

# MIND THE GAP

BY **MONIKA LIS** AND **MARCIN KRZYKOWSKI**

**UNDERSTANDING THE INSURANCE GAP.** The insurance gap is defined as the difference between the financial losses incurred from adverse events and the compensation received from insurance. A recent assessment by the Swiss Re Institute<sup>1</sup> estimated the insurance gap (excluding pensions) to be over \$1.83 trillion with an overall coverage percentage of 57.9%. Additionally, the Global Federation of Insurance Associations assessed annual global pension gap<sup>2</sup> of approximately \$1 trillion. Thus, the total unmet insurance needs globally amount to nearly \$3 trillion.

**T**he estimate of the insurance gap can vary depending on the data sources and methodologies used. Nonetheless, it is commonly presented on an annual basis, and it is important to use a consistent method that ideally does not depend on country-specific details. For instance, the Swiss Re Institute expresses the gap in terms of premium value, taking into account the additional costs associated with obtaining an adequate cover.

## CHALLENGES OF CONSISTENCY

The health insurance gap is a prime example of a problem where the biggest methodological advantage - simplicity - is also its biggest drawback. A common approach to estimating the health insurance gap is to base it on out-of-pocket health expenditures. The method is simple, consistent and does not require a deep understanding of the complexities of different healthcare systems.

The health insurance gap constitutes a half of an overall insurance gap (approximately \$1 trillion) with a global coverage of 77.7%. However, it does not necessarily mean that 77.7% of people have access to quality healthcare. It merely indicates access, but the quality and type of treatment can vary, perhaps significantly. >



**MONIKA LIS** is  
Manager at Milliman.

---

<sup>1</sup> Swiss Re Institute, [sigma Resilience Index 2024](#).

---

<sup>2</sup> GFIA, [Global protection gaps and recommendations for bridging them, 2023](#).

---

Working for the Polish Chamber of Insurers, we have developed a new way of assessing the insurance gap to provide a clearer message: the amount of money needed to approach the quality of the highest-ranked healthcare systems. We used the Principal Component Analysis (PCA) to illustrate the position of a healthcare system relative to others when certain adjustments are applied. This model involved creating an artificial country with specific level of the 20 most common variables, such as healthcare expenditure, number of doctors, life expectancy, mortality and morbidity due to cancer, and the proportion between an outpatient and hospital care.

For Poland, where this exercise was conducted,<sup>3</sup> the actual healthcare gap was found to be 5-6 times larger than the level assessed based on out-of-pocket expenses (PLN 22.1 bn vs. PLN 100-125 bn) assuming these funds are used appropriately.

Should we then multiply the global healthcare gap by 5 to get an accurate estimate? The answer is no, but to give the assessment actual meaning - that the money inserted to the system might impact quality - we might consider finding a local multiplier for a specific country or region.

### SYSTEMIC RISKS RECOGNITION

Understanding the insurance gap provides a valuable tool for the insurance industry and policymakers to systemically address the growing gap. It is particularly relevant for the pension gap, defined as the shortfall in funds needed to achieve a 70% replacement rate, as recommended by the Organisation for Economic Co-operation and Development (OECD).

European and Occupational Pension Authority (EIOPA) considers pension gap as a potential systemic risk. Petra Hielkema, the Chairperson of EIOPA, highlighted<sup>4</sup> that one in five senior citizens in the EU is at the risk of poverty or social exclusion, meaning more than 17 million people >



**MARCIN KRZYKOWSKI**  
is Principal at Milliman.

---

<sup>3</sup> [Polska Izba Ubezpieczeń, Polacy i ryzyko – jak się ubezpieczamy? Luka ubezpieczeniowa w Polsce, 2024.](#)

