impacts on public finances. According to Reto Schnarwiler (www.swissre.com, 2012) governments shoulder the biggest chunk of financing cost after every disaster event. The government therefore should find ways to protect itself from suffering heavy financial burden and recover quickly from calamities. The cost of disasters is increasing and will continue to rise with the increased frequency and magnitude of hydro-meteorological disasters. Schnarwiler (2012) added that no country can fully insulate itself against extreme weather events due to climate change; therefore countries prone to natural disasters should consider transferring their risks to capital markets.

WHAT ARE RISK TRANSFER MECHANISMS?

Risk transfer is the process of shifting the burden of financial loss or responsibility for risk financing to another party, examples would be through insurance, reinsurance, legislation, or other means (Mahul & Stutley, 2010). Munich Climate Insurance Initiative (MCII) in 2009 presented to the UNFCCC Climate Talks a typology of risk transfer mechanisms available in the global market. These include the following:

BOX 2. Different Types of Risk Transfer Mechanisms

Insurance. Insurance is a contractual transaction that guarantees financial protection against potentially large loss in return for a premium; if the insured experiences a loss, then the insurer pay out previously agreed amount. Insurance is common across most developed countries and covers many types of 'peril' (e.g. fire and theft insurance to protect property, automobile liability insurance).

Reserve fund. Catastrophe reserve funds are typically set up by governments, or may be donated, to cover the costs of unexpected losses.

Risk pooling. Risks pools aggregate risks regionally (or nationally) allowing individual risk holders to spread their risk geographically. Through spreading risks, pooling allows participants to gain catastrophe insurance on better terms and access collective reserves in the event of a disaster (e.g. Caribbean Catastrophe Risk Insurance Facility (CCRIF), which allows Caribbean governments to purchase coverage for earthquake and/or hurricane, securing US\$ 110 million of reinsurance capacity in addition to its own reserves).

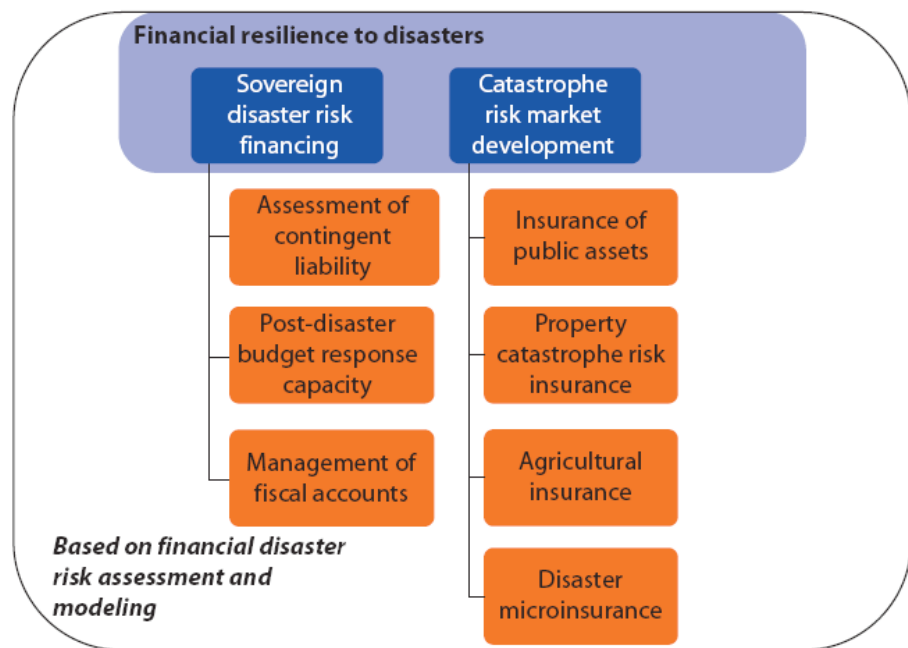
Insurance-linked securities. Insurance-linked securities, most commonly catastrophe (cat) bonds, offer an avenue to share risk more broadly with the capital markets. Cat bonds are issued by the risk holder (usually a government or insurance company) and trigger payments on the occurrence of a specified event. This event may be a specified loss or may be a parametric trigger, such as the wind speed at a location (e.g. in 2006, the Government of Mexico issued a cat bond (the Cat-Mex bond) that transfers earthquake risk to investors by allowing the government to not repay the bond principal if a major earthquake were to hit Mexico).

