Government Insurance Risk Pool: A Lifesaver or Learning to Swim?

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SUMMARY:
We have recently experienced several large catastrophic events around the world that showed the great financial impact the existence of insurance, or lack of it, has when these events occur, and this not only for the individual citizen but also for the country, and in some instances affecting the world economy as well.
When a disaster happens, people will normally seek to recover their losses through insurance, but as not everyone has insurance they will turn to their governments for help. On the other hand, a catastrophic event can create severe problems to the economy, especially in developing countries, so much that the government can neither recover in a short period of time, nor help their citizens in an efficient way.
Governments have passed legislation that requires insurance companies to insure high risk events as a way to provide coverage to those risks that will produce very large claims for the industry to take, or could cause great disturbance to the economy.
The Government Pools are adapted to the risk they cover, the social and political conditions, the economy, and the maturity of the insurance market on the country.

Keywords: Insurance, Risk Modelling

1. INTRODUCTION

According to Swiss Re, in 2011 there were 325 catastrophic events, 175 of which were natural catastrophes and 150 man-made disasters. Combined, they claimed about 35 000 lives and resulted in economic losses of over 370 billion USD. The cost to the insurance industry was 116 billion USD of which 110 billion USD were due to natural catastrophes. (Swiss Re, 2012). There are 254 billion USD of losses that were not covered by insurance.

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Since the beginning of the XX century, some governments have passed legislation that requires insurance companies to insure high risk events as a way to provide coverage to those risks that will produce very large claims for the industry to take, or could cause great disturbance to the economy. Some are government sponsored and in some instances this is also beneficial for insurance companies because the government will assume some of the risk.

The Government programs or Pools are adapted to the risk they cover, the social and political conditions, the economy, and the maturity of the insurance market on the country.

2. GOVERNMENT SCHEMES

Governments will ensure that there is a framework to avoid risk, for example through land use regulation, and prevent losses of unavoidable risks, for example through building construction codes. But in addition, they have a moral obligation to protect their citizens after a catastrophic event has happened, not only to shelter and provide assistance but also to ensure the country keeps functioning after a major disaster.

The insurance industry provides a service by preventing and giving relief after an event, but the industry is limited in its ability to finance catastrophe risk. They can only provide this service to their policyholders, and if the event is larger than their estimation of the risk, they will not be able to cope either. The higher the risk, the costlier the solution is and as a consequence not everyone can afford it.

What is essential for the government is that the cover for catastrophic events is available at a reasonable cost to them and or to their citizens. In this way, most of the existing risk pools are government financed, first to keep the cost at an affordable price for anyone who wants it -especially if the government makes this obligatory- and second, to reduce the cost of rebuilding after an event.

As each country has different priorities and needs, there is a variety of programs and pools: some include private insurance companies and in others the government acts as an insurer or a reinsurer. It will depend on the peril being covered, the social and political conditions, the economy, the insurance penetration, and whom the schema is covering.

When the government acts as an insurer, it assumes direct liability for the losses without the insurance sector intervention. When it acts as a reinsurer, the government provides financial support to the private insurance market. The insurance industry may be required to retain some risk or can voluntarily retain risk. Usually, regardless of the schema, the private insurance provides administrative support and is paid a commission or a fee for its services.

3. EXISTING PROGRAMS

One of the first programs was created in 1939 in Switzerland to cover for damages caused by natural catastrophes. It was followed in 1954 by the Consorcio de Compensación de Seguros (CCS) from Spain as an extension to the Consorcio de Compensación de Motín, which covered war damages. Then, in 1966, the Japanese Earthquake Reinsurance Company (JER) was created to cover earthquake, tsunami and volcanic damage to residential properties.

In 1968 the United States created the National Flood Insurance Program (NFIP) to cover damage caused by water (flood and its consequences), and any necessary cleaning up of property. In 1975, the Icelandic Catastrophe Fund was created according to the Iceland Catastrophe Insurance Act. In 1980 the Norsk Naturskadepool from Norway that covers the damages caused by floods, storms, earthquakes, avalanches, volcanic eruptions and tidal waves to personal and commercial property.

The Régime d'Indemnisation de Catastrophes Naturelles from France was created in 1982 after the floods of 1981 in the south of France. In 1993, after hurricane Andrew, the USA created the Florida Hurricane Catastrophe Fund (FHCF) that covers residential structures against windstorm damage during a hurricane; also in 1993, New Zealand replaced the Earthquake and War Damage Commission by the Earthquake Commission (EQC).

The California Earthquake Authority (CEA) from the United States was created in 1996 after the Northridge earthquake. It covers earthquake perils for residential personal lines. After the 1999 earthquakes, Turkey created the Turkish Catastrophe Insurance Pool (TCIP) that covers earthquake damage for residential buildings for all registered habitations, excluding rural areas and unauthorized construction after December 27, 1999.

There are other schemes usually created or modified after major events to cover natural catastrophes.

4. RECENT EVENTS AND THE POOLS

In 2011 three government schemas were triggered: the Japanese Earthquake Reinsurance Company (JER), the Earthquake Commission (EQC) from New Zealand and the Consorcio de Compensación de Seguros (CCS) from Spain.

4.1 Japan

On Friday March 11, 2011, at 14:46 local time, a 9.0 magnitude earthquake occurred off the coast of Tohoku, Japan. It was the strongest known earthquake ever to have hit Japan, and one of the five most powerful earthquakes in the world since modern record keeping began in 1900.

