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# Disaster Risk Insurance Best Practices

Sponsor: United Nations Development Programme Albania

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## *Risk and Resiliency in the Western Balkans*

The Western Balkans are at a high risk of natural disasters including earthquakes, floods, droughts, and wildfires (FAO, 2019). Climate change is expected to increase the frequency and intensity of climatic shocks in the region, and many governments are working to increase national resiliency and recovery measures. Montenegro and Serbia are examples of countries that have implemented disaster risk reduction (DRR) strategies. Albania has the most recent DRR strategy in the region with the approval of its National Disaster Risk Reduction Strategy (NDRRS).

Montenegro's main hazard exposures are flooding and earthquakes. Earthquakes affect 9,000 people and cause upwards of US$70 million in damages annually (Magheru, 2022). Flooding impacts 10,000 people annually and causes upwards of US$90 million in damages (Magheru, 2022). Over the last 20 years, six major flood events have occurred. A 2010 flood was particularly devastating, with €14 million in damages (FAO, 2018). To mitigate the effects of such disasters, Montenegro has implemented the Strategy for Disaster Risk Reduction for 2018-2023. The strategy has four priorities: understanding disaster risk, strengthening management, investing in disaster risk reduction, and increasing readiness for disasters (FAO, 2018). The conclusion of the plan occurs this year, and evaluations of its implementation will be seen in future years.

The main hazards that Serbia is exposed to primarily are droughts and flooding. In 2014, Serbia experienced its worst flooding in over a century, causing over US$1.5 billion in damages and displacing 125,000 people (GFDRR, 2017). To manage extreme weather events, Serbia implemented its National Disaster Risk Management Program (NDRMP). This program utilizes a multi-donor trust fund to provide the basis for the system. The NDRMP focuses on institutional building, disaster risk identification and monitoring, structural and non-structural risk reduction, early warning systems, risk financing strategies, and resilient recovery (World Bank, 2021). The Serbian NDRMP officially concluded in 2020, and the effects of these resiliency efforts are yet to be seen.

There are no significant differences between the disaster risk reduction strategy between Serbia and Montenegro. Both programs concluded recently, and feature

programs focused on foundational efforts toward resiliency. In comparison, Albania has the most recent and newly developed risk reduction strategy in the region.

The Council of Ministers in Albania recently approved the National Disaster Risk Reduction Strategy (NDRRS) of Albania. The strategy was developed with assistance from the World Bank and features a 7-year timeframe to address key resiliency goals. Furthermore, it serves as a guide to Albania's future disaster risk management activities and investments.

The NDRRS emphasizes that strengthening the catastrophe insurance market plays a role in increasing the disaster resilience of Albania. The Multi-Risk Disaster Risk Management Projects, Strategic project no. 14 "Strengthen financial preparedness of the country through adopting a National Disaster Risk Financing Program" aims to increase financial resilience against national disasters by increasing the capacity to meet post-disaster funding needs. The second key activity in this project titled "Access to financial services post-disaster by households, farmers and businesses and the poor", focuses on insurance. This project aims to address: 1) earthquake insurance for households, 2) access to finance (by farmers and MSMEs), 3) adaptive social protection, 4) insurance market development, 5) the introduction of financial instruments that can strengthen financial and private sector resilience against disasters and climate change.

Albania's NDRRS is a newly developed strategy to address disaster risk reduction in the region. With this framework, Albania is trailblazing disaster risk reduction in the Western Balkans. If effectively implemented, the strategy will increase the resiliency of Albania to exceed that of the region and put it at the forefront of disaster risk management in the Balkans. Although Albania has a sound development plan, it can still benefit from the practices of other countries that have faced similar challenges. The national efforts of Turkey, Romania, France, and Bulgaria can provide further practices that Albania may consider implementing.

