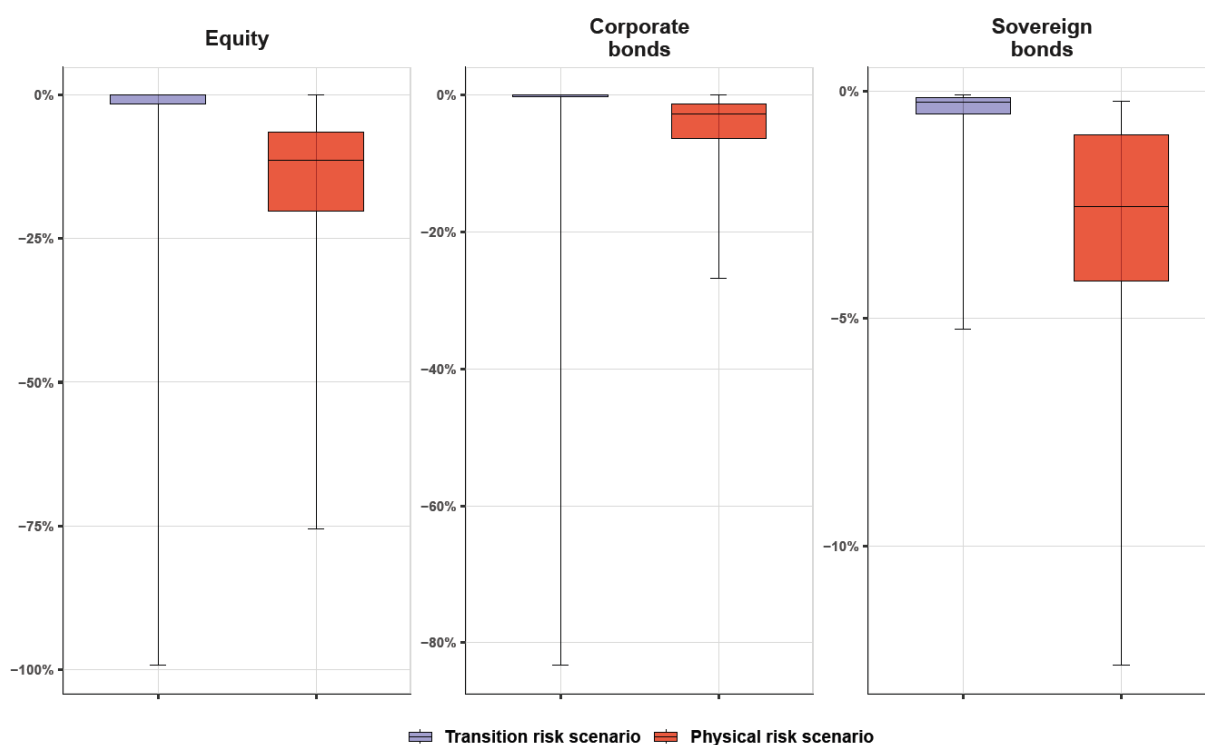


Extreme weather events and the risks to the financial system

[Tristan Jourde](#), [Sofía Ruiz Romanos](#), [Dilyara Salakhova](#)

This blog post builds on the NGFS's short-term climate scenarios to assess the risk of a financial market correction caused by a series of natural disasters. In the event of extreme climate shocks, French banks, insurers and asset managers would be exposed to losses of EUR 196 billion, equivalent to a 4% drop in the value of their equity and bond portfolios.

Chart 1: Market valuation shocks: breakdown by asset class and scenario



Source: NGFS short-term climate scenarios (2025).

Note: Losses in value by asset class over a two-year horizon for a sample of 42 advanced and emerging economies and 50 sectors. The horizontal line within the box represents the median, the upper and lower edges of the box represent the first and third quartiles, and the extended lines indicate minimum and maximum values. Each observation corresponds to a sector-country.

In addition to the environmental challenge alone, climate change generates risks to economic and financial stability. With the rise in global temperatures accelerating and climate policies failing to keep up, the economic and financial system is doubly exposed. First, physical risk is growing with the proliferation of natural disasters. Second, transition risk could intensify with

the adoption of new climate regulations or the emergence of disruptive technologies. These types of developments are likely to undermine economic activity (Champey and Gosset, 2026) and trigger severe corrections on the financial markets and devaluations of financial institutions' portfolios.