'The earthquake moved Honshu 2.4 m east and shifted the Earth on its axis by estimates of 10-25 cm. The earthquake triggered devastating tsunami waves in Tohoku and then spread across the Pacific Ocean. The tsunami waves reached heights of up to 40.5 meters in Miyako in Tohoku's Iwate Prefecture, and travelled up to 10 km inland in the Sendai area (Tsunami.gov)'.

The damage caused by the earthquake shake was relatively moderate due to their strict building code but the tsunami wave devastated the northeast coast of the main island of Honshu. The tsunami wave washed away entire towns, roads and railway lines and it damaged several blocks of the Fukushima power plant with a heavy consequence: within a radius of several kilometers of the plant, the area will be uninhabitable for a long period of time.

The JER covers earthquake, tsunami and volcanic damage to residential properties. The system includes a mechanism for pooling all earthquake insurance policies, as well as an aggregate accumulation of funds for earthquake contingency reserves. It is partially funded by the government. The program covers policyholders with a valid insurance policy at the time of the event. Among other things, it takes into account earthquake resistance performance of buildings.

The earthquake claimed 15 840 lives and caused approximately 210 billion USD in economic losses, of which an estimated 35 billion USD were paid by the insurance sector (Munich Re, 2012). The JER covered insured residential properties but 'unfortunately earthquake insurance coverage is still low, thus Japanese society was faced with huge financial losses supported by the citizens, the government and other organizations' (Kurt Karl, Swiss Re).

4.2 New Zealand

On Tuesday February 22, 2011, at 12:51 local time, a 6.3 magnitude earthquake struck the Canterbury region in New Zealand's South Island. The earthquake was 10 kilometers south-east of the centre of Christchurch, New Zealand's second-most populous city. It followed after the magnitude 7.1 Canterbury earthquake of September 4, 2010, which caused significant damage to Christchurch and the central Canterbury region.

The earthquake caused widespread damage across Christchurch, especially in the central city and eastern suburbs, with damage exacerbated by buildings and infrastructure already being weakened by the 4 September 2010 earthquake and its aftershocks. Significant liquefaction affected the eastern suburbs.

The program covers homes, residential land and personal possessions against earthquakes, tsunami, landslips, volcanic eruption, hydrothermal activity, storm or flood damage and fire following any of these perils. It is reinforced with public awareness campaigns and strict code enforcements. The

program covers policyholders with valid fire insurance policies at the time of the event. The maximum cover that the EQC provides is $100,000 and it is often referred to as EQC top-up cover. The insured has the option to get extra cover form his insurance company.

The earthquake claimed 181 lives, caused approximately 16 billion USD in economic losses of which an estimated 13 billion USD were paid by the insurance sector (Munich Re, 2012). That is, about 80% of the losses were covered by insurance, which indicates a higher insurance penetration.

4.3 Spain

On May 11, 2011, at 18:47 local time, a 5.1 magnitude earthquake occurred 50 km south west of Murcia, Spain, close to the town of Lorca. The event was preceded by a 4.5 magnitude event, just about two hours before. Even thought it was a much smaller earthquake, the previous earthquake and its shallow epicenter distance of about 1 km caused 9 dead, 293 injured and building damage in the city where around 1000 buildings were declared inhabitable. A large amount of the buildings in the city were constructed before the seismic construction codes were officially implemented (EERI Newsletter, 2011).

The CCS covers losses due to earthquakes, tidal waves, floods, volcanic eruptions, cyclone storms, acts of terrorism, rebellion, insurrection, riots, civil commotion, and act or actions of the armed forces in times of peace. It is obligatory and it is included when a policy that covers damage to property or life insurance is purchased. In practice, the Consorcio is the sole institution that assumes the cover of the extraordinary risks in all circumstances. (Consorcio de Compensación de Seguros, 2008).

As of February 3, 2012, the indemnity paid by the Consorcio accounts for 354 million Euros, which represents about 97.5% of the total number of policies presented to the CCS by January 1, 2012. This includes damage to property, casualty, and business interruption to policyholders that had a valid insurance policy at the time of the earthquake. (Consorcio de Compensación de Seguros, 2012).

According to Swiss Re (Sigma, 2012), the economic losses were 150 million USD of which 100 million USD were covered by insurance. These refer to property losses and business interruption as a direct consequence of the property damage. It does not include liability, life insurance losses, or indirect financial losses.

5. CONCLUSION

Governments need to prepare for the events that may disrupt the economy and the life of their citizens. These Insurance mechanisms stimulate higher standard for building practices and establish long-term financial resources.

Last year’s events showed that the availability of Insurance Pools is an efficient way to mitigate the risk. The programs that make the cover for natural events obligatory performed better than the ones that are optional. The EQC and CCS mitigated the losses better than the JER, which is not obligatory.

Insurance is not the only solution but it helps after a catastrophic event. One important part is the education of the citizens so they can prepare against an event and be part of the solution. EQC enforces citizen education and strict building code as part of the program, and the JER reduces premiums if the buildings are earthquake resistant.

Everyone involved on the risk management chain, that is homeowners, insurance, engineers, developers, and Government officials, can promote mitigation efforts and assist recovery after an event.

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