# Approaches to Disaster Risk Insurance & Resiliency

| Country | Turkey | Romania | France | Bulgaria |
|---|---|---|---|---|
| **Disasters** | *Earthquakes* | *Earthquakes, Floods, Landslides* | *Tropical Storms, Hurricanes, Floods* | *Floods, Wildfires, Earthquakes* |
| **Strategy** | ***DASK:*** *State-owned catastrophe pools which mandates insurance and provides policies to owners through private insurance companies* | ***PAID:*** *Mandated private home insurance through a union of 12 private insurance companies* | ***CATNAT:*** *Public-private partnership between private insurers, public reinsurance, and a government-backed guarantee* | *EU Directive* ***Solvency II*** *Private insurance market* |
| **Successes** | *+ Payment claims capacity of US $4.2 Billion*<br>*+ Utilizes private insurers to sell policies.*<br>*+ Historically effective payouts* | *+ Payment claims capacity of €900 million*<br>*+ Financially sound private insurers*<br>*+ Affordable premiums: €10 or €20 per year* | *+ Mandated through private insurers*<br>*+ Large disasters are backed by reinsurance and government*<br>*+ Able to pay back large losses efficiently* | *+ Solvency II enables a stable market*<br>*+ Legal pathways to file complaints and seek damages*<br>*+ unintentional misrepresentation will still receive some payout* |
| **Challenges** | *- Low penetration: no legal penalty for not insuring & was only compulsory for one year*<br>*- Not resilient to frequent or extremely damaging earthquakes* | *- Resistant population & low enforcement, 20% penetration rate*<br>*- Moral hazard: gov. indemnifies non-insured homes* | *- 6% - 12% of premium to private insurers go to reinsurance companies* | *- Penetration rate is still relatively low*<br>*- Slow market growth*<br>*- Solvency II capital requirements increase the price of premiums* |

## *Case One: Turkey*

Turkey is at a high risk of seismic activity. In 1999, an earthquake struck the city of Izmit, just 100km away from Istanbul. According to a 1999 World Bank Report, the earthquake resulted in over 17,000 deaths and US$10 billion in damages (World Bank, 2003). Financing relief and recovery efforts caused significant strain on the public budget while resources were devoted to restoring public access to water, services, and infrastructure before compensating affected households (World Bank & GFDRR, 2021b). The government understood that its current system for disaster mitigation was unsustainable and looked for alternative solutions.

With the support of the World Bank, Turkey launched the Turkish Catastrophe Insurance Pool (DASK) in 2000. A 2012 law further specified the goals of DASK, defining the responsibilities of "providing affordable earthquake insurance for every homeowner, allowing for a true risk transfer mechanism, introduce claims-paying capacity to limit government exposure, and building national catastrophes reserves over time" (World Bank & GFDRR, 2021 b, p. 39). The concept behind the insurance pool was to mandate earthquake insurance for residential buildings, covering material damage to the structure but not the contents of the building. DASK sells policies through private insurance companies, which take a fee on all transactions. Premiums are based on a multitude of variables, factoring in building location, total size, and construction type (World Bank & GFDRR, 2021b). The DASK system has built a US $2.9 billion safety net since its inception from these premiums, but the capacity and efficiency of the system is currently being challenged.

The 2023 Turkey-Syria earthquakes that struck the southeastern region of the country exposed a significant weakness in the DASK system. Despite the word "mandatory", policies are required for only one year and there is no legal penalty for not having coverage. Furthermore, business entities are not required to buy into DASK (Howard, 2023). The result of such policies was a protection gap, leaving many unprotected assets vulnerable to over USD$34.2 billion in seismic damages (World Bank, 2023).

The Turkish Catastrophe Insurance Pool, while an imperfect and presently strained system, is a modern approach to distribute risk across a seismically active region. Further development of the program is necessary, as evidenced by the 2023 earthquake, but the DASK model and its operation are tailored to the region and can serve as a starting point for other countries in seismically active areas.

*Figure 1: Damage in Ankara, Turkey (NY Times, 2023)*

## *Case 2: Romania*

Romania faces significant risks from earthquakes, floods, and landslides. Romania's 1977 earthquake killed almost 1,600 people and caused US$2 billion in economic losses (World Bank, 2019). Seismic vulnerabilities, particularly in the Vrancea fault zone, and widespread flooding affect hundreds of thousands of people annually. Figure 3 shows the frequency of natural disasters for the last two decades, with flooding being the most common.

