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RESEARCH ARTICLE / ARAŞTIRMA MAKALESİ

COMPULSORY EARTHQUAKE INSURANCE AND INSURANCE SUBSIDY IN TURKEY

COMPULSORY EARTHQUAKE INSURANCE AND INSURANCE SUBSIDY IN TURKEY

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Özet

Tüm dünyada olduğu gibi Türkiye ‘de de İklim değişikliği, küresel ısınma ve doğal çevrelerin bozulması doğal afetlerin sıklığının ve etkisinin artmasına neden olmaktadır. Meydana gelen doğal afetin yarattığı hasarların ve toplumun maddi zararının karşılanması için temelde iki sistem bulunmaktadır. Birincisi, devlet zararı toplumun vergileriyle tazmin eder ve tüm vatandaşı hasardan/zarardan tam olarak sorumlu tutar. İkinci sistemde ise devlet, doğal afetlerde ilk yardım, arama ve kurtarma dışında binaların yeniden inşasına güvence vermez. Genellikle, sıkça meydana gelen doğal afetlere karşı sigorta, bazıları için zorunlu, bazıları için isteğe bağlı olarak uygulanır. Sigortanın zorunlu sigortalar ile üstlendiği yükümlülüklerinde ise devlettin büyük bir sübvansiyonu bulunmaktadır. Bu çalışmada, 6 Şubat 2023’te Kahramanmaraş’ı ve 10 ili etkileyen deprem felaketinden sonra, zorunlu deprem sigortası ve isteğe bağlı deprem sigortası uygulamaları sigorta hukuku, genel şartlar, hasar ve öneriler açısından değerlendirilmiştir.

Özellikle zorunlu deprem sigorta teminatlarının, hasar tespitinin ve uygulamada yaşanan sorunların yasal mevzuat kapsamında ve gerçek zararın karşılanması ilkesi çerçevesinde gerek teminatların yıl içerisinde güncellenmesi gerekse sigortalanma oranının arttıtılarak büyük sayılara ulaşılması gerekmektedir.

Anahtar kelimeler: sigorta; deprem sigortası; zorunlu deprem sigortası; sigorta sübvansiyonu, ihtiyari deprem sigortası; CEI; TNCIP.

Jel Kodları: G22, K30; G18

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Abstract

As in the rest of the world, climate change, global warming and the degradation of natural environments are causing the frequency and impact of natural disasters to increase in Turkey. There are basically two systems for covering the damages caused by natural disasters and the material losses of the society. First, the state compensates the damage with the taxes of the society and holds all citizens fully responsible for the damage/loss. In the second system, the state does not guarantee the reconstruction of buildings except for first aid, search and rescue in natural disasters. Generally, insurance against frequently occurring natural disasters is applied compulsorily for some and optionally for others. The state has a large subsidy in the obligations undertaken by the insurance with compulsory insurances. In this study, compulsory earthquake insurance and optional earthquake insurance applications were evaluated in terms of insurance law, general conditions, damage and recommendations after the earthquake disaster that affected Kahramanmaraş and 10 provinces on February 6, 2023.

In particular, compulsory earthquake insurance coverage, damage assessment and problems experienced in practice must be addressed within the scope of legal legislation and the principle of covering real damage, and the coverage must be updated throughout the year and the insurance rate must be increased to reach large numbers.

Keywors: Insurance, Earthquake Insurance, Compulsory Earthquale Insurance, Insurance Subsidy, Voluntary Earthquake Insurance, CEI, TNCIP.

JEL Codes: G22,K30,G18

1. INTRODUCTION

A disaster is a dangerous event; it is not known exactly when it will occur, and it may be caused by nature or by humans (Wiegmann *et al*., 2021). Natural hazards, which cannot be predicted in advance, cause significant damage to human life, property, the environment, and agricultural products. It is estimated that $190 billion of economic losses occur on a global scale annually due to disasters. In its 2021 report, Swiss Re, a Swiss-based reinsurance company, stated that 47% of these losses are covered by insurance, with 91% of insured losses caused by natural disasters and 9% caused by man-made activities (Swiss Re, 2023).

The type of natural disaster differs by region in the world. In continental Europe, flooding occurs nearly every year. Flood disasters have caused economic losses in many countries on the European continent due to the damage caused and the costs associated with disaster management. In America, common disasters are floods, earthquakes, tornadoes, and landslides. The United States is a country that often experiences tornadoes, one of the most dangerous and frightening types of disaster, which can cause casualties, damage to settlements, and economic losses. Meanwhile, on the Asian continent, the disasters that often occur are flash floods, landslides, earthquakes, and tsunamis. Flash floods, earthquakes, and landslides are the types of disasters that lead to the highest material and economic losses (Supian and Mamat, 2022).

Turkey is a country where many types of disasters occur frequently. In addition to natural disasters such as earthquakes, landslides, floods, and avalanches, its geopolitical location makes it susceptible to humanitarian crises that can be classified as human-induced disasters. Turkey ranks 45th among 191 countries in the Global Risk Index and is in the “high risk” group with an index score of 5.0 (AFAD, 2023).