Micro-insurance. Micro-insurance is characterized by low premiums or coverage and is typically targeted at lower income individuals who are unable to afford or access more traditional insurance. Micro-insurance can cover a broad range of risks; to date, it has tended to cover health and weather risks (including crop and livestock insurance). Weather insurance typically takes the form of a parametric (or index-based) transaction, where payment is made if a chosen weather-index, such as 5-day rainfall amounts, exceeds some threshold. Such initiatives minimize administrative costs and moral hazard and allow companies to offer simple, affordable and transparent risk transfer solutions (e.g. Weather-based Crop Insurance Scheme established by the Government of India, protecting more than 700,000 farmers against drought).

Source: Munich Climate Insurance Initiative (MCII). MCII submission to the June session of the UNFCCC Climate Talks, 2009. Adapted from <http://unfccc.int/resource/docs/2009/smsn/ngo/163.pdf>

The World Bank came up with its own disaster risk-financing and insurance (DRFI) framework to better categorize the financial protection strategies countries can use against disasters. The DRFI framework classifies risk financing mechanisms into 2 ways: (1) sovereign disaster risk financing -- which entails identification and assessment of the government's contingent liabilities associated with natural hazards and financial strategies to increase their financial response capacity in the aftermath of a disaster while protecting their long-term fiscal balance, and (2) catastrophe risk market development -- which increases the transfer of public and private risks to the insurance sector.

Disaster Risk-Financing and Insurance (DRFI) Framework, World Bank 2012



Source: World Bank Disaster Risk Financing and Insurance Program 2012

CURRENT POLICY ON RISK TRANSFER MECHANISMS

The UN Framework Convention on Climate Change in 2007 formulated the Bali Action Plan which identified risk transfer mechanisms as risk management and risk reduction strategies which is part of enhanced adaptation actions for the country. The Hyogo Framework for Action (HFA) highlighted the importance of (1) promoting the development of financial and risk-sharing mechanisms, particularly insurance and reinsurance against disasters, (2) encouraging the establishment of public-private partnerships to better engage the private sector in disaster risk reduction activities, encourage the private sector to foster a culture of disaster prevention, putting greater emphasis on, and allocating resources to pre-disaster activities such as risk assessments and early warning systems, and (3) developing and promoting alternative and innovative financial instruments to address disaster risk (Jha and Stanton-Geddes, 2013). IPCC SREX (2012) emphasized that

risk sharing and transfer mechanisms at local, national, regional, and global scales can increase resilience to climate extremes. Mechanisms such as informal and traditional risk sharing mechanisms, micro-insurance, insurance, reinsurance, and national, regional, and global risk pools are linked to disaster risk reduction and climate change adaptation by providing means to finance relief, recovery of livelihoods, and reconstruction; reducing vulnerability; and providing knowledge and incentives for reducing risk (IPCC SREX, 2012)

In the Philippines, the Climate Change Act of 2009 and the Philippine Disaster Risk Reduction and Management Act of 2010 both mandated the appropriate design of risk transfer mechanisms as part of resiliency measures required to be taken. Indonesia's National Action Plan Addressing Climate Change (NAPACC) states that several funding mechanism should be immediately tried, including market instruments like insurance and reinsurance as part of its climate actions. The Government of Vietnam formulated the National Strategy for Natural Disaster Prevention, Response and Mitigation 2020 which includes a strategy on the development of catastrophe risk financing solutions (including insurance) to complement other disaster risk management measures. The Climate Change Master Plan of Thailand seeks the creation of a financial mechanism to support the implementation of adaptation for coping with the negative effects of climate change.