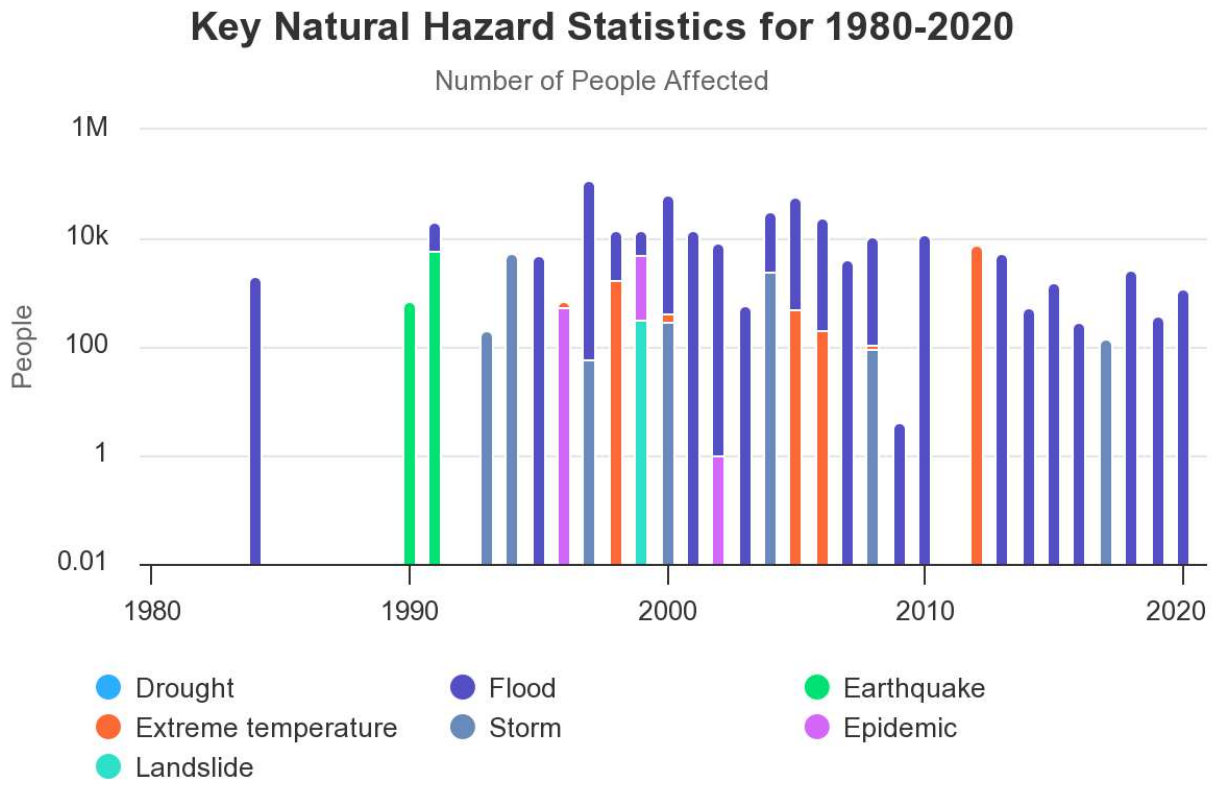


Figure 3: Key Natural Hazard Statistics in Romania (CCNP, 2021)

Romania sought the World Bank's assistance in disaster risk management, leading to the development of the Hazard Risk Mitigation and Emergency Preparedness (HRMEP) project in 2004. One of the products of the HRMEP project was the creation of the Pool Against Natural Catastrophes (PAID) insurance program in 2008.

PAID provides mandatory coverage for earthquakes, floods, and landslides. It offers affordable insurance options for homeowners, with premiums being either €10 to €20 per year depending on building materials (China-CEE Institute, 2023). There are two

types of buildings covered by the insurance program. Type A buildings, with a resistant structure made of reinforced concrete, metal, or wood, or external walls made of stone, burnt brick, or treated materials, have a maximum insured amount of €20,000, with an annual premium of €20. Type B buildings, with external walls made of unburnt bricks or untreated materials, have a maximum insured amount of €10,000, with an annual premium of €10.

Seventeen private insurance companies provide the PAID insurance (China-CEE Institute, 2023). It is very financially sound. The program holds approximately €900 million in reinsurance and boasts a high solvency ratio, indicating it has more than enough capital to cover claim obligations to policyholders (World Bank, 2019). As of 2019, PAID has never experienced a year in which payouts surpassed the program's income.

Though legally mandated, PAID has an actual penetration rate of 19% as of December 2018 (China-CEE Institute, 2023). Local authorities are supposed to enforce the mandate, but due to the unpopularity of PAID, they do not enforce it (World Bank, 2019).

PAID has been compensating for losses in recent disasters. PAID policyholders were compensated for 1,664 earthquake damage claims from 2013 to 2022. In February 2023, a 5.7 magnitude earthquake hit Southern Romania which caused earthquake damage compensation to increase significantly, with about US$600,000 in payouts of 35 cases. In 2022, about US$300,000 was paid out for almost 500 flood claims (China-CEE Institute, 2023).

The PAID policy has remained unchanged since 2008. The government is discussing future changes to improve the policy and extend coverages to storms, which have increased in recent years (China-CEE Institute, 2023). It is serving Romania well as an inexpensive, efficient, financially-sound source of insurance against various natural disasters.