According to the 2023 updated AFAD Turkey Earthquake Hazard Map and MTA Map Showing Active Fault Lines and Hazard Levels in Turkey, a significant portion of Turkey is located on active fault lines (MTA, 2023; TNCIP, 2023).

Like other natural disasters, earthquakes cause damage and loss depending on their severity. As the recent slogan "earthquakes don't kill, buildings do" indicates, there are two important measures against earthquakes today: The first is to minimize the damage and loss caused by earthquakes by constructing earthquake-resistant buildings with the help of modern technology. The second is to alleviate the financial burden, which is very difficult for individuals to bear on their own, through insurance. In the face of today's technology, it is not possible to predict in advance where, when and with what intensity an earthquake will occur and whether it will cause damage or to what extent it will cause damage. Nevertheless, properly kept earthquake statistics can give some clues in this regard. In this context, it is useful to monitor earthquakes in a country by regions, according to the magnitude, intensity, and recurrence period of the earthquake. However, the uncertainty arising from the lack of knowledge of the recurrence periods of earthquakes negatively affects interest in taking precautions against earthquakes and especially in earthquake insurance. People do not show the necessary interest in earthquake insurance for many reasons (Kayıhan, 2004).

Turkey is located on important earthquake belts surrounding the globe and most of them are faced with earthquake risks of different intensities. As a result of the earthquakes with a magnitude of 7.4 in Golcuk on 17.08.1999 and with a magnitude of 7.2 in Duzce on 12.11.1999, thousands of people lost their lives, thousands of residences and workplaces were destroyed, damaged, uninhabitable, and unusable. The fact that the earthquake was centered in the industrial zone had an even more negative impact on the economic destruction, and the high population density in the region also led to an increase in the loss of life and property. The socio-economic picture is aggravated by the wrong settlement and zoning plans, unplanned urbanization, the use of poor-quality materials in construction, poor, flimsy and mathematically unsound construction, and building heights that contradict static calculations, which are added to the consequences of the earthquake, which is perhaps the most severe of natural disasters. Then another disaster struck with a magnitude of 7.2 in Van on October 23, 2011, which once again demonstrated the necessity of taking measures to create social safeguards to prevent all and any harm to our country's economy, which is still developing (Barlas, 2011). Unfortunately, with the earthquake with a magnitude of 7.7 and 7.4 in Kahramanmaraş on February 6, 2023, we see that expectations regarding the earthquake-resistant construction of buildings or the strengthening of existing buildings have not been realized over the several years where similar incidents had occurred. The serious consequences of this earthquake show us that new measures must be taken.

After the recent earthquake disaster, we once again see the importance of earthquake insurance. For these reasons, our aim in this study is to draw attention to the regulations on Compulsory Earthquake Insurance (CEI) and the deficiencies and problems experienced in practice.

Natural disaster insurances that are not subsidized by the state and especially compulsory earthquake insurance will set a precedent for other countries. The conclusions and recommendations to be drawn from the earthquake disaster example will provide significant benefits on state policy, insurance coverage and policy coverage, reinsurance companies, insurance law, and settlement of disputes between the insured and related institutions.

2. MATERIALS AND METHODS

In this study, the insurance protection of compulsory earthquake insurance and the protection of voluntary earthquake insurance in compensation for the damage in the earthquake centered in Kahramanmaras, which occurred on February 6, 2023 and affected 10 provinces in Turkey, has been examined within the scope of coverage, general conditions, and private insurance laws and legislation, which

are included within the scope of the Natural Disaster Insurance Institution, compulsory earthquake insurance, and fire lightning-detonation main coverage. The law, legislation, and functioning of the loss follow-up process in the earthquake in question have been observed and analyzed, and suggestions have been made.

Since Turkish Natural Catastrophe Insurance Pool and Compulsory Earthquake Insurance are still new and not widely implemented around the world, there is a lack of data. This study aims to establish a precedent for future studies by examining the efficacy of Compulsory Earthquake Insurance in mitigating the economic impact of natural disasters, particularly earthquakes, and distributing the risk.

3- COMPULSORY EARTHQUAKE INSURANCE IN GENERAL

A disaster is a dangerous event; it is not known exactly when it will occur, and it may be caused by nature or by humans (Henstra and McBean, 2005). As studies on first aid and disaster rescue progressed, it became clear that hazards cannot be eliminated, but their negative consequences can be minimized through disaster management (Ahmed, 2013).

Several nations have amended and extended their Disaster Management system beyond mere relief and recovery activities and place a larger focus on "Disaster Risk Reduction" (DRR) a term used to refer to mitigation and preparedness measures (Chopra and Venkatesh, 2015).

Governments generally finance losses in disaster management and disaster risk reduction activities as part of central administration. However, in countries where disasters occur frequently, governments encourage insurance. For example, since 2007, agricultural insurance has been promoted in China to manage natural disaster risks with significant government subsidies. As of 2017, more than 160 agricultural insurance products were offered in China, covering a wide range of crops and livestock. However, Multi-Peril Crop Insurance (MPCI) has not been actuarially sustainable in China and relies heavily on large government support. Currently, government subsidies cover 70% or more of the premium (Liu *et al*., 2019).