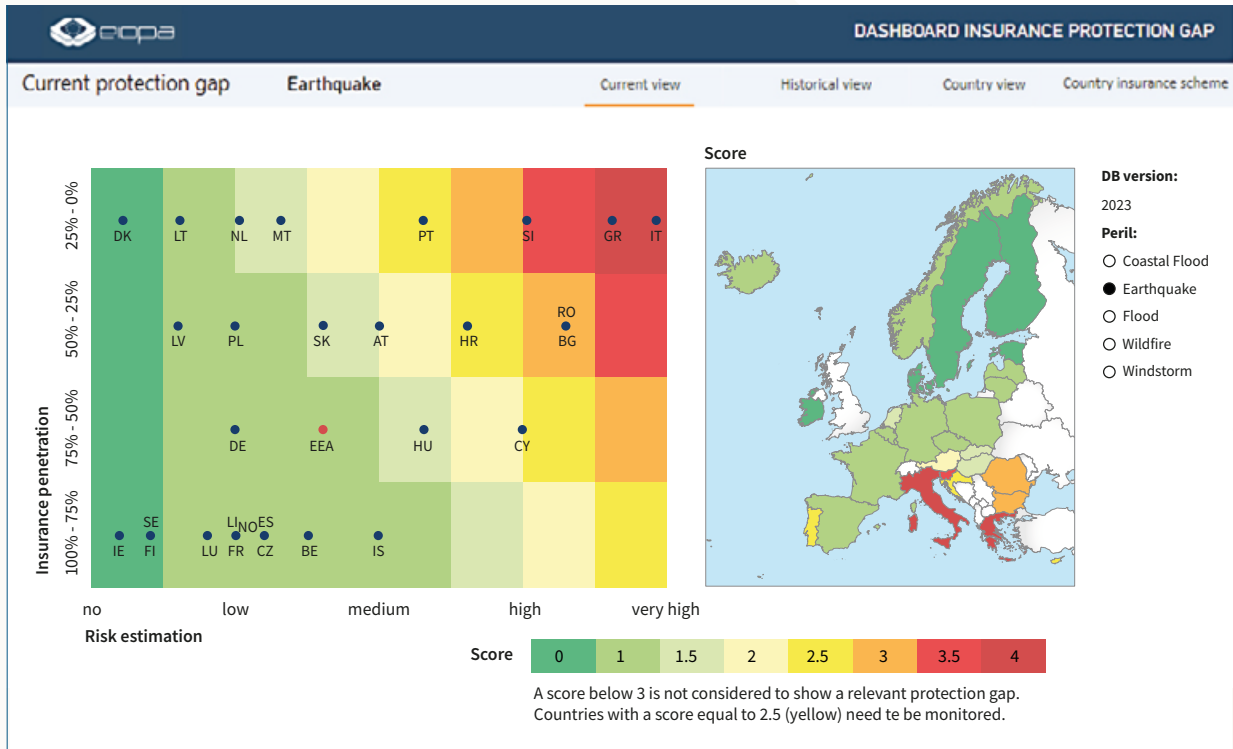
*(Polish Chamber of Insurers, Poles and Risk – How Do We Insure Ourselves? Insurance Gap in Poland, 2024)*

---

<sup>4</sup> [Insurance and Pensions Supervision for a More Resilient Society, Speech delivered by Petra Hielkema at the CRO Forum in Venice, Italy, March 2024.](#)

---

FIGURE 1. EIOPA, DASHBOARD INSURANCE PROTECTION GAP



Source: EIOPA

affected. The issue is specifically significant for women, who, on average receive 29% less in retirement than men in Europe. She stressed the importance of a pension tracking system at both the individual and European levels which would benefit both citizens and policymakers.

Such a tracking system is already developed by EIOPA for natural catastrophes, enabling more informed decision-making and planning (see Figure 1).<sup>5</sup>

