
Risk Transfer for Disasters



**Disaster Risk Financing
& Insurance Program**

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DEFINITION OF RISK TRANSFER

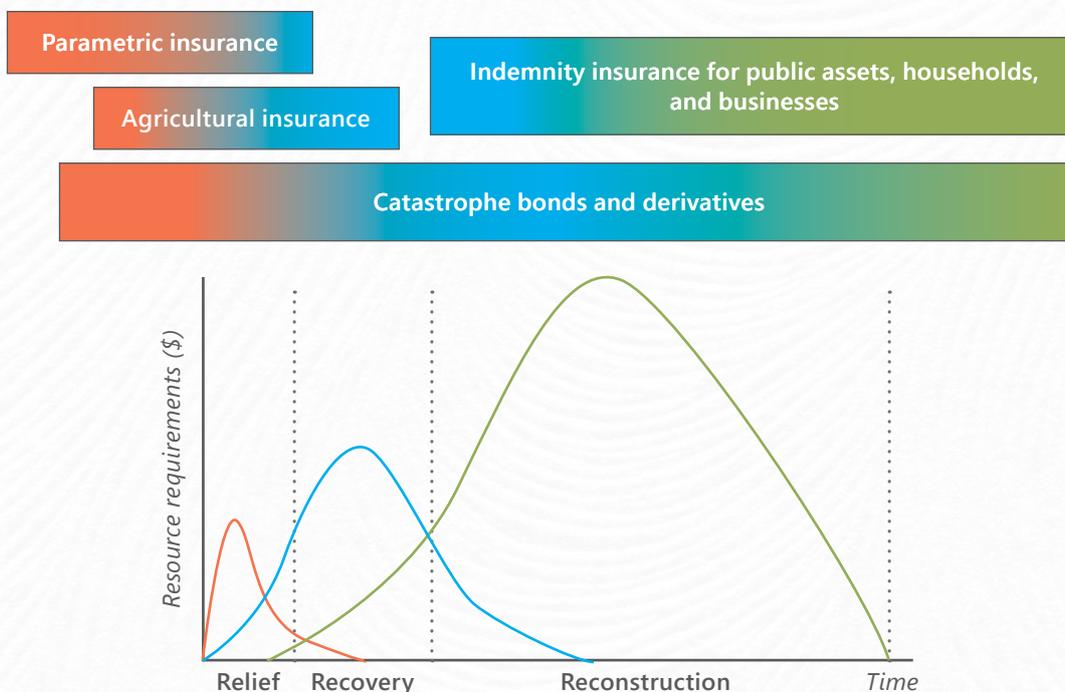
Risk transfer is the process of formally or informally shifting the financial consequences of particular risks from one party to another. The first party, which may be a household, community, organization, or national or local government, receives a financial payout from the other party after a qualifying event occurs (such as a disaster), in exchange for a fixed and specified payment.¹



TYPES OF RISK TRANSFER

The best-known form of risk transfer is **insurance**, which involves a company (or the state) providing a guarantee of compensation for specified loss, damage, illness, or death in return for a specified payment, known as the insurance premium. Other forms of risk transfer include **reinsurance** (insurance for insurance companies) and alternative risk transfer (ART), which includes **catastrophe bonds** and derivative contracts such as **catastrophe swaps**. Each of the various types of risk transfer serves a different purpose within a comprehensive financing strategy for all stages of post-disaster response. As indicated in the diagram below, instruments such as parametric insurance and some forms of agricultural insurance provide rapid payouts to support financing requirements for disaster relief and early recovery, whereas indemnity insurance is better suited to providing a greater level of finance needed for longer-term reconstruction.

FIGURE 1: USE OF DIFFERENT RISK TRANSFER INSTRUMENTS ACROSS STAGES OF POST-DISASTER RESPONSE



Source: Adapted from F. Ghesquiere and O. Mahul, "Financial Protection of the State against Natural Disasters: A Primer," Policy Research Working Paper 5429, World Bank, Washington, DC, <http://hdl.handle.net/10986/3912>

1 - Adapted from United Nations Office for Disaster Risk Reduction (UNDRR), "Terminology," <https://www.undrr.org/terminology/risk-transfer>



KEY PRINCIPLES OF RISK TRANSFER

Insurance law dictates that any risk transfer contract must be for an **insurable interest**, which means the policyholder would otherwise suffer a loss should the insured event occur (for example a disaster).

To cover operating costs and profit margins, the **cost of risk transfer** is calculated such that the premium will always be higher than what the insurer (or risk carrier) expects to pay out on average. If the insured event does not occur, there will be no payout; however, after a severe disaster, the payout could be significantly higher than the premium paid. Insurance is therefore aimed at providing payouts for extreme events rather than covering the cost of average events.