## *Case 3: France*

France's main impacts from natural disasters come in the forms of tropical storms, hurricanes, and flooding. In 1999, Storm Lothar and Storm Martin caused US$8.5 billion in damages, as well as 92 deaths, while affecting 3.4 million more people. Floods often follow major storms such as these, but can often times be more devistating. The Paris region floods in 2016 damaged around US$2.4 billion alone (OCED and World Bank, 2019).

Disasters like these caused France to develop a national disaster risk insurance plan in 1982 (Aktualitet, 2023). This scheme, called Catastrophes Naturelles, or CATNAT, is a scheme where public and private insurers work in a partnership to manage the disaster risk insurance landscape of France. CATNAT mandates property insurance for natural disasters; when renting, it is obligatory that you have insurance to cover the contents and the building, whereas if you own the property, you must at least have third-party liability insurance (Complete France, 2022). 12% of the premiums for property insurance are transferred from the private insurers to a public reinsurance company Caisse Cenrale de Reassurance, or CCR. This public company acts to assist the insurance companies of France in the case of an abnormally large natural disaster (Aktualitet, 2023).

CATNAT is also backed by a state guarantee, where in the unlikely event that the CRR is unable to completely cover the insurance companies, the government will step in to provide the remaining funds (OECD, 2019). In the 40+ years where CATNAT has been in effect, there has only been one instance where the government has had to intervene. This happened in 2000, where the government stepped in and added US$250 million to cover the outstanding payments that had been claimed from the previously mentioned storms Martin and Lothar in 1999 (OECD, 2019).

Overall, the CRR is estimated to pay out an average of US$1.2 billion per year to compensate for damages resulting from natural disasters. However it might seem, the CRR and private insurers are not the only stakeholders that help with disaster relief. Local authorities and emergency relief funds have quite some impact as well, contributing about US$100 million in relief after the 2016 floods in the Paris area

(OECD, 2019). Other national programs such as the Solidarity Provisions for Local Authorities, Emergency Relocation Fond, and National Guarentee Fund for Agricultural Disasters help to further resiliency through help with reconstruction, relocation, and more (OECD, 2019).

Overall, with the CATNAT system and government-backed guarentee, France has created a very stable disaster insurance market and proven it to be very resilient over the past 40 years. Even with a large risk of heavy storms and flooding, the partnership of private and public markets and companies has proven to be an affective way to combat disasters and improve the country's resiliency overall.

Figure 4: Damages from Storm Lothar, 1999 (Ouest France, 2019)

## *Case 4: Bulgaria*

Bulgaria is at biggest risks from flooding and earthquakes. Bulgaria's location makes it a prime candidate for heavy rainfall allong with melting snow and ice in the mountains, creating the potential for flash flooding rivers and torrential downpours. In 2005 a series of floods killed 30 people and caused around US$300 Million in damages (World Bank & GFDRR). Rainfall in Bulgaria has only increased in recent years with global warming, and recent studies show that rateswill continue to increase (World Bank).