In order to quantify the magnitude of the impact of climate breakdown on the French financial sector, this blog post draws on the "Disasters and Policy Stagnation" scenario – a short-term climate scenario that focuses on physical risk developed by the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) and published in May 2025 ([NGFS, 2025](#)). This scenario simulates extreme but plausible regional weather events: a series of droughts, heatwaves and wildfires in 2026, followed by floods and storms in 2027. We put these results into perspective by comparing them with results based on the "Sudden Wake-Up Call" scenario, which focuses on the effects of a disorderly climate transition.

Two climate scenarios, with contrasting impacts

The first point to note is that, on average, the physical disaster scenario results in more significant and widespread losses than the sudden climate transition scenario. Under the first scenario (physical risk), the average potential share price correction would see a loss in value of 14.5% – five times greater than the 2.7% decline simulated under the second scenario (transition risk). This trend is confirmed in the case of corporate and sovereign bonds, which would fall by 4.2% and 3.2%, respectively, under the physical risk scenario, compared with just 1.0% and 0.6% under the transition scenario, as shown in Chart 1.

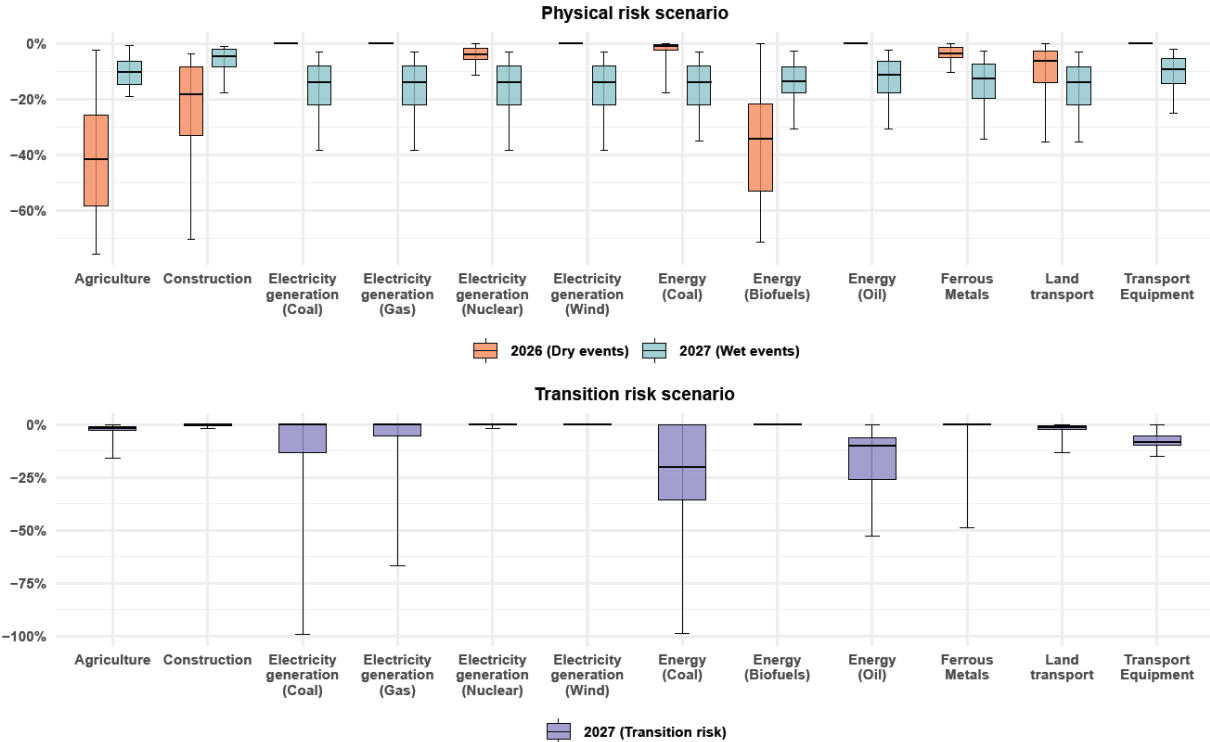
However, an analysis of extreme cases reveals that in certain instances the corrections can be far sharper. The sectoral and geographical dispersion of corrections is more pronounced under the transition risk scenario in the case of equities and corporate bonds. For example, the players most exposed to the transition to a low-carbon economy could be subject to severe devaluations of as much as 99% for equities and 83% for bonds issued by companies in the coal sector in Argentina, Brazil and Mexico.