Although similar practices are observed, insurance incentives based on state subsidization of losses are at the forefront. Unlike other countries, Turkey has TNCIP, which is not subsidized by the state to cover financial losses from natural disasters. In Turkey, there is no state support for premiums, and the state determines the compulsion and limitations of TNCIP. Many compulsory natural disaster branches can operate within its scope, but only Compulsory Earthquake Insurance has been implemented so far.

Following the Marmara earthquakes of August 17, 1999, and the Bolu-Duzce earthquakes of November 12, 1999, the government was authorized to issue decree-laws by the Authorization Law dated August 27, 1999, and numbered 4452. Based on the Law on Authorization, the Decree-Law No. 587 adopted by the Council of Ministers on 12, 1999, the government was authorized to issue decree-laws by the Authorization Law dated August 27, 1999, and numbered 4452. Based on the Law on Authorization, Decree Law No. 587 adopted by the Council of Ministers on November 25, 1999, aims to establish "an insurance system to cover the losses arising from natural disasters" (ZDS, 2023a). It was decided that the first implementation of the principles of compulsory earthquake insurance would start on September 27, 2000. It was published in the Official Gazette on September 8, 2000, with the number 24164, and it was announced that it would go into effect on September 27, 2000. Thus, the technical details of the compulsory earthquake insurance introduced by Decree-Law No. 587 were determined with this announcement of the Undersecretariat of Treasury. Executive Decree 587 also established a new organization with public legal personality under the name of Turkish Natural Catastrophe Insurance Pool (TNCIP) to carry out compulsory earthquake insurance operations under the Ministry of State. According to the provisions of the decree law, a fund will be established at TNCIP with the premiums to be collected by insurance companies. Thus, funds will be provided for the country's economy with the money accumulated in the pool.

The Law on Catastrophe Insurance No. 6305 dated May 9, 2012 which replaced the Decree Law on Compulsory Earthquake Insurance, aims to determine the procedures and principles regarding the compulsory earthquake insurance to be taken out to cover material damages that may occur in buildings as a result of earthquakes and the insurance and reinsurance guarantees to be offered to cover material and bodily damages that may occur as a result of various disasters and risks that cannot be covered by insurance companies or for which there are difficulties in providing coverage.

In accordance with Article 14(1) of the Law "Regulations regarding the implementation of this Law shall be put into effect within one year after the publication of this law", the Regulation on the Working Principles of Natural Catastrophe Insurance published in the Official Gazette dated August 15, 2012, and numbered 28385 got into effect (DASK, 2023).

Compulsory earthquake insurance contracts are established according to the general conditions determined by the Insurance Regulation and Supervision Agency. 13.05.2011 dated and 27933 numbered General Conditions of Compulsory Earthquake Insurance were published in the Official Gazette (ZDS, 2023b).

This insurance covers property damage caused directly by an earthquake, and damage to insured buildings (foundations, main walls, common walls separating independent sections, garden walls, retaining walls) caused by fire, explosion, giant wave (tsunami) or landslide resulting from an earthquake, ceilings and floors, stairs, elevators, landings, corridors, roofs, chimneys and similar complementary parts of the building) are covered by the TNCIP up to the sum insured.

Issues such as insurance coverage and the determination of premiums to be paid are determined by tariffs. Pursuant to Article 13 of the aforementioned law, issues regarding the determination of insurance coverage and premiums to be paid are determined by tariffs. In this context, the Insurance and Private Pension Regulatory and Supervisory Authority (SEDDK) announce tariffs and instructions once a year.

The general purpose of compulsory insurance is to protect the national wealth, to provide social benefits and social security, and to protect the consumer who is exposed to a certain type of risk (Omağ, 1993). The purpose of compulsory earthquake insurance, just like other compulsory insurances, is to reduce the burden of the earthquake disaster that we always face in our country, to minimize the outflow of national wealth out of the country through the reinsured risk and to eliminate the victimization of citizens to the extent possible in this way.

Turkish Natural Catastrophe Insurance Pool provides the Compulsory Earthquake Insurance Policy through the insurance companies that it works with and insurance intermediaries, i.e, agents (including banks) and brokers, which are not for profit and do not establish a separate sales network.

4. LEGAL NATURE OF COMPULSORY EARTHQUAKE INSURANCE

Compulsory earthquake insurance is property insurance under the category of loss insurance due to the nature of the coverage it provides and the damage it covers (Somer, 2001). Although both property insurances and compulsory insurances are included in the Insurance Book of the Turkish Commercial Code, no special regulation has been made for compulsory property insurances. The special regulations regarding compulsory insurances in the Turkish Trade Law (TTK) are only related to compulsory liability insurance; compulsory property insurance is not regulated.

This insurance, which got into effect for the first time in Turkish law with Decree Law No. 587 and is technically a property insurance, is compulsory property insurance in terms of its legal nature (Somer, 2001). For this reason, first of all, evaluations in terms of compulsory earthquake insurance should be made in accordance with Catastrophe Insurance Law No. 6305, and if there is no provision in the relevant legislation, in accordance with the hierarchy of norms, it will be necessary to make an evaluation in

accordance with the legal nature of compulsory earthquake insurance and the purposes of its creation by taking into account the contracting and implementation provisions regulating the Protective Provisions in the TTK and the legislation on earthquake insurance.

Compulsory Earthquake Insurance is included in active insurances among loss insurances. As damage insurance, the property interest of the owner is insured. The scope of the insurance is limited to property, and bodily injuries are not covered by the insurance. In addition, direct damages caused by the earthquake are covered. Indirect damages are not covered. Items inside the immovable are not covered (Süzel *et al*., 2023).

In addition, although compulsory earthquake insurance is mandatory, since it is property insurance, the penalty for not having the policy in other compulsory liability insurance is not foreseen. However, compulsory earthquake insurance is required only once during the relevant transaction period for water and electricity subscriptions, municipal tax payments, title deed transactions, and during the loan period when housing loans are used by banks. There is no obligation to renew these policies in subsequent years. Therefore, these policies which are only issued for mandatory reasons are usually not renewed.

In the 10 provinces in the epicenter of the earthquake, the compulsory earthquake insurance rate is 49 percent on average. This rate shows that there is an average insurance rate in the region. However, at the TNCIP "Compulsory Earthquake Insurance New Structure" workshop, the chairman of SEDDK stated that the voluntary earthquake insurance rate in the same region was 20% (Aligil, 2023). Since the majority of this rate is mandatory for individuals who receive housing loans until the end of their loan debt, it is evident that Optional Earthquake Insurance coverage, which is an additional coverage to the Fire, Lightning, and Explosion Policy, is rarely requested by individuals.

Table 1. The number of TNCIP policies, total coverage, and penetration (insurance rate) in the 10 provinces affected by the two earthquakes in Kahramanmaras on February 06, 2023 (ZDS, 2023c).

Province	Number of Active Policies	Collateral (USD)	Insurance Rate (%)
Kahramanmaras	113.347	884.889.039	54
Adiyaman	40.107	411.633.866	45
Hatay	126.852	1.211.927.182	40
Gaziantep	219.644	1.776.313.319	65
Diyarbakir	78.904	967.381.380	39
Malatya	98.618	1.034.845.911	52
Kilis	14.996	103.882.854	60
Adana	222.159	2.201.573.761	46
Sanliurfa	105.209	922.094.064	53
Osmaniye	43.252	417.629.273	42
Total	1.063.088	9.931.119.680	49

[1]March. 25.2023: 1 USD=19.03 TL

5. SCOPE OF COMPULSORY EARTHQUAKE INSURANCE

It is necessary to examine the place where the Compulsory Earthquake Insurance Policy can be issued, the type of construction, the scope of the coverage, and the situations excluded from the coverage.

Scope in terms of location; Article 10 of the Catastrophe Insurance Law regulates the scope of Insurance in terms of location as follows:

(1) Independent sections within the scope of the Condominium Law dated June 23, 1965and numbered 634, buildings constructed as dwellings on immovables registered to title deeds and subject to private ownership, independent sections within these buildings and used for commercial, office, and similar purposes, and dwellings constructed by the state due to natural disasters or constructed with the loan provided are subject to compulsory earthquake insurance.

(2) Buildings and independent sections that are subject to the Public Housing Law, dated September 11, 1983and numbered 2946 or used as public service buildings, buildings constructed in and around the village settlement areas and hamlets by those registered in the village population and permanent residents of the village, and buildings used for nonresidential purposes even if they are within the scope of the Law numbered 634 are not subject to compulsory earthquake insurance.

(3) Compulsory earthquake insurance shall be taken out by the owners or usufructuaries for the buildings and independent sections mentioned in the first paragraph and this insurance shall be renewed every year.

(4) The Pool has the right not to ensure buildings are constructed in violation of the relevant legislation and project. The institution shall not ensure buildings that are found to have been modified or weakened in a way to adversely affects the structural system. The list of buildings where this determination is made is sent to the relevant administration by the institution.

According to A.1 of the General Terms and Conditions of Compulsory Earthquake Insurance currently in effect, the scope in terms of location is as follows:

Pursuant to the Catastrophe Insurance Law No. 6305, independent sections within the scope of the Condominium Law No. 634, buildings constructed as dwellings on immovable properties registered to the title deed and subject to private ownership, independent sections within these buildings and used for commercial, office and similar purposes, and dwellings built by the state due to natural disasters or constructed with the loan granted are subject to compulsory earthquake insurance.

With this insurance, material damages directly caused by the earthquake and damages to the insured buildings caused by fire, explosion, tsunami, or landslide (foundations, main walls, common walls separating independent sections, garden walls, retaining walls, ceilings and floors, stairs, elevators, landings, corridors, roofs, chimneys, and similar complementary parts of the building) are covered by the TNCIP up to the sum insured.

In subparagraph A.2 of the CEI General Conditions, the buildings excluded from the scope are listed as follows:

2.1- Buildings and independent sections that are subject to the Public Housing Law dated 9/11/1983, numbered 2946 or used as public service buildings,

2.2- Buildings constructed in and around village settlement areas and hamlets by those registered to the village population and permanent residents of the village,

2.3- Buildings used entirely for commercial or industrial purposes,

2.4- Buildings without a project and engineering services,

2.5- Buildings found to have been modified or weakened in a way to adversely affects the load-bearing system,

2.6- Buildings constructed in violation of the relevant legislation and project in a way to adversely affect the carrier system,

2.7- Buildings decided to be demolished by authorized public institutions and buildings that are not suitable for residential use, neglected, dilapidated, or abandoned buildings."

Buildings located in villages are excluded from the scope of the CEI due to the lack of municipal supervision, the inability to clearly determine the construction style of the buildings, the low income level, the low share to be allocated to the policy, and the low rate of insurance. However, dwellings in areas that were previously villages but were later transformed into neighborhoods were included in the scope of the CEI.

Scope in terms of damage; This insurance covers property damage caused directly by an earthquake and damage to insured buildings (foundations, main walls, common walls separating independent sections, garden walls, retaining walls) caused by fire, explosion, giant wave (tsunami), or landslide resulting from an earthquake, as well as ceilings and floors, stairs, elevators, landings, corridors, roofs, chimneys and similar complementary parts of the building), are covered by the TNCIP up to the sum insured.

Cases excluded from the scope of compulsory earthquake insurance; According to Compulsory Earthquake Insurance (CEI) A.3, the following cases are excluded from the scope of earthquake insurance: Debris removal costs, loss of profit, business interruption, rent deprivation, alternative residence and workplace costs, financial liabilities and similar indirect damages, all kinds of movable goods, goods and the like, all bodily damages including death, claims for moral damages, damages other than earthquake and earthquake-induced fire, explosion, giant wave (tsunami) or landslide, damages that occur over time due to the building's own defects and characteristics without being related to a specific earthquake event.

Duration of insurance and exemption; As a rule, the duration of compulsory earthquake insurance is one year. The insurance contract must be renewed every year before the policy expires. According to A.7 of the General Terms and Conditions of Compulsory Earthquake Insurance, the term of this insurance contract is one year. Unless otherwise agreed, the insurance starts at 12:00 p.m. Turkish time and ends at 12:00 p.m. on the days specified in the policy as the commencement and expiration dates.

According to A.7 of the General Terms and Conditions of Compulsory Earthquake Insurance;

For each claim, a deductible of 2% of the sum insured is applied. TCIP is responsible for the portion of the damage exceeding the deductible amount found in this way. In terms of deductible application, all damages occurring in each 72 hours are considered one damage.

However, in terms of the last earthquake dated February 6, 2023, thousands of buildings collapsed, and thousands of people died in earthquakes that were effective in 10 provinces due to the 7.7 magnitude earthquake at 04.17 in Pazarcik district of Kahramanmaraş and the 7.6 magnitude earthquake at 13.24 centered in Elbistan. Kandilli Observatory, AFAD, and authorized authorities stated that these two earthquakes were not aftershocks but isolated earthquakes. Aftershocks are continuing.

In this case, although it has not exceeded 72 hours, it is considered that the deductible, which should be applied for each policy, should be applied only once, as earthquakes occur very frequently one after the other.

6. TARIFF AND INSTRUCTIONS

TNCIP is subject to the Catastrophe Insurance Law No. 6305, except for the provisions of the Insurance Law on supervision. Article 1, Paragraph 3 of Insurance Law No. 5684 clearly states the relevant issue.

Purpose and scope;

Article 1 - (3): Social security institutions, the Export Credit Bank of Turkey Incorporated Company, and other organizations engaged in insurance activities according to their special laws, except for the provisions of this law

related to supervision, are not covered by this law.

Article 13 of Catastrophe Insurance Law No. 6305 clearly stipulates that the "Compulsory Earthquake Insurance Tariff and Instructions" shall be published in the Official Gazette, and the Official Gazette contains the relevant Tariff and Instructions.

Tariffs and instructions, application principles, and general conditions:

Article 13: (1) Tariffs and instructions regarding compulsory earthquake insurance and the maximum coverage amount shall be determined by the Minister every year and published in the Official Gazette. In determining the insurance premiums, the area of the building, type, and quality of construction, ground characteristics of the land on which the building is located, earthquake risk, and similar factors are evaluated.

(2) Compensation for buildings having compulsory earthquake insurance and damage due to an earthquake shall be paid within thirty days at the latest following the completion of the damage assessment with the necessary information and documents.

(3) The implementation procedures and principles regarding compulsory earthquake insurance and the general conditions of insurance shall be determined by the Undersecretariat (SEDDK).

In the Communiqués section of the Official Gazette dated May 13, 2011, and numbered 27933, the Ministry of State and Deputy Prime Minister published the General Conditions of Compulsory Earthquake Insurance. The General Terms and Conditions of Compulsory Earthquake Insurance prepared by the Administration and published in the Official Gazette are not technically "general acts" like other general terms and conditions but are "unnamed regulatory acts" in administrative law. In this respect, the General Terms and Conditions of Compulsory Earthquake Insurance are related to the duties and operations of the administration and cannot be characterized as a "general transaction" as stated in private law. The fact that the annulment of the General Conditions of Compulsory Earthquake Insurance is within the jurisdiction of the Council of State confirms this point.

Article 7 of the Catastrophe Insurance Law, which includes regulations on the guarantees to be provided by the Turkish Catastrophe Insurance Pool, clearly states that the compulsory earthquake insurance coverage will be provided exclusively by the Pool. Paragraph 2 of the same provision states that the limits, general conditions of insurance, and tariffs regarding the guarantees will be determined by SEDDK.

Guarantees to be provided by the institution:

Article 7- (1): Compulsory earthquake insurance coverage is provided exclusively by the institution. This coverage may also be provided jointly with insurance companies if the conditions necessitate it in terms of risk management and if it is deemed appropriate by the Minister.

(2) In the event that insurance companies cannot provide coverage, insurance or reinsurance coverage may be provided by the Pool for earthquake, flood, landslide, storm, hail, l, frost, avalanche, and similar natural disasters and other special risks, if deemed necessary in terms of public interest, by observing insurance principles. The President of the Republic shall determine which of these guarantees shall be provided by the Pool. The Undersecretariat shall determine the limits, insurance general conditions, and tariffs for the guarantees granted by the Pool under this paragraph. (According to the current regulations, compulsory earthquake Insurance policies are determined by the Insurance Regulation and Supervision Agency (SEDDK).

(3) The principles regarding the accounts, records, and inter-account transfers related to the guarantees provided by the Pool shall be determined by a regulation prepared by the Undersecretariat.

(4) The implementation procedures and principles of the guarantees granted by the Pool and the principles regarding joint insurance with insurance companies shall be determined by the Undersecretariat within the framework of insurance principles by taking the opinion of the Pool and the Association."

Article A.4 titled "Determination of the Sum Insured" of the General Terms and Conditions of Compulsory Earthquake Insurance published in the Official Gazette dated May 13, 2011, and numbered 27933 states that the sum insured shall be based on the amount calculated by multiplying the gross surface area (or approximate surface area) of the same dwelling by the square meter price determined in the "Compulsory Earthquake Insurance Tariff and Instruction" published by the Ministry of Treasury and Finance.

Article A.4- Determination of the Insurance Amount

"In determining the insurance amount, the amount calculated by multiplying the square meter price determined in the "Compulsory Earthquake Insurance Tariff and Instruction" published by the Ministry of Treasury and Finance for the construction type of the insured dwelling by the gross surface area (or approximate surface area) of the same dwelling is taken as the basis. In any case, the insurance amount of a dwelling covered by compulsory earthquake insurance cannot exceed the maximum coverage amount specified in the "Compulsory Earthquake Insurance Tariff and Instruction".

Each year, TNCIP determines the maximum reconstruction cost and maximum coverage amount based on the square meter based on the cost of reconstruction of the demolished dwelling (excluding land value) according to the increase in construction costs. For this purpose, TNCIP determines the square meter values based on the calculation of the insurance amount and the maximum coverage amount accordingly by taking into account the "Schedule Showing the Square Meter Normal Construction Costs of Buildings" annexed to the General Communiqué on Real Estate Tax Law.

As stated, TNCIP publishes the maximum square meter values once a year according to the type of construction it determines.

As of 17.11.2021, the maximum insurance value of a dwelling with Compulsory Earthquake Insurance is 16.815,56 USD for all building types.

As of November 25, 2022, the maximum sum insured for a dwelling with compulsory earthquake insurance is 33.631,11 USD for all building types (CEI, 2023).

Accordingly, TNCIP has set the maximum reconstruction cost on a square meter basis at 158,49 USD and the maximum coverage amount at 33.631,11 USD for all building types as of November 25, 2022. (25.03.2023: 1 USD =19,03 TL)

Regarding the obligation to issue an addendum and pay the premium difference depending on the first applied tariff change, it has been declared that payment will be made from the previous tariff in case an addendum is not made by NDIA in the damage payment related to the two earthquakes that occurred consecutively on June 2, 2023, centered in Kahramanmaras province.

However, here, according to Article B.3.1. titled "Calculation of Compensation" of the General Terms and Conditions of TNCIP, the reconstruction cost of the insured building calculated according to the market price at the place and date of the occurrence of the risk will be considered in the calculation of the compensation. In the same article, "However, the insurance indemnity may in no case be more than the sum insured".

Due to the nature of this insurance, the policyholder does not have the right to determine, modify, reduce, or increase the insurance premium at their own will. Even if the policyholder is aware that construction unit costs have increased, they do not have the right to request a change in the insurance premium or maximum coverage. There is also no possibility to request or obtain an inflation protection clause, as is currently practiced by insurers in optional property insurance (Özbasan, 2023).

There is no addendum or additional premium obligation regulation imposed on the policyholders nei-

ther by special law nor by the regulation or general terms and conditions.

Article 10 of the Catastrophe Insurance Law titled "Compulsory Earthquake Insurance Scope and Obligation to Insure" reads as follows;

"Article 10/(3): Compulsory earthquake insurance shall be taken out by the owners or usufructuaries for the buildings and independent sections specified in the first paragraph and this insurance shall be renewed every year." With this statement, no other obligation is imposed on the policyholders other than the obligation to have the insurance contracts concluded and renewed every year.

Article 12 of the same law titled "Responsibility of the insured" does not impose any obligation on the insured in this regard.

Therefore, in our opinion, the insurance amount for the earthquake in Kahramanmaras on February 6, 2023, should be paid according to the tariff amount on the date of the risk, not according to the tariff amount on the date of the contract.

7. COMPULSORY EARTHQUAKE INSURANCE POLICY AND OPTIONAL EARTHQUAKE INSURANCE POLICY APPLICATION

More than one compulsory earthquake Insurance policy cannot be taken out for the same building/ independent section. However, if the insurance value of the independent section or building for which compulsory earthquake insurance has been taken out (due to the cost of reconstruction on a square meter basis and/or its surface area) is above the insurance value amount determined by Compulsory Earthquake Insurance, voluntary earthquake insurance can be taken out by insurance companies for the part above this amount, provided that compulsory earthquake insurance has been taken out (if no compulsory earthquake insurance has been taken out, a voluntary earthquake insurance policy cannot be issued).

Since voluntary earthquake insurance coverage is not the main coverage, it is not possible to issue an individual policy since it can be given as additional coverage to the main coverage of fire, lightning, and explosion. In addition, for the coverage to be provided, the compulsory earthquake insurance policy must have been issued and still be in force.

If the compulsory insurance is subject to priority loss calculation during the payment of compensation and there is claimable compensation after the paid compensation (for the building), compensation is claimed from the voluntary earthquake coverage.

In other words, if the insured's dwelling, which exceeds the maximum coverage amount at the time of issuance of the TNCIP policy, is covered by voluntary earthquake insurance in the fire insurance policy to be obtained from an insurance company, TNCIP pays the current maximum coverage amount (33.631,11 USD) at the time of the earthquake, regardless of whether there is an addendum. The insurance company, in turn, pays the remaining amount after deducting the exemption and coinsurance amounts in the policy based on the difference between the reconstruction cost calculated by multiplying the reconstruction cost based on the current square meters of the house on the date of the earthquake by the surface area and the amount paid by TNCIP.

8. DAMAGE NOTICE

Figures Insurance, the policyholder or the insured is obliged to fulfill the following obligations in the event of the occurrence of the risk.

1.1- To notify TNCIP or the insurance company that made the contract on behalf and for the account of the institution within fifteen business days at the latest from the date of learning that the risk has occurred,

1.2- To allow TNCIP officers or persons authorized by TNCIP to enter the damaged buildings for reasonable purposes and in appropriate ways and to make attempts to mitigate the damage,

1.3- Upon the request of TNCIP, to provide TNCIP without delay with the necessary information and documents that are useful for determining the amount of loss and evidence, for the exercise of the right of recourse and that can be provided for the policyholder,

1.4- To submit a written notification stating the estimated amount of the loss to TNCIP or to the persons authorized by TNCIP within a reasonable and appropriate period of time,

1.5- If there are other insurance contracts with earthquake coverage other than Compulsory Earthquake Insurance on the insured building or place, you should notify TCIP.

According to the information announced on TNCIP's official website after the 06.02.2023 earthquake, insured persons will be able to notify TNCIP both through the official website and ALO TNCIP 125, and no time limit will be applied.

9. CONCLUSION AND RECOMMENDATIONS

There are various practices for protecting society against natural disaster damages and providing guarantees. There are two main systems in this regard (Metezade, 2000).

In the first system, the state finds it necessary to intervene in such damages, which have a social dimension due to their large-scale impact and provides guarantees and assistance. Thus, since the damage is compensated by the taxes of society, all citizens become responsible for the damage. Most of the time, the protection provided by the state is far from fully compensating for the damage. In addition, insured persons who act prudently and provide protection through private insurance do not benefit from the protection provided by the state, considering that this would lead to unjust enrichment. The system, which punishes those who act prudently and provide security for their interests and rewards those who act imprudently, is criticized by insurers (Kongar, 2000).

In the second system, the state takes a more liberal approach to the issue and does not provide coverage or assistance against natural disasters. This need is met by private insurance. In countries where compulsory insurance against natural disasters is applied, it is an exception that all natural disasters are covered by compulsory insurance. Generally, insurance against natural disasters that occur frequently is compulsory, while insurance against others is voluntary (Koyuncu, 2003). In cases of compulsory insurance, there is also significant government subsidy.

In Turkey, following the earthquake disaster in the Marmara Region on August 17, 1999, compulsory insurance against earthquakes was introduced with Decree-Law No. 587, which entered into force on September 27, 2000. Thus, the obligation of the state to pay earthquake-related payments for the buildings determined by TNCIP was eliminated. Citizens have also obtained modern, reliable, and regular protection against earthquake damage.

The general purpose of compulsory insurance is to protect national wealth, provide social benefits and social security, and protect the public exposed to a certain type of risk. The purpose of compulsory earthquake insurance, just like other compulsory insurances, is to reduce the burden of the earthquake disaster that we always encounter in our country, which is an earthquake country, on the state, to minimize the outflow of national wealth out of the country through the reinsured risk, and to eliminate the victimization of citizens to the extent possible in this way.

As explained in detail above, the establishment of the Natural Catastrophe Insurance Institution, the formation of the General Terms and Conditions of Compulsory Earthquake Insurance, and the implementation of the laws and regulations that provide the working conditions of the system have been

achieved with the speed and structuring that will set an example in our country in this sense.

Especially in the Kahramanmaras Earthquake dated February 6, 2023, which affected 10 provinces, TNCIP's damage management process, and the Circular of the Insurance and Private Pension Regulation and Supervision Agency (SEDDK) dated February 27, 2023the relevant institutions fulfill their responsibilities with the decision and practice that advance payments will be made without waiting for 30 days, which is the legal payment period, and the balance compensation will be paid in due time.

However, it is necessary to draw attention to the deficiencies and problems experienced in the regulations and implementation of mandatory earthquake insurance. Namely;

The position of TNCIP is that it does not want to allow policyholders to benefit from tariff changes without paying a premium difference, and it appears to pay compensation in line with this view. However, since there is no provision in the CEI regulations regarding this issue, it is legally unlikely that assuming or alleging what the legislator may have thought will have any legal consequences. Since it is mandatory insurance, it is expected that the relevant legislation should include what obligations are incumbent on the policyholder (Özbasan, 2023).

In terms of compulsory earthquake insurance, the insurance price is not the price written in the previous tariff at the beginning of the contract when the policy is issued, but the price specified in the official tariff is valid on the date of risk, unless there is underinsurance. Since there is no addendum or additional premium obligation regulation imposed on the policyholders, neither by special law nor by the Regulation or General Terms and Conditions, only the responsibility of renewing the policy every year is pointed out, and the insurer's responsibility should be up to the compensation of the damage on the date of risk. Afterwards, it is important to eliminate ambiguity in the General Conditions and Regulations.

- In compulsory earthquake insurance, there can be neither underinsurance nor over-insurance. This is because, unlike in optional earthquake insurance, no information is requested from the insured party that could increase or decrease the level of risk. A standard policy is issued based on a fixed coverage and premium. The coverage limit is accepted by the parties as the actual value. Therefore, obtaining optional earthquake coverage for the remaining building value does not indicate the presence of underinsurance.

- In the General Terms and Conditions of Compulsory Earthquake Insurance regarding the notification of TNCIP and the insurance companies authorized on its behalf to the policyholder or insured within the insurance period, "C.5- In the article titled "Notifications and Notices", "The notifications of TNCIP or the insurance company authorized on behalf of TNCIP or the insurance company authorized on behalf of TNCIP are also made to the parties in writing to the address shown in the policy or if this address has changed, to the last notified address." Although it is stated in the article titled "Notifications and notices made to the policyholders via SMS in terms of the CEI, the notifications and notices made to the policyholders via SMS cause a decrease in insurance renewal in societies where awareness and the desire to be insured are already lacking, with comments such as the phone information of the insured or policyholders is not up-to-date, or the SMS does not reach. For this reason, it is important to include clear explanations about information in the policies and to provide information in light of up-to-date information.

- The two consecutive major earthquakes that occurred in our country on February 6, 2023, and affected 10 provinces should be considered a single earthquake and a single deductible should be applied, even if the earthquake did not exceed 72 hours.

- It should be ensured to prevent the loss of rights of the insured under the compulsory earthquake insurance policy due to the increase in construction costs due to the inflationary effects experienced by the country.

- The remaining coverage, other than the CEI coverage, can be provided as additional coverage to the Voluntary Earthquake Insurance and Fire Insurance Policies. Although it is quite correct in terms of insurance logic, it may be appropriate to expand the coverage of the CEI since it causes problems in practice.

- Due to the recent earthquakes and the expected earthquakes, instead of TNCIP ceding to reinsurers with high prices, a pool application should be introduced, and the state's contribution should be provided to strengthen the financial structure of TNCIP.

- It should be clearly and explicitly declared by the authorized persons of the state that the insurance policy should be issued for the part exceeding the compulsory coverage limit with the CEI, where the state protection for damages to buildings in earthquakes is abandoned, and stability should be ensured in practice.

- It would be appropriate to leave the supervision of the Building Inspection Application to the insurance sector to ensure more stable and careful inspections and approvals of the buildings, which they will later provide assurance for, by the competent authorities.

- For the formation of insurance awareness, more active declarations, activities, and actions of TNCIP and TARSIM as well as insurance companies are required.

As explained above, especially the compulsory earthquake insurance coverage, damage assessment and problems experienced in practice should be updated within the scope of the legal legislation and the principle of covering the real damage, and the coverage rates should be increased to reach large numbers. Encouraging property owners with compulsory earthquake insurance to opt for voluntary earthquake insurance, which can provide assurance above standard coverage, will ensure that the real damage is covered and that people who experience major disasters regain their living standards and rights.

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