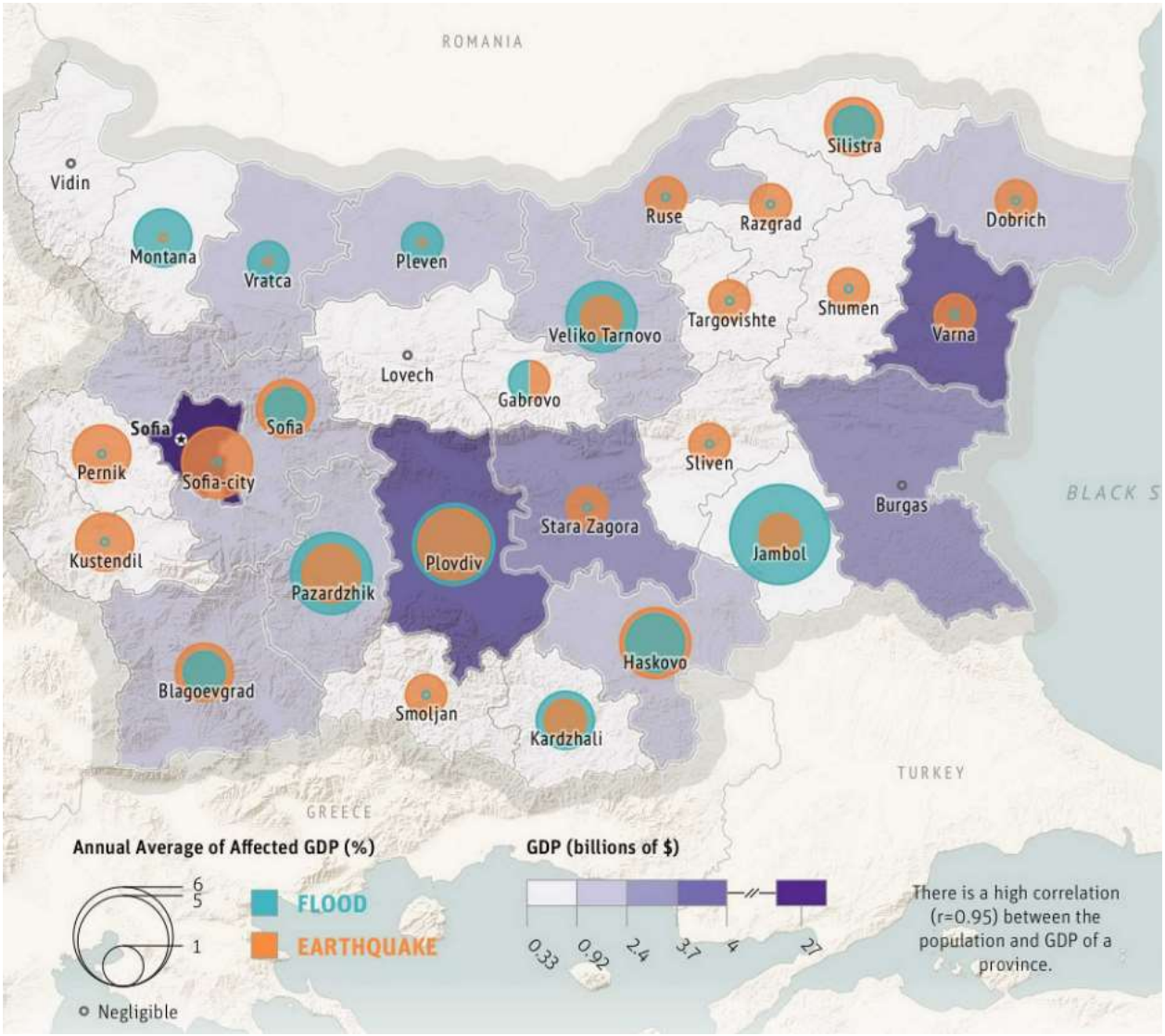


Figure 5: Average annual affected GDP from floods and earthquakes (World Bank & GFDRR)

Bulgaria does not employ any mandated insurance programs or government insurance programs to mitigate the affects of such disasters. Instead, Bulgaria relies on its well developed and regulated private insurance market. Property insurance is the second most popular form of non-life insurance after motorvehicle insurance which is mandated. Bulgaria's insurance code is largely based on EU Solvency II, a 2016 EU directive which aims to unify the EU insurance market and strengthen consumer protection. Solvency II consists of 3 main areas or pillars to regulate insurance markets. Pillar 1 sets out the monetary requirements of insurance companies including the amount of capital they should hold. Pillar 2 sets out governance requirements, risk management of insurerers, and effective supervision of insureres. Pillar 3 sets out rules for transparency and discosure (EIOPA). While Solvency II is not a perfect system, it is a good framework for a well developed insurance market.

Bulgarian insurance code sets out rules and regulations for insurance companies. Domestic and foreign insurance companies must obtain a insurance liscence from the Bulgarian Financial Supervision Commission (FSC), with an exception for EU companies who can use liscences from their home country. Insurers can only sell insurance types they or their parent company are licensed for and cannot sell both life and non-life insurance policies.This policy prevents insurance companies from expanding and spreading assets to thin into between insurance types. A stand out part of Bulgarian insurance code is the effect of misrepresentation oro non-disclosure. In the case of unintentional misrepresentation or nondiscosure, the insurer cannot refuse to compensate. They are allowed to reduce the payment accordingly but still must pay. This helps to build trust in the market by aknowledging accidents happen and not refusing payouts. This ensures that no insured person is without some form of compensation in the event of a disaster.

Bulgarian insurance code also contains ways for the insured to take action against the insurer in the case of late payment or inadequit compensation. Complaints can be brought to the Bulgarian Consumer Protection Commission or the FSC in the case of late payment. In case of inadequit funding or seeking damages, a system is in place to bring insurers to court. This further holds insurance companies accountable and promotes

transparency in the insurance market. This further builds the publics trust in the market and can help increase insurance penetration and decrease the protection gap.

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