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Hub for New Industrial Policy & Economic Governance

Joint JDI-LUHNIP Policy Paper

Together we trade, divided we aid:

Mapping the flexibilization of the EU state aid regime across GBER, IPCEIs and Temporary Frameworks

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#SingleMarket
#stateaid

• Executive summary

This joint JDI-LUHNIP Policy Paper documents the pressing policy problem of growing Single Market fragmentation due to the increasing EU Member State use of state aid and makes recommendations for how to address these risks at the European level. Starting out with a brief overview of key changes in EU state aid law and policy over the course of the last decades, our paper is providing an in-depth analysis of the evolution of national state aid expenditures across different state aid instruments. These instruments include the General Block Exemption Regulation (GBER), the Important Projects of Common European Interest (IPCEI) instrument and the various temporary frameworks set up to respond to the Covid-19 pandemic and the Russian invasion of Ukraine. Beyond immediate crises responses, these instruments have been set up to foster the green and digital transitions, ensure economic resilience, and promote and protect domestic industries in the face of growing geoeconomic competition. Across the different state aid instruments, our paper highlights a substantial cross-country variation in the level and composition of national state aid, leading to significant imbalances in the EU Single Market. The lack of supranational fiscal and political capacity to provide state aid at the EU level has exacerbated these disparities, creating the risk of subsidy races within the Single Market. To address these challenges, our policy paper proposes several policy solutions. First, it argues that state aid temporary frameworks should be phased out by 2025 to prevent further fragmentation of the Single Market. Instead, the EU should focus on consolidating its permanent state aid instruments to improve efficiency and coherence. Second, a more European approach based on the IPCEI instrument is needed, prioritizing project selection based on merit rather than a Member State's fiscal capacity to aid. This European approach needs to be supported by more common funding to provide aid to industry, which could be further leveraged by national expenditure by making use of the exemption of national co-financing of EU-funded programmes in the new fiscal rules of the Stability and Growth Pact.

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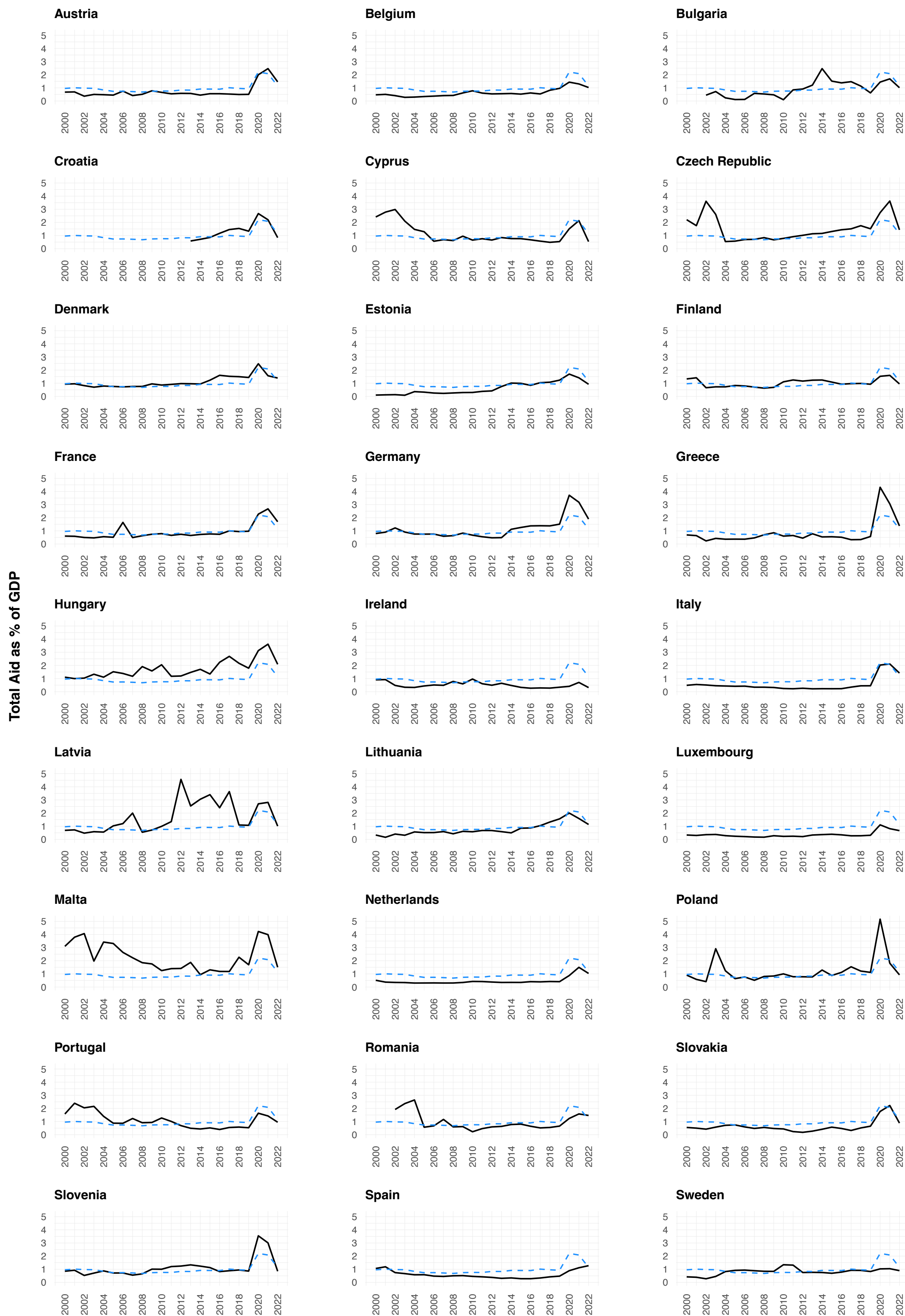
Introduction: The policy problem

Since the 2010s, national governments and the European Union institutions have increasingly adopted interventionist measures to support their domestic industries in the face of growing international competition and a changing geopolitical environment (Bulfone 2023, Di Carlo and Schmitz 2023, Landesmann and Stöllinger 2020, McNamara 2024). During the 2000s, member states' aid in the European single market had declined slightly – from an average of around 1 to 0.68 percent of national GDP in 2008 (Figure 1, blue dashed line). Since the global financial crisis, state aid has increