

# TURKISH CATASTROPHE INSURANCE POOL (TCIP): CONTRIBUTIONS TO RISK AWARENESS

**M. Semih YUCEMEN**

**Head, Department of Earthquake Studies  
Middle East Technical University**

**Member, High Level Advisory Board of the OECD International Network on  
Financial Management of Large Scale Disasters**

**e-mail: [yucemen@metu.edu.tr](mailto:yucemen@metu.edu.tr)**

**International Conference on Financial Education**

**7- 8 May 2008  
Washington, DC USA**

# BACKGROUND INFORMATION

➤ In Turkey, the State had a legal obligation (**Disaster Law, No. 7269**) to fund the costs of reconstructing buildings after an earthquake. This responsibility of the State brought an **unplanned burden** on the national economy and on the already limited central budget in the case of catastrophic seismic events.

➤ After the two major earthquakes in 1999, which caused widespread destruction of the building stock, the Government of Turkey has decided to **enforce the earthquake insurance** on a nationwide basis with the sole purpose of privatizing the potential risk by offering insurance through the **Turkish Catastrophe Insurance Pool (TCIP)** and then exporting the major part of this risk on to the **international reinsurance and capital markets.**

**(RISK AWARENESS on GOVERNMENT BASIS)**

➤ Initially funded by the **World Bank**, TCIP was founded on **08.08.2000** and the program became effective since then. All **registered residential dwellings** that are located within municipality boundaries are required to be in the compulsory earthquake insurance coverage. With its **2.7 million** policy count as of **April 2008**, Turkish Catastrophe Insurance Pool has a potential to become the **largest earthquake insurance company** in the world.

➤ TCIP is supervised by the **Under-secretariat of Treasury**, which forms the **public side** of this partnership. The Under-secretariat is responsible for **overseeing** the program, **auditing** the operations and accounts of TCIP. The other partner, **Pool Management Company**, (**private sector**) performs the **administrative duties**.

➤ The overall management of TCIP is performed by the **TCIP Board of Directors**, which is the only management body of TCIP.

# OBJECTIVES OF TCIP

The principal objectives of TCIP can be summarized as follows:

- To provide **insurance coverage** for all the dwellings within the scope of the TCIP policies against **earthquake risk** in return for a premium;
- To ensure **risk sharing** within the country and also to distribute the financial liabilities caused by earthquakes on to the **international reinsurance markets**;
- To **mitigate the possible financial burdens on the government** due to earthquakes (especially construction of new dwellings after a catastrophe);
- To utilize the insurance system as a means to encourage the **construction of earthquake-resistant structures**;
- To contribute to the development of **insurance awareness and risk awareness** in the public.

## CONTRIBUTIONS OF TCIP TO RISK AWARENESS

- Before the establishment of TCIP (2000), earthquake insurance in Turkey was mostly provided as an allied peril to the fire and engineering policies. The penetration rate was quite low, especially for residential buildings (5% at that time).
- Within a year after the establishment of TCIP, the number of compulsory insurance policies sold reached to 2.4 million, corresponding to approximately 20% penetration rate.
- In the last couple of years, in spite of the adverse attitude of the Government and no legal enforcement, the penetration rate was kept slightly above this level (2.7 million as of March 2008, corresponding to a penetration rate of 21% ).

The **drastic increase** in the penetration rate shortly after the inception of TCIP and its **preservation** at the same levels in spite of many adverse effects, can be attributed to the following contributions of TCIP to **risk awareness in the public** with respect to earthquake risk.

**(a)** The decision that only property covered by insurance will be eligible to receive compensation was a very significant **reform**, considering the traditional practice and realities in Turkey. TCIP was the only source of funding for the earthquake losses in residential buildings. This had a very effective **impact** on the public. The compulsory earthquake insurance implementation not only contributed to the development of **insurance awareness** in the public, but also forced people to become **aware of the earthquake risk** in the geographical regions that they are living in.

**(b)** The operational management has been contracted out to leading reinsurance companies in Turkey for periods of 5 years. The payment that the **Pool Management Company** receives is proportional to the insurance policies sold. Therefore the Company conducts **a very intensive advertisement and public relations campaign** to promote the sale of earthquake insurance policies.

These campaigns include mainly:

- Every week a regular **television program** is broadcasted on a national TV channel providing information on the compulsory earthquake insurance and TCIP and also answering questions asked by the audience.
- **Commercials** are displayed on various **TV channels** and **newspapers**.

- **Periodic trips** are organized to different cities, especially to those where seismic hazard is high. In these trips the local authorities are contacted and their cooperation is obtained. **Elementary and high schools are visited**, seminars are given on the general aspects of earthquakes, brochures, CDs and seismic zoning maps of Turkey are distributed. Also, live programs are arranged on local TV's and radio channels. Notably, **children have expressed a great interest** in such activities.
- On the **web page** of TCIP, in addition to information on the insurance issues, real-time information is provided on earthquakes that are occurring within the boundaries of Turkey.