### UNDERINSURANCE

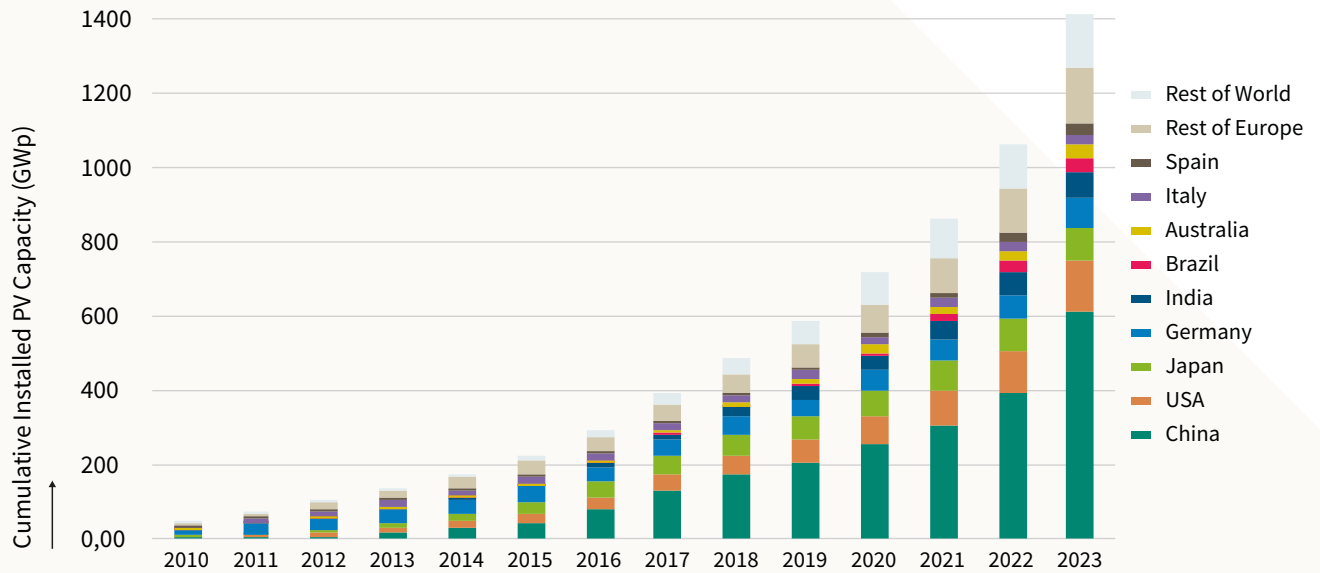
Looking at historical data, natural catastrophes resulted in insured losses of \$108 bn in 2023.<sup>6</sup> According to Swiss Re Institute, this marks the fourth consecutive year that insured

losses have surpassed \$100 bn, indicating a new norm. The long-term growth rate of these losses is expected to be between 5-7%, consistent with trends observed over the past 30 years. However, the overall economic losses reached \$280 bn, meaning that 62% of the global losses were uninsured. The Swiss Re Institute provides an example of the earthquake in Turkey and Syria, which claimed 58,000 lives and was the costliest event for the insurance industry in 2023, with losses amounting to \$6.2 bn. Despite this, only about 10% of all economic losses were covered. For context, global industrial losses ranging from \$1-5 bn are still considered medium severity. This is starkly contracted by the losses covered after Hurricane Ian which were exceeded \$60 bn in 2022. >

<sup>5</sup> EIOPA, [Dashboard on insurance protection gap for natural catastrophes](#).

<sup>6</sup> [Swiss Re Institute, sigma, Natural catastrophes in 2023](#).

**FIGURE 2: GLOBAL CUMULATIVE PV INSTALLATION BY REGION**



Source: IRENASTAT 2024

### DRAWBACKS OF RISK MODELLING

The impact of climate change and risk vulnerability is still under scrutiny by the industry, but the full extent might not yet be fully visible in the insurance gap projections due to its annual term view and in some areas limited data for comprehensive risk assessment.

As a specific risk booming in recent years is a photovoltaics (PV) roof installation which expanded the vulnerability to severe convective storms (SCS), specifically including hail. The annual production of PV modules has increased 10-fold over the past decade, with a compound annual growth of PV installations at 26% (see Figure 2).<sup>7</sup>

In 2023, SCS were responsible for more than \$60 bn losses and a series of SCS claims in Italy in July 2023 set a record in term of insured losses in the region, but there is still limited data for comprehensive SCS risk modelling.

### CONCLUSION

Understanding the insurance gap provides a valuable tool for the insurance industry and policymakers in discussions on potential systemic risks and how they might be mitigated. It helps them work towards creating efficient insurance, healthcare, and pension systems that can address the growing gap in an organized way. However, the selection of the appropriate methods and awareness of their limitations are crucial to an effective decision-making process. <

<sup>7</sup> International Renewable Energy Agency, IRENASTAT.