PROVIDERS OF RISK TRANSFER



Domestic insurance companies within a country are likely to be providers of indemnity insurance for households and businesses, and potential providers of agricultural insurance and insurance for public assets. However, for high levels of coverage (e.g., catastrophe risk), local insurers are likely to require reinsurance protection either in the domestic or international market



Domestic and international reinsurance companies offer insurance to insurance companies to transfer catastrophic risk. International reinsurance companies are used extensively in crisis risk financing, as they also offer policies to directly country governments.



Sovereign risk pools can offer coverage to individual countries, retain some of the risks through joint reserves and capital, and transfer excess risk to the reinsurance and capital markets. The use of risk pools allows some countries to access coverage against disasters that they might otherwise not be able to afford



Capital markets offer coverage for disasters through catastrophe bonds and other kinds of derivatives.



PHOTO BY: DOMINIC CHAVEZF, WORLD BANK

Table 1: Benefits and drawbacks of risk transfer

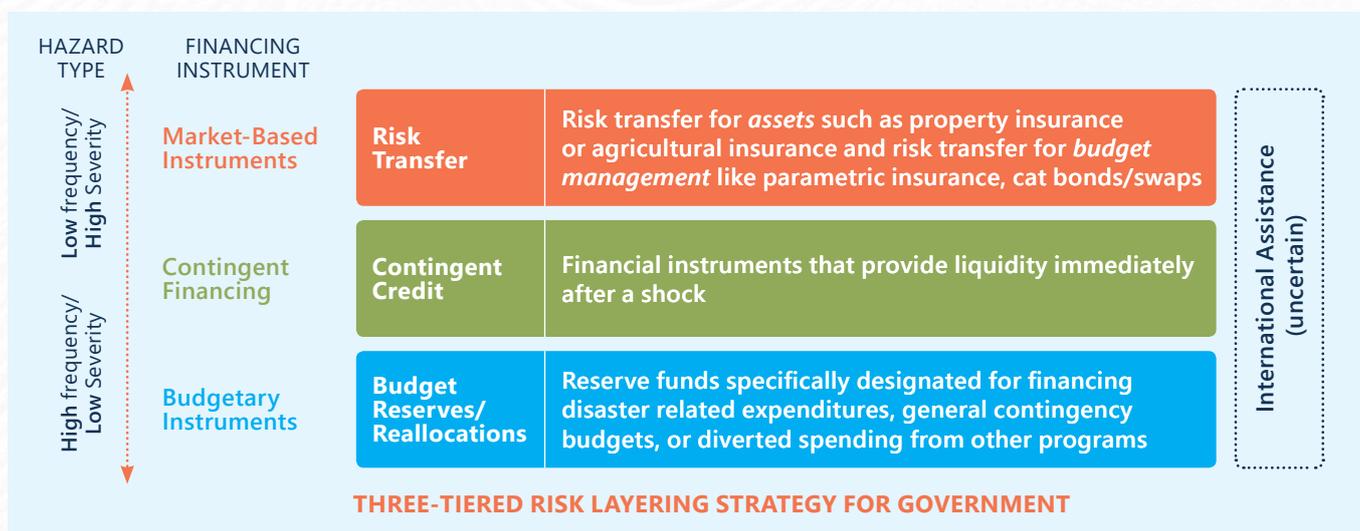
Advantages	Disadvantages
<ul style="list-style-type: none"> ◆ Can be cost-effective for high-severity / low-frequency risks ◆ Offers fast payouts for some types of risk transfer (parametric insurance, catastrophe bonds and derivatives, and some agricultural insurance policies) ◆ Allows for better financial planning due to greater predictability and reduced volatility of expenditures ◆ Supports fiscal discipline ◆ Provides payouts with no restriction on how the payout is used (for some types of insurance) ◆ Allows the insured party to set the amount of premium it is willing to pay (for some types of insurance, e.g. parametric insurance) 	<ul style="list-style-type: none"> ◆ Is likely to be very expensive for low-severity / high-frequency risks ◆ Can be vulnerable to criticism if an event occurs and no payout is provided under the contract terms ◆ May provide payouts that do not meet the needs of the insured (for some types of insurance) ◆ Requires expertise in risk transfer products to ensure policy wording is appropriate for needs May entail high transaction costs for some kinds of risk transfer ◆ Entails trade-off between the cost of premiums and the frequency or scale of payout ◆ May have fluctuating cost, since cost also depends on risk appetite from providers and market status, which can change over time



USE OF DIFFERENT INSTRUMENTS TO ADDRESS DIFFERENT RISK WITH A THREE-TIERED RISK-LAYERING STRATEGY

As indicated in the graphic below, a comprehensive disaster risk finance strategy utilizes different financing instruments for different types of risks. Risk transfer is best suited to high-severity / low-frequency events occurring less than every 10–50 years, such as severe floods, droughts, cyclones, or earthquakes. In the case of more frequent risks, paying an insurance premium to cover these costs is inefficient, and other disaster risk financing instruments such as contingent credit or budget reserves/reallocations should be used.

FIGURE 2: RISK LAYERING STRATEGY FOR GOVERNMENTS



Source: Adapted from World Bank, "Fundamentals of Disaster Risk Finance," World Bank