Although the actual aim of the Pool Management Company in carrying out these activities is **commercial**, still these activities **improve public awareness** of seismic risk and the development of insurance culture.

# MAJOR PROBLEMS

- **Penetration rate being less than the desired level:**
  - If the whole building stock is considered the current penetration rate is about **21%**.
  - If the **eligible building stock** is considered (i.e. those buildings that are registered at the cadastral records) a more realistic rate will be obtained as **35%-40%**.
- **Low rate of renewal:**

It is about **36%** as of March 2008, and needs to be improved substantially.
- It is to be noted that **penetration rate** and **risk awareness** of the public are **correlated**. Specifically, penetration rate can be considered as a good **indicator** of the level of risk awareness.

## Reasons for not attaining the desired level of penetration rate:

### ➤ Lack of interest and support from the State:

(a) The **populist trend** of governments: willingness to provide post disaster aid to homeowners by themselves. This destroys the homeowners' incentive to participate in the program and has a very **adverse effect on the penetration rate**.

(b) TCIP was established by a **temporary governmental decree**. For the realization of its full effect, the Parliament should pass the follow up “**Earthquake Insurance Law**”, making earthquake insurance compulsory. To date the Parliament has not passed this legislation, which has been waiting there for almost two years.

(c) TCIP was subjected to the **Turkish Public Procurement Law** towards the end of 2004. The Law brought a number of **restrictions** on the expenditures of the Pool.

- Insufficient advertisement and public relations campaigns due to the barriers created by the **Turkish Public Procurement Law**.
- A **fatalistic mentality** in society and the expectation that the State will provide everything;
- A low level of **income**;
- The **cultural awareness of insurance** has not reached to a sufficient level in Turkey and obtaining insurance is not a high priority in the daily lives of people;
- There are **no legal penalties** or **fines** to enforcement the “compulsory” earthquake insurance.
- **Lack of confidence** in TCIP with respect to the compensation of losses after an earthquake.

# FUTURE ACTIVITIES AND THEIR EXPECTED IMPACT ON RISK AWARENESS

- Development of **public relations strategies** and initiation of new **advertising campaigns** based on the results of a recent **public opinion survey** in order to **upgrade the risk awareness** of public and increase the penetration and renewal rates.
- Take the necessary actions for the implementation of the **Emergency Action Plan**, considering the number of claims to be filed following a major earthquake, like the one in **Istanbul**, could be around 400,000, which would create an enormous burden on TCIP.
- Development of **new mechanisms to enforce earthquake insurance**: Oblige homeowners to present their insurance policy when opening an account for such services as water, natural gas, electricity and telecommunications. This type of **checkpoints** will also **activate the risk awareness** of individuals.

➤ The use of earthquake insurance as a tool for the enforcement of the earthquake resistant provisions of the Code. For this purpose insurance premiums should be graduated taking into consideration the “**seismic resistance quality**” of buildings. In other words, lower premiums should be charged for buildings that comply with the **Seismic Code** requirements. Such a rating procedure would shift the attention of individuals from **global** to **local risk awareness**.

➤ Allocation of a modest portion of annual income of the Pool to **mitigation investments** (e.g. risk avoidance and reduction projects, revisions in land use planning, retrofitting of public and private buildings).

## CONCLUDING COMMENTS

- TCIP has proved to be a well designed **public-private partnership** due to its satisfactory performance over the past eight years. By engaging the private sector in the process of administration, **bureaucratic burdens have been minimized**.
- Formation of a large pool independent of the national budget and therefore to a large extent free of the “**molest**” of **political decision makers**.
- TCIP has all the main components and the potential for substituting for the government, in compensating post disaster losses in residential buildings through an **insurance** program.

➤ Within the context of the Turkish experience, pooling natural catastrophe risks **increases the penetration rates significantly if it is made mandatory (with affordable rates) and improves risk awareness of the public.** The current penetration rate of **21%** is quite high compared to countries such as India, Philippines, Iran, China, Romania and Bulgaria where the penetration rates are all less than **5%**. Furthermore, pooling natural catastrophe risks enforces **standard** wordings, conditions and tariffs and establishes a single risk transfer solution for a whole region or a country, resulting in **low administrative expenses.**

➤ In terms of program characteristics TCIP can be used as **a role model** for countries with similar exposures and economic conditions **for the mitigation of financial burdens on local authorities, as well as stimulating the risk awareness of the public.** **Alternative models** can be considered for other countries with respect to **spatial extent** (one or many countries) and **organizational structure** (public-private partnership or a purely private organization).

# ACKNOWLEDGEMENTS

Thanks are due to:

- **Mr. Idris Serdar**  
Under-secretariat of Treasury,  
Chairman of the Board of Directors, TCIP;
- **Mr. Selamet Yazici, Mr Buminhan Akin,**  
**Ms. Ebru Gencosmanoglu**  
Under-secretariat of Treasury;
- **Ms. Serpil Ozturk Yakut**  
Eureko Insurance

for providing some of the information used in this presentation.