



Climate risks and sustainability in the insurance sector. Recent macro-prudential investigations at national level

Speech by Riccardo Cesari, IVASS Board Member

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I would like to thank the organisers and in particular Professor Patrizia Contaldo for this invitation to say a few words on such a “boiling” topic on which we have been working together with other European authorities for many years.

1. Monitoring of risks from natural catastrophes and sustainability

In 2022, the Istituto per la Vigilanza sulle Assicurazioni (IVASS) launched the first survey, on an IT platform, dedicated to climate and sustainability risks¹. It was targeted at all the companies pursuing insurance business in Italy (94 undertakings²).

The systematic survey, conducted on an annual basis, will, over time, facilitate the construction of a system of data on environmental, social and governance (ESG) risks, one that is robust and functional for the achievement of institutional objectives.

In September 2023³, the EU Commission considered the initiative a best practice among European practices on prudential supervision of financial sustainability.

The survey aims, in particular, to:

- contribute to the objectives set out in IVASS 2021- 2023 Strategic Plan on sustainability and transition to a green economy;
- monitor financial stability profiles at national level related to increasing environmental risks;
- monitor the progress made by Italian companies in adapting to the new European provisions on sustainable finance;

1 “Sustainability risk” is an environmental, social or governance event or condition that, if it occurs, could cause a significant actual or potential negative impact on the value of the investment (definition taken from EU Regulation No. 2019/2088).

2 In 2022, the 94 undertakings making up the market included: 12 composites; 29 life assurance undertakings; 53 non-life undertakings; including 4 branches of non-EEA undertakings.

3 See *EC TAEIX-TSI Workshop on Sustainable Finance Disclosure and Reporting, September 2023* <https://www.mfsa.mt/wp-content/uploads/2023/09/MFSA-Hosts-EC-TAEIX-TSI-Workshop-on-Sustainable-Finance-Disclosure-and-Reporting.pdf>

- support the alignment of the provisions issued by IVASS with the European regulations;
- effectively contribute to steering international works on sustainable finance.

The structure of the monitoring is made up of two surveys: a quantitative one, aimed at acquiring data on exposure to transition risks (investment area) and physical risks (technical-insurance area); and a qualitative survey, aimed at knowing the level of integration of sustainability risks within the corporate governance system, organisational structure, risk management system, investment policies and underwriting policies and practices.

Undertakings are required to send the data by end October each year; quantitative data refer to the year-end date of the previous year; qualitative data are updated at the most recent date.

The monitoring is the result of a very intensive process of assessing and examining a set of ESG risk information over the past five years; particularly relevant was the sharing of experiences between supervisory bodies and authorities in national, European and international fora⁴, of analyses and models with stakeholders experienced in climate risk assessments and with leading market players in Europe.

2. Main analysis activities (2018-2022) and contributions to European projects

Since 2018, in particular, IVASS has been actively contributing to the various projects of the EIOPA Action Plan on sustainability, which has been progressively updated, driven mainly by specific requests from the European Commission⁵ (Fig. 1).

Reference is made in more detail to the work within EIOPA on the level of integration of climate risks into the Solvency II framework⁶ (i.e. capital requirements, governance aspects, investment and underwriting policies and ORSA); to the analysis of underwriting practices (pricing models, notion of impact underwriting); to the dashboard on the insurance protection gap at European level.

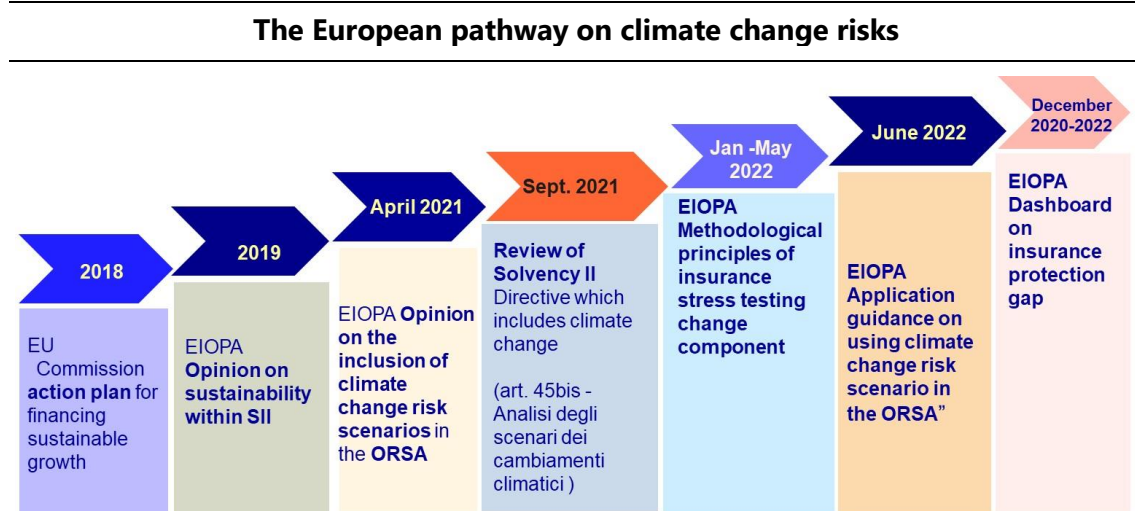
4 Reference is made in particular to: International Association of Insurance Supervisors-IAIS, Sustainable Insurance Forum-SIF, Network for Greening and Financial System-NGFS and Financial Stability Board - FSB

5 In March 2018 the EU Commission published an "[Action Plan for Sustainable Finance](#)". Specifically, this Action Plan aims to: 1. reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth; 2. manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues; and 3. foster transparency and long-termism in financial and economic activity.

6 Reference is made to the key areas indicated, most recently, in "EIOPA, Sustainable finance activities 2022-2024" and in the previous action plans (since 2028). <https://www.eiopa.europa.eu/system/files/2021-12/eiopa-sustainable-finance-activities-2022-2024.pdf>. See also https://www.eiopa.europa.eu/browse/sustainable-finance_en

This latest analysis tool, the insurance protection gap dashboard⁷, represents the achievement of one of the main strategic priorities of the European Authority since 2020, when an initial pilot exercise was created, subsequently refined and reworked into the version now made available on the website.

Figure 1



The main surveys conducted in Europe, aimed at measuring the insurance gap, are summarised in Fig. 2.

Figure 2

INDAGINI NAZIONALI condotte da IVASS e principali contributi ad indagini EUROPEE in ambito EIOPA mediante il coinvolgimento di campioni di imprese/gruppi selezionati sulla base di criteri connessi alle dimensioni aziendali e/o specificità del business.	
➤	2018-2019: Indagine in ambito EIOPA su Investimenti, coperture assicurative e requisiti di capitale Indagine quantitativa e qualitativa su investimenti, coperture assicurative, pricing dei prodotti, riserve tecniche, requisiti di capitale su un campione di imprese in prevalenza operanti nel business danni rappresentativo del mercato UE. (Cfr. esiti in <i>EIOPA, Opinion on sustainability within Solvency II, EIOPA 2019</i>)
➤	2019: indagine in ambito EIOPA sui potenziali drivers delle pressioni a breve termine nel settore assicurativo e influenza dei criteri ESG nella determinazione degli orizzonti temporali. (Cfr. esiti in <i>EIOPA, Potential undue short-term pressure from financial markets, EIOPA 2019</i>)
➤	2019-2020: Indagine macroprudenziale condotta da IVASS (90% del mercato nazionale) di natura qualitativa e quantitativa su investimenti sostenibili e strategie di decarbonizzazione, criteri ESG adottati e politiche di investimento sostenibili su un campione di imprese/gruppi operanti nel business Vita/danni. Condotte consultazioni bilaterali con specifici gruppi nazionali sui criteri di valutazione ESG
➤	2020-2021: Indagine macroprudenziale condotta da IVASS (85% del mercato nazionale), qualitativa e quantitativa, su pratiche di sottoscrizione , modelli di pricing e orientamenti strategici degli assicuratori (campione di imprese/gruppi operanti nel business danni). Condotte consultazioni bilaterali con specifici gruppi nazionali sui modelli pricing e peculiarità contrattuali
➤	2021-2022: Indagine in ambito EIOPA di natura quantitativa e qualitativa sui rischi fisici da catastrofi naturali relativi condotta su un campione di imprese UE, operanti nel business danni. (Cfr. esiti in <i>1) European insurers' exposure to physical climate change risks, EIOPA 2022; 2) Dashboard on Nat-Cat insurance protection gap, EIOPA 2022</i>)
➤	2022: Indagine in ambito EIOPA di natura qualitativa sul livello di integrazione degli obiettivi di adattamento ai rischi climatici nei prodotti assicurativi danni su un campione di imprese/gruppi UE, operanti nel business danni. Le analisi saranno pubblicate a feb 2023.
➤	2022: Indagine in ambito EIOPA di natura quantitativa sulle misure di adattamento ai rischi e per la rilevazione dell'eventuale differenziale di rischio in termini di premi e di sinistri registrati (2010-2021), rivolto ad un campione di imprese leader nel business danni (cfr. Discussion Paper on Prudential treatment of sustainability risks, EIOPA 2022)

Among the main findings were that:

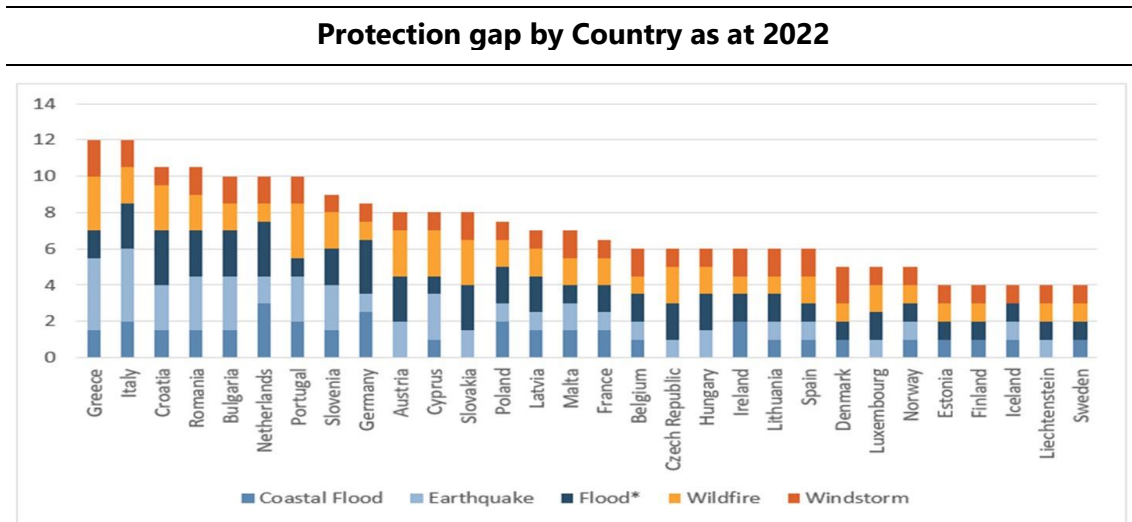
- Italy and Greece have the highest protection gap (high risk exposure and low insurance penetration) given their recorded economic losses and current

7 The dashboard provides: 1) a map of the insurance protection gap for five natural disaster risks: (river and rain) flood, coastal flood, (forest) fire, storm, earthquake; 2) a historical and current overview of the exposure of each of the 30 countries in the European Economic Area (EEA) to physical risks and information on national insurance systems and average contractual limits (deductibles and maximum amounts of cover).

exposure to the risk of natural disasters (in terms of frequency, exposure and vulnerability) (Fig. 3);

- insured claims in the period 1980-2021 amount to a quarter of the total;
- The highest protection gap for specific risks was found, namely: for earthquakes, in Italy (98% of uninsured claims), and for floods in Germany (75% of uninsured claims) and Italy (97% of uninsured claims), which together accounted for around 45% of uninsured claims in Europe during the reference period;
- earthquakes are the event with the highest protection gap, followed by floods, fire and storms.

Figure 3



3. Main outcomes of the 2022 ESG monitoring

I think it is important to point out that, from the monitoring conducted by IVASS on the risks in question and on a national basis, an initial description of the special role of companies emerges:

- as risk underwriters;
- as systems incentivising risk prevention and mitigation (risk sensitive premiums⁸);
- as institutional investors.

The possible scenarios generated by climate change make many insurance business activities more complex. Reference is made, in particular, to underwriting practices;

8 The assessment of the insurance industry's impact underwriting takes into account the ability of insurers (as risk managers and underwriters) to contribute to climate change adaptation and mitigation by using their data, expertise and risk assessment capacity to incentivise policyholders to mitigate the risks for which they are seeking coverage. See EIOPA (2023). *Report on the Implementation of Climate-Related Adaptation Measures in Non-Life Underwriting Practices – Impact underwriting*, EIOPA-BoS-22-593, Feb. 2023

investment policies; product design and pricing; the definition of disclosure to clients and the public; governance and internal control systems (increased uncertainty of forecasts).

With regard to the governance and risk management profiles, the main outcomes concerned the following aspects:

- sustainability policies are widespread in the national insurance market: almost all companies have adopted (78%) or plan to adopt (13%) investment or underwriting strategies that integrate ESG factors into their policies. The development compared to previous surveys was significant (the level of climate risk integration was between 38% in 2018 and 50% in 2020);
- 77% of non-life companies (41) consider the impact of climate change risks to be “significant” in terms of potential productivity losses in the non-life business; 20% of companies have implemented or are in the process of conducting quantitative impact assessments of climate (physical and transition) risks on their insurance contract portfolio;
- the impact on the investment portfolio was assessed as “significant” by only 12% of life and/or non-life companies, which account for 28% of the insurance industry's total investments;
- scenario analyses included or to be included in the ORSA report⁹.

With regard to the coverage of risks from natural disasters, it was noted in particular that:

- climate risk premiums in Italy are €2.1 billion (5.6% of total premiums), stable over the last three years (2019-2021). 58% is attributable to hail risk;
- the cost of claims from climate risks are €1.6 billion, up 28% over the last two years 2020-2021. The “Combined ratio” indicator for the hail risk is 125%;
- in the same period, premium income for earthquake risk remained low (€364 ml in 2021), but on the rise (+25%) compared to the previous two years 2019-2020;
- premiums, claims and expenses are mainly concentrated in the line of business (LoB) «fire and other damage to property insurance» (over 60-90%); to a lesser extent in “other non-life insurance” and residually in other LoB;
- insurance covers are mainly annual with risk-based premiums (premium reduction if the policyholder adopts risk mitigation measures).

The domestic insurance sector is characterised by a high concentration of nat-cat premiums on the top 5 insurance groups (77%); there is a general expectation of an expansion of insurance premiums for the five-year period 2022-2026, particularly for flood and hail coverage. In addition, a strong growth in the cost of claims was reported for the five-year period 2017-2021 with a potential effect on premiums.

The first survey revealed critical issues with the availability and quality of data that was very heterogeneous, with increasing levels of uncertainty in relation to the granularity of the data requested. Three types of data have been found: collected data (10% of cases); estimated data (70%); data not available (20%). These critical issues also arise from the fact that guarantees for climate risks are “ancillary/optional” in the context of “multi-risk” insurance contracts (difficulty of unbundling).

Indeed, with regard to the analysis of eco-sustainable investments significant difficulties have emerged in the collection of data, in particular, for the identification of data according to the European Taxonomy (EU Reg. 2020/852). The main information acquired concerned:

- most companies indicated that they had set decarbonisation targets for their investment portfolio. This objective is generally pursued through strategies of progressive exclusion of economic sectors or geographical areas deemed not to be in line with the sustainability criteria adopted in international conventions;
- green bonds account for about 5% of corporate bonds held by companies;
- no less than 9% of insurance investments are in sectors of economic activity exposed to the transition risk (e.g. fossil fuels, energy-intensive sectors, transport);
- investments in the fossil fuel sector (at higher risk of becoming stranded assets) are estimated at around €19 billion (2% of total investments).

Conclusion

The survey shows how climate risks can impact the insurance market at various levels (assets and liabilities). These risks must be fully integrated into the governance processes and policies of insurance companies.

The prospective growth of these risks raises sensitive stability (solvency) issues.

Finally, the need to commensurate capital requirements to the exposure to climate risks currently faces two obstacles: the availability of reliable data; the lack of evidence on contributions to risk mitigation (asset side) and adaptation (liability side) to climate risks.

Monitoring will continue on an annual basis, and increasingly precise results are expected.