Risk Transfer for Promoting Risk Reduction

- Dr Piyoosh Rautela Executive Director,

Disaster Mitigation and Management Centre (DMMC), Govt of Uttarakhand

Disasters often result in the loss of lives, livestock, assets, property and infrastructure that often have severe adverse impacts on the quality of life and livelihood strategy of the affected population. These at the same time disrupt industrial activities, commerce and routine business of the government. The state has to therefore intervene in bringing forth normalcy by way of changes in the techno-legal regime aimed at fostering the pace of economy, growth and development in the affected area. Besides this, the state also diverts resources for post-disaster relief, rescue, restoration and rehabilitation besides assisting the affected population for various categories of losses incurred by the disaster.

Despite overburdening the public exchequer this expenditure often fails to satisfy the disaster-affected population as the assistance provided is generally insignificant as compared to the losses. This highlights the need to have a system to ensure equitable compensation for the losses incurred to the property and assets of the disaster-affected population, as well as for providing resources to the state to speed up the post-disaster recovery process. This is to facilitate smooth, speedy and hassle-free post-disaster recovery besides lightening the burden of the public exchequer. Risk transfer promises to make all this possible in an organised manner.

Risk transfer is a process of formally or informally shifting the financial consequences of identified risks from one party to another whereby a household, community, enterprise or state authority is assured of resource availability from the other party after a disaster incident, in exchange for ongoing or compensatory social or financial benefits provided to that other party.

Risk transfer is a commonly utilised risk management technique where the burden of potential loss from an adverse outcome faced by an individual or entity is shifted to another party, in exchange for periodic payments by the individual or entity as a cost of bearing the risk.

There are two common methods of risk transfer.

Insurance policy

Purchasing an insurance policy is a common method of transferring risk. When an individual or entity purchases insurance, it shifts the financial risks of certain identified adverse outcomes occurring within a mutually agreed period to the insurance company. Insurance companies typically charge a fee – an insurance premium - for accepting such risks.

Legally insurance is a contract between two parties wherein one party, the insurer, undertakes to pay the other party, the insured, a fixed amount of money on the happening of a certain event within a specified period in exchange for a consideration or fixed premium.

By purchasing an insurance cover an individual insures herself against certain financial risks for an agreed-upon period. For example, by purchasing car insurance she is acquiring financial protection against physical damage or bodily harm to her car from traffic incidents or other causes. As such, she has shifted the risk of having to incur significant financial losses from traffic incidents to an insurance company. In exchange for bearing such risk, the insurance company would typically require periodic payments from her.

An indemnification clause in contracts

Contracts can also be used to help an individual or entity to transfer risk. Contracts can include an indemnification clause- a clause that ensures potential losses are compensated by the opposing party. In simplest terms, an indemnification clause is a clause in which the parties involved in the contract commit to compensating each other for any harm, liability, or loss arising out of the contract.

For example, consider a client that signs a contract with an indemnification clause. The indemnification clause states that the contract writer will indemnify the client against copyright claims. As such, if the client receives a copyright claim, the contract writer would be (i) obliged to cover the costs related to defending against the copyright claim, and (ii) responsible for copyright claim damages if the client is found liable for copyright infringement.

Risk shifting

Risk transfer is often confused with risk shifting. To reiterate, risk transfer is passing on (transferring) risk to a third party. On the other hand, risk shifting involves changing (shifting) the distribution of risky outcomes rather than passing on the risk to a third party. For example, an insurance policy is a method of risk transfer. Purchasing derivative contracts is a method of risk shifting.

Reinsurance

It is important to note that the financial viability of an insurance company is based on ensuring a large number of spatially dispersed low-probability risks. A major disaster, mishap or accident can however inflict damage to a large number of insured assets making the insurance company liable to pay a huge insured amount. Such a situation is possible on the occurrence of high-impact, low-frequency hazards such as earthquakes, and could result in the company going bankrupt.

To cover the risk of such incidences the insurance companies also resort to risk transfer or insurance. Insurance coverage by insurance companies is generally referred to as reinsurance, and several companies offer insurance coverage to the insurance companies. These are referred to as reinsurance companies.

Similar to how individuals or entities purchase insurance from insurance companies, insurance companies shift their risk by purchasing insurance from reinsurance companies. In exchange for taking on this risk, reinsurance companies charge the insurance companies an insurance premium.

Swiss Re Ltd., Munich Reinsurance Company, and Hannover Re are global leaders in the field of reinsurance. It is important to note here that precise, and fine-tuned risk assessment is the key to the viability of the reinsurance companies, and therefore it is no surprise that these companies have major stakes in most global risk models, and almost all the disaster-induced economic loss data available globally is provided by these companies. The accuracy of this data is naturally a function of insurance penetration in the concerned society, and with relatively low levels of insurance coverage reliable disaster-induced economic loss data for underdeveloped and developing nations including India is generally not available.

Risk Transfer Scenario in India

Even though life and health insurance are slowly gaining social acceptance in the country as a means of social security, the coverage remains abysmally low, and generally restricted to urban areas and people with assured regular sources of income. Only 28.3 and 36.2% of India’s population are covered by life, and health insurance respectively. An overwhelmingly large proportion of this coverage is however through various welfare schemes of the government wherein payoffs are often insignificant.

Insurance of vehicles is however commonplace, largely due to regulatory compulsions. Lately, people, particularly in urban areas have also started to insure their houses and other assets. These insurance covers are however mostly against fire and theft and often do not cover natural disasters, or other perils.

Developed nations however have high insurance penetration, and most disaster-induced losses in these countries are generally compensated by insurance companies due to which the public exchequer is often not overburdened. This ensures that the developmental initiatives are not hampered by paucity of funds, and facilitates smooth post-disaster recovery.

In the face of continuously rising state expenditure on post-disaster relief and reconstruction, taking the lead from the developed nations the options of replacing state-sponsored post-disaster relief, and reconstruction regime with risk transfer is often debated in different forums. Despite the Ministry of Home Affairs (MHA), and National Disaster Management Authority (NDMA) championing the cause of risk transfer various Finance Commissions have not formally accepted it as a viable option for the country.

The IX Finance Commission (FC) was formally entrusted with the responsibility of exploring the feasibility of establishing a national insurance fund to which the state governments could contribute a percentage of their revenue receipts. After examining various possibilities the IX FC concluded that the concept of an insurance fund for disaster relief was neither viable nor practicable as the process of loss assessment by an external agency could be complicated and time-consuming, which would defeat the very purpose of relief - providing timely succour to the affected people. It was added that the source of calamity, by its nature and magnitude, would pose problems which no agency, outside the government, could tackle exclusively and in full measure.

This conclusion was based on the fact that it is generally economical to pool risks arising out of high-impact, low-frequency disasters, but it is not economical to pool risks arising out of low-impact, high-frequency disasters. The IX therefore did not find merit in setting up a comprehensive risk pooling mechanism for financing disaster relief in India.

In this perspective, the XI FC added that any insurance cover in which the premium is to be paid fully by the government would not reduce the financial burden of the government in dealing with natural calamities. The Commission, however, felt that the crop insurance scheme would help individual farmers, especially at the time of natural calamities, and therefore, suggested strengthening of these schemes.

The XII FC endorsed the views of the IX and XI FC on this issue and commented that any insurance scheme, the premium for which is to be paid by the government alone would put a very heavy burden on public exchequer without providing any substantial benefit to the affected population. The XII FC however recommended that the government should encourage insurance of private assets by individuals in vulnerable zones. Strengthening of the crop insurance scheme, and loan-linked insurance schemes in rural areas were cited as examples of such measures.

The XII FC at the same time identified micro-insurance to be the need of the hour. Micro-insurance refers to the protection of assets and lives against insurable risks of the target populations, such as micro-entrepreneurs, small farmers and the landless, women and low-income people through formal institutions i.e. insurers and semiformal or informal institutions, such as NGOs, self-help groups and others.

The XIII FC noted the risk transfer concept to be at a nascent stage in the country as the Insurance Regulatory and Development Authority of India (IRDAI) was still in the process of finalising, and notifying the micro-insurance regulations. The XIII FC opined that the formal institutions serve only a fraction of the population, which typically lies within the upper quartile of the social hierarchy, and therefore initiatives with the involvement of non-government organisations (NGOs), and self-help groups (SHGs) which are directly accessible to all segments of the population, could be planned, and implemented at the behest of the state governments.

The XIII FC at the same time took cognisance of the “earthquake pool” being created by the General Insurance Corporation of India, which would enable all the insurance companies to share the burden of risk in case of huge losses arising out of earthquakes. Under this the insurers would divert the earthquake premia to the “pool” and therefore it could prove useful in providing social security to the public in the unfortunate event of a catastrophe. The XIII FC hoped that an insurance solution like this would result in the orderly distribution of disaster relief to the affected population.

The XIII FC also noted that the Insurance Regulatory and Development Authority (IRDA) has framed micro-insurance regulations that allow the distribution of micro-insurance products by micro-insurance agents like NGOs, SHGs, micro-finance institutions (MFIs), and others. These regulations cover insurance for personal accidents, health care for individuals and families, and assets like dwelling units, livestock, tools, and other named assets. The XIII FC also took cognisance of the national health insurance scheme - Rashtriya Swasthya Beema Yojana launched by the Union government to cover families below the poverty line (BPL) for proper health care. In addition, similar schemes operational in various states were also taken note of.

As disaster relief is considered a welfare activity that the state is obliged to undertake, the XIII FC was apprehensive of mass resistance to insurance premiums and also pointed out challenges in collecting premiums from the large number of persons dispersed throughout the country.

The XIII FC considered the existing system of providing relief financially viable for low-impact, high-frequency hazards. Though accepting risk transfer as a viable option for high-impact, low-frequency hazards the FC suggested that this option be considered in future as not many options were available in the market at that time.Despite hoping to increase insurance penetration in the country with time, the XIII FC concluded that the insurance schemes do not provide an adequate alternative to government funding for disaster relief.

XIV and XV FCs did not make any positive recommendations in favour of risk transfer, and therefore disaster financing in the country remains solely state-funded.

Insurance for promoting disaster safety measures

Despite insurance agents always being keen to sell their products, you won't be able to buy a good life or health cover policy in case you have crossed a certain age bracket or have some chronic ailments. Though within the specified age limit, you might have to undergo a detailed medical examination before getting the insurance cover.

If the policy is not denied correctly, the detection of certain ailments in the medical examination could have adverse implications on the insurance premiums and you might end up paying much higher. Looking from another perspective, being able to buy the desired insurance coverage at a relatively low premium could be an incentive for keeping fit. Moreover, with healthcare and treatment getting costly one is incentivised to invest in fitness.

Likewise, with housing insurance becoming popular it would get increasingly hard to insure your house if it is not located in the identified safe zone and built according to the prescribed codes and building by-laws. Or else you would have to pay an exorbitant premium to get your house insured. To make its business viable and profitable the insurance company would try to diversify its portfolio of insured houses and desist from insuring houses built in identified unsafe zones and not incorporating appropriate disaster-safe technologies as prescribed by codes and building by-laws.

Rather than banking solely on secondary data about the location of houses and state of compliance with building bylaws from municipal authorities and others, the insurance companies would invest in land use zonation and seismic safety assessments to assess the risk posed by these by different hazards.

Relying on its risk database the insurance company would manipulate the insurance premiums and a differential insurance premium regime would come into being wherein houses located in safe zones and built using prescribed technology would be charged lower premiums. At the same time, the insurance company would use its risk database to formulate new insurance policies to attract more customers and also to customise policies to suit the requirements of its premium customers.

The differential insurance premium regime would at the same time influence the real estate business and both demand and market price of identified high-risk properties would fall and people would prefer to purchase assets with low risk resulting in their prices gaining.

People owning high-risk assets would thus be incentivised to invest in risk reduction measures to ensure appreciation of their property prices. This would make risk reduction a priority of land developers, builders and house owners. Popularisation of the insurance regime would thus have a positive impact on the state of the built environment and therefore it is warranted that the state promoted risk transfer tools by a supportive techno legal regime.

Way forward

It is important to note here that the state is already spending huge amounts of money on various pre- and post-disaster activities, and risk transfer should not further increase the burden of public exchequer.

As also pointed out by various FCs insurance is not going to be an economically viable option if the state is to remain the sole entity paying all the premiums. Moreover, insurance is unlikely to be an economically viable option for low-impact, high-frequency hazards. The state thus has no incentive to opt for risk transfer as it does not reduce the burden of public exchequer.

The state could however opt to limit the coverage of the State Disaster Response Fund (SDRF). Likewise, the economically well-off state of the society could be excluded from SDRF coverage. The state could at the same time negotiate with insurance companies to develop innovative and cost-effective insurance policies and promote these aggressively amid the section put out of SDRF coverage. The state could at the same time devise innovative ways of collecting the insurance premium and the same could be clubbed with routine house tax and electricity or water dues of the house owners.

The state could at the same time resort to legislative measures wherein insurance could be made a legally binding condition for owning immovable assets and the insurance premium could be built into the property registration tax. To start with the state could make insurance a necessary condition for operating all public utilities, and commercial establishments.

After a minimal threshold is achieved with the support of the state, the insurance companies would be regulating the market and this, in turn, would ensure voluntary compliance with disaster safety measures and help in creating a disaster-resilient community.