The Coalition of Finance Ministers for Climate Action

A structured approach to disaster risk financing in the EU Member States

European Union—European Commission

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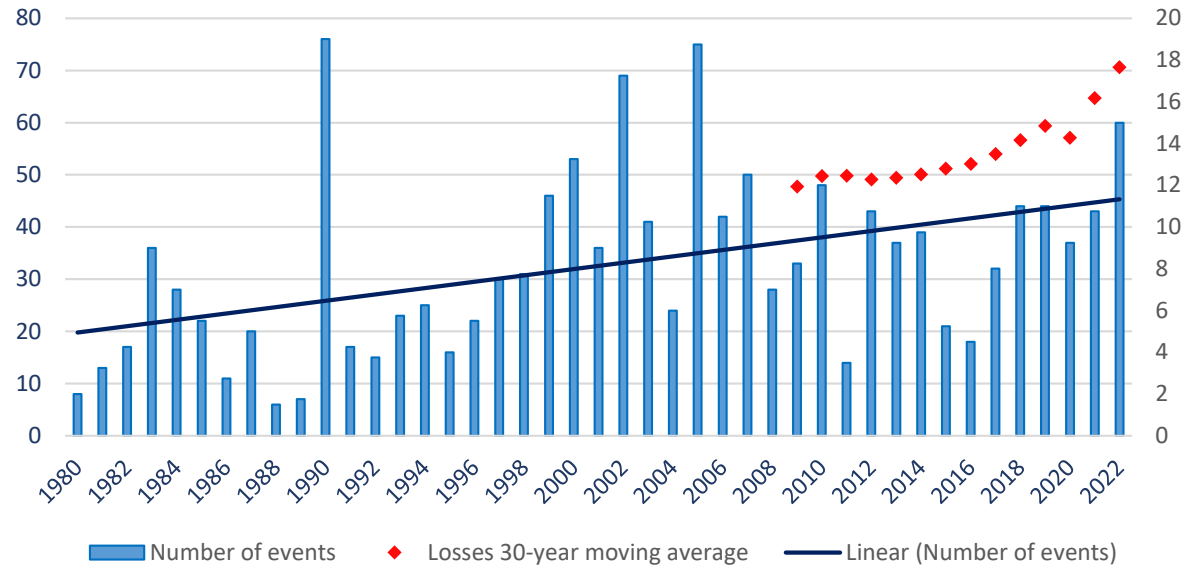
All European Union Member States practice some form of disaster risk financing (DRF) as they have all been confronted with disaster events at some point in time. The most common way to deal with the financial consequences of disasters in EU Member States is ad-hoc financing. In fact, there is limited evidence of natural disaster funds or other prearranged funding in the national budgets of EU Member States (Radu, 2021; 2022). But ad-hoc financing is suboptimal, as it rests on identifying the funds needed to cover the cost of a disaster in a given budget that had not specifically taken such events into account. Moreover, extreme weather and climate events may pose risks to debt sustainability (Gagliardi et al., 2022). At the same time, extreme weather events are becoming more frequent in the EU, and the 30-year moving average of total losses is increasing (Figure 1). Corroborating this data, recent figures from the European Commission estimate that exposing the present economy to global warming of 3°C would result in additional annual climate-related losses of at least €175 bn (1.38% of gross domestic product) (Szewczyk et al., 2020).[1] Other recent estimates, using a range of methodological approaches, point to potentially much larger negative economic impacts (Bilal and Känzig, 2024; European Commission, 2024). It is therefore increasingly important to treat recurrent disasters as belonging to a new normal, and to include them in national budgets. By embedding climate risks into fiscal planning, governments can adopt more proactive, risk-informed budgeting practices, align fiscal strategies with climate goals, and enhance public financial management.

Figure 1: The increasing trend in the number of extreme weather events and average disaster losses in the EU, 1980–2021



Source: Emergency Events Database (EM-DAT), European Commission

Budgets that consider the potential macrofiscal impact of disaster risks are an essential complement to disaster risk prevention and reduction and part of the adaptation to climate change. Climate-related events will impact GDP levels and public finances, through revenue and expenditure channels. This implies progressively upgrading budgetary processes to reflect the macrofiscal risks from climate-related disasters in a transparent way. The reformed EU economic governance framework introduces reporting requirements for EU Member States regarding the macrofiscal risks from climate change through the Council Directive (EU) 2024/1265 amending Directive 2011/85/EU on Requirements for Budgetary Frameworks of the Member States, which entered into force on 30 April 2024. Member States are required to assess and report on the macrofiscal risks from climate change (Article 9(2)(d)), and on disaster- and climate-related contingent liabilities and the fiscal costs incurred due to disasters

[1] Joint Research Centre PESETA IV project on the economic analysis of selected climate impacts (Szewczyk et al., 2020).

and climate-related shocks (Article 14(3)). The requirement for Member States to report these risks "to the extent possible" acknowledges the current lack of a single or common methodology, differences in data availability, and variations in country-specific contexts. The amended Directive must be transposed into national law by the EU Member States by 31 December 2025.[2]

Making budgets more climate resilient is part of the efforts to increase the resilience of our societies to climate change. Currently, national processes for disaster risk management and financing are fragmented, and national budgets' accounting of the fiscal impacts of climate change is limited. A first step toward more climate-resilient budgets is to take stock of national practices for DRF, as the information available for disaster risk management and DRF varies greatly in scope and detail. Such a stocktaking exercise could follow a structured and articulated logic, looking at the main steps and actors along different stages of development (i.e., essential, intermediate, advanced) (Radu, 2024). It allows Member States to consider national specificities, together with some common features (i.e., shared challenges related to loss data collection and loss estimates, ad-hoc approaches to DRF, fragmentation). Such a toolkit could guide both EU Member States aiming to improve their approach to DRF and the European Commission in their analyses, taking into account the heterogeneity in starting points and national ambition as well as methodological, capability, and institutional challenges that would have to be overcome in the process. Ultimately, this exercise would enable the authorities to answer the questions "Is my country prepared to deal with the fiscal costs of disasters?," "Where are the gaps?," and "What can be improved and how?"

The key elements of a structured approach to disaster risk financing could be organized into four pillars and in three development stages (Table 1). Pillar 1 would cover the economic and fiscal impact of disasters. Under this pillar, Ministries of Finance would need to work with other agencies and the private insurance sector to understand the extent of past disaster losses and how they have been covered, to develop methods to collect past data, and to estimate future economic and fiscal impacts of disasters and include this information in the budget documents. Pillar 2 would cover the private disaster insurance landscape, notably the offer of disaster insurance policies and the drivers of disaster insurance penetration rates (availability, affordability, risk awareness, trust), while Pillar 3 would cover the elements related to public sector risk ownership and how disaster-related costs are managed by public authorities. Pillar 4 would cover the institutional aspects of governance, provisions for transparency, and accountability.

More granularity and accurate information on the economic and fiscal costs of disasters is the cornerstone of disaster risk financing strategies. These strategies reflect national choices to pursue sound public finances, to protect strategic sectors, to reduce inequalities, or to protect vulnerable populations, etc. However, such decisions need to be evidence based and informed by the most up-to-date qualitative and quantitative information on the relevant risks, and on the assets and populations exposed and vulnerable to such risks. This stepwise approach seems warranted, as it would build on the relevant expertise of the different actors and bridge data, methodological, and modeling gaps.

EU Member States already have in place some of the abovementioned elements with different degrees of sophistication. Following the suggested structure would also allow the authorities to assess the maturity of different DRF elements and identify areas that could be further developed. Accordingly, the "essential" stage refers to the necessary minimum; the "intermediate" stage is more developed, with wider coverage, more advanced methods, and clear allocation of responsibilities across actors; while the "advanced" stage is more detailed, including technical expertise, methodologies, and transparency arrangements, and it broadens the scope of DRF to include conditional compensation, resilience objectives, ex-post assessment, and feedback loops with ex-post evaluations, for example.

[2] Article 9(2)(d) and Article 14(3) of the amended Directive on National Fiscal Frameworks (OJ L. 2024/1265, 30.4.2024) includes national reporting requirements on the fiscal losses and contingent liabilities from climate-related disasters and on the macrofiscal risks from climate change.

Table 1: Key elements of a structured approach to disaster risk financing

	Elements	Basic / Essential	Intermediate	Advanced
1. Fiscal impact from disasters	*Historical losses from physical damage*	**Some** data available for **some** events Publicly available	Data available for **all** events with a significant budgetary impact Publicly available	Systematic and comparable data collected for **all** events with a significant budgetary impact **Public database**
	Historical disaster-related expenditure	**Partial** tracking disaster-related expenditure Transfers to local authorities	Tracking **main** disaster-related expenditure Transfers to local authorities	Tracking **all** disaster-related expenditure Transfers to local authorities
	Future economic loss estimates	**Identification**, **qualitative** and/or **quantitative** assessment of risks within bandwidths Publicly available **methodology** In budgetary documents	**Qualitative** and **quantitative** assessment **within bandwidths** for risks with high budgetary impact Publicly available **methodology** In budgetary documents	**Quantitative** assessment for risks with high budgetary impact for different **scenarios** Publicly available **methodology** In budgetary documents
	Disaster-related public expenditure estimates	**Identification** and **qualitative** disclosure in **budgetary documents**	**Quantitative** disclosure for **some** risks with a significant budgetary impact in **budgetary documents**	**Quantitative** disclosure for **all** relevant risks with a significant budgetary impact in **budgetary documents**
2. Private sector Insurance	*Private assets insurance*	**Assessment** of disaster insurance penetration	**Assessment** of disaster insurance penetration **Regulatory measures** for insurance take-up	**Assessment** of disaster insurance penetration **Regulatory measures** for insurance take-up **Conditional** compensation from public money
3. Public sector fiscal risk management	*Public insurance schemes (for private and/or public assets)*	optional	mandatory (in no private insurance)	mandatory (if no private insurance)
	National budgets	Managed under the **overall budget** of different ministries **Ad-hoc financing** via budgetary reallocations, deficit, debt	Managed under the **overall budget** of different ministries **Mainly ad-hoc financing** **Some contingent financing** **Some pre-arranged financing**	Managed under the **overall budget** of different ministries **Some ad-hoc financing** **Contingent financing** in the budget **Support** Schemes **Reconstruction** expenditure Mainly pre-arranged financing
	Public assets insurance	Main public assets **list,** insurance status in high-risk areas, hazard map	Main public assets **list,** insurance status everywhere, hazard map, exposure	Public assets **repository,** insurance status and promotion, hazard map, exposure, vulnerability
	Compensation	Ad-hoc decision	Legal base and thresholds for some sectors/disasters	Legal base for compensation Comprehensive compensation system with link to insurance
	Disaster prevention and preparedness	**No link** between spending for prevention and preparedness and disaster resilience objectives	Spending for prevention and preparedness is **linked to broad** disaster resilience objectives	**Explicit link** between spending for prevention and preparedness and disaster resilience objectives **Ex-post review**
4. Instit(l) arrangements	*Transparency and monitoring*	All information is **public**, information on **DRM funds** and expert assessment of **methodology**	All information is **public** in budget documents, **expert opinion** on methodology and post-disaster risk management	All information is **public** in budget documents, **expert opinion** on methodology and post-disaster risk management, **monitoring** funds use
	Governance and coordination	Some coordination across public services **Ad-hoc task force**	Clear role and resources across relevant ministries and services Permanent DRM/ DRF service	Established correspondents in relevant ministries Permanent DRM/DRF in MoF for coordination

Source: Radu (2024)

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