Several international financial institutions such as the World Bank and the Asian Development Bank have provided assistance to various countries in developing and establishing their risk transfer strategies towards climate change adaptation and disaster risk management. The World Bank pioneered and supported the development of the Turkish Cat Insurance Pool after the devastating Marmara earthquake in Turkey, the Caribbean Cat Risk Insurance Facility (CCRIF) which insures 16 national governments in the Caribbean, drought insurance coverage for the government of Malawi, the MultiCat bond of Mexico that provides the Mexican government with rapid funding to finance disaster relief efforts after earthquakes and hurricanes, and many other countries around the world. The Philippines and Southeast Asia can learn from these countries and adapt or develop their own risk transfer strategies suited to their individual context. The World Bank is currently spearheading the development of national level risk finance instruments in countries with high exposure to disasters and climate change, including Cambodia, Indonesia, Laos, the Philippines and Vietnam. Asian Development Bank on the other hand is assisting selected pilot cities to study and develop risk transfer products and strategies that are suited and cost-effective for local governments in Asia and the Pacific.

NECESSITY FOR POLICY REFORM

It has been established that risk transfer mechanisms can be a viable tool to reduce losses of public and private sectors from impacts of disasters and climate changes. Several key players such as international financial institutions, national governments, city governments, business groups and insurance sectors are pushing hard to create an environment that can provide financial tools and products to protect every sector from losses and financial burden. Risk transfer as a financial protection and risk reduction strategy is slowly creating inroads in the Philippines and in Southeast Asia. It is a welcome development, however the efforts are still in early stages and many challenges and hurdles hinder the way forward.

1. The main challenge is the need to create the enabling environment for risk transfer mechanisms to grow and mature. Several laws, regulations and policies in the Philippines and Southeast Asia are blocking the growth or entry of diversified insurance products, especially those covering losses from the impacts of disasters and climate change. Policy reforms should be made specifically to create this enabling environment to promote the development of different types of financial tools and risk-sharing mechanisms at national, sub-national and local levels of government
2. Insurance penetration and demand for regular insurance products in developing countries are quite low. Expanding to specialized disaster risk transfer products seems not viable at the moment given the risk adverse attitudes of people, as well as the low perceived demand for risk transfer products. IPCC SREX (2012) reported that the use of formal risk sharing and transfer mechanisms in developing countries remain low and unequally distributed across regions and hazard coverage. Policy reform is therefore needed to (i) support the private sector-insurance industry in developing financial instruments that are marketable and affordable, (ii) support the development of alternative and innovative risk transfer mechanisms, (iii) support the creation of public-sector initiated risk transfer mechanisms.
3. There is poor insurance coverage in terms of geographic scope (insurance are mostly available in key cities) and the perils covered (selected hazards only). Policy reform is needed to develop diversified risk transfer mechanisms that can cover as many areas and as many hazards as possible.
4. Formal insurance arrangements tend to exclude the poor and most vulnerable. Policy reform should support the development of risk transfer products that are affordable and caters to low income sector.
5. The low capability of governments to pay insurance premiums for all its assets. Government stopped paying insurance premiums to many public assets (schools, hospitals, etc.). Policy reform is needed to support the government to ensure the use of cost-effective risk transfer mechanisms to protect public assets and investments.

The proposed policy reforms should address these concerns and come up with innovative, cost-effective and viable options for various types of financial protection needs in the Philippines and Southeast Asia.

LEGISLATIVE OPTIONS AVAILABLE TO THE PHILIPPINES

A number of policy options are available for the Philippines to move forward in terms of providing risk transfer protection for all sectors from financial losses due to disasters and climate change. Some of these policy recommendations include creation of the following policies:

1. Policy to encourage national, sub-national and local governments to develop disaster risk-financing and insurance strategies that is suited to their own individual needs and context.
2. Policy to support the creation of national disaster funds as a financial mechanism to ensure the rapid disbursement of funds for relief and recovery efforts (Jha and Stanton-Geddes, 2013).
3. Policy to support and promote the growth of private disaster risk insurance markets by allowing the entry of international insurance and reinsurance companies, by promoting public-private partnerships and by providing financial, regulatory and other incentives.
4. Policy to endorse and facilitate disaster risk pooling among countries, among government agencies or among local governments that can create competitive insurance markets.
5. Policy to encourage the development of innovative, cost-effective, sector-appropriate and sector-targeted risk transfer products.
6. Policy to require the government to use appropriate risk transfer mechanisms in all public assets and investments as risk reduction and financial protection tool to cover possible losses due to disasters and climate change impacts.

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