Highly varied exposures across economic sectors

A sectoral analysis confirms this dual interpretation: climate disasters and transition shocks do not affect the same players, and they do not affect them in the same way. The "dry events" (droughts, heatwaves and wildfires) in 2026 would mainly affect certain sectors such as agriculture (a 41% drop in the share price of the few listed companies) and construction (an 18% decline), as illustrated in Chart 2. Conversely, the "wet events" (floods and storms) in 2027 would have a more widespread negative impact across all economic sectors, with an average downward correction of 15% in share prices due to damage to companies' physical assets.

By comparison, the average impact on the economy of the sudden transition scenario is more limited (a 2.7% decline in share prices), but the corrections in the fossil fuel sectors would be considerable. Average losses would amount to 25% for shares in companies operating in the coal sector and 16.5% for companies in the oil sector. For the most polluting sectors located in certain geographical regions, the corrections could prove even more substantial. Losses could hit 99% in the coal sector, 67% for gas power generation, and up to 53% for the oil sector.

Chart 2: Share price valuation shocks: breakdown by sector and scenario



Source: NGFS short-term climate scenarios (2025).

Note: Share price corrections by economic sector. The horizontal line within the box represents the median, the upper and lower edges of the box represent the first and third quartiles, and the extended lines indicate minimum and maximum values by sector for all countries considered.

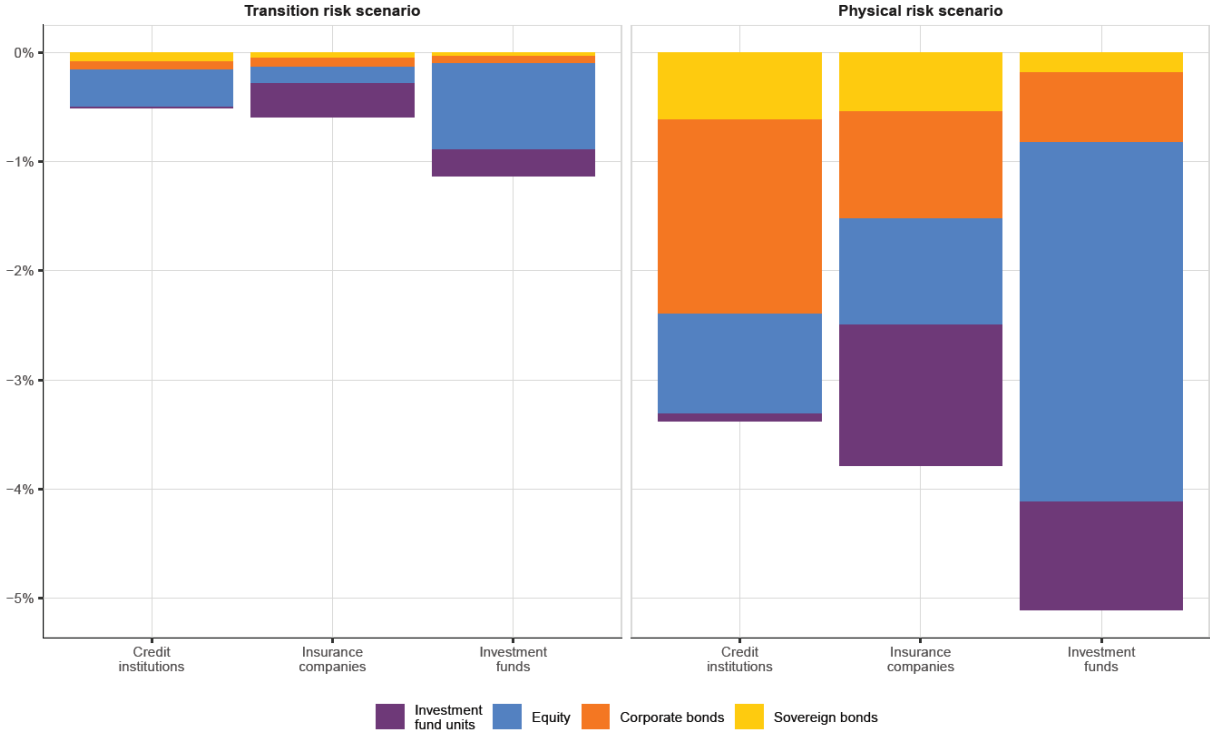
A potential loss of up to EUR 196 for French investors

For the equity and bond portfolios of French financial institutions, diversifying geographically and by sector helps to soften the blow. Nonetheless, under the climate disaster scenario, there is a moderate but not insignificant risk of a correction, as shown in Chart 3. Total losses are thus estimated at EUR 196 billion, equivalent to a 4% drop in the value of the assets held.

Certain categories of investors, however, appear to be more vulnerable than others. This is particularly the case for investment funds, which would suffer average losses on their portfolios of around 5.1% – a EUR 62 billion drop in the value of their assets under management. This sensitivity is the result of their significant exposure to equity markets. Insurance undertakings would be exposed to a loss of 3.8%, mainly through their fund unit holdings. Lastly, credit institutions, whose exposures are concentrated in bonds, would be relatively less affected.

By comparison, the impact of the sudden transition scenario is much more limited at the aggregate level, with a total loss of EUR 33 billion, or 0.7% of assets held. Investment funds remain the most exposed with losses of 1.1%, while the equity and bond portfolio corrections suffered by insurers and banks would be very limited in scale at 0.6% and 0.5%, respectively.

Chart 3: Potential correction to French financial intermediaries' equity and bond portfolios



Source: NGFS (2025), SHSS, OPC Titres, Lipper, Banque de France.

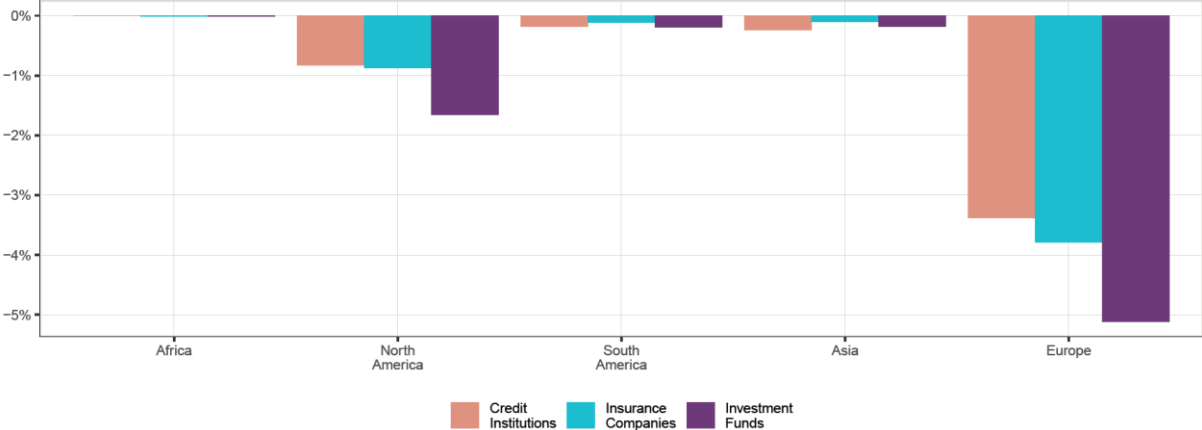
Note: The disaster scenario only takes natural disasters occurring on the European continent into account. The chart breaks down the main sources of revaluation by asset class.

A global risk with contained effects for France

Given the concentration of French equity and bond portfolios in Europe, natural disasters occurring in other parts of the world would have a less significant effect. The impact of a climate crisis in North America could, however, be considerable, ranging from losses of 0.8% to 1.7% depending on the financial intermediaries, due to shares held directly or indirectly through funds in the region.

In conclusion, this analysis highlights the tangible risk that natural disasters in Europe pose for the French financial system, with estimated potential losses on equity and bond portfolios of EUR 196 billion in the event of extreme disasters. Although transition risk has a smaller aggregate impact, it could cause a targeted shock with potentially very severe consequences for certain sectors. In this context, it is imperative that financial institutions integrate these risks into their strategies more rapidly in order to ensure their resilience to intensifying climate shocks.

Chart 4: Impact of natural disasters in different regions on French investors



Source: NGFS (2025), SHSS, OPC Titres, Lipper, Banque de France.

Note: The chart compares the impact on the French financial sector of natural disasters occurring in different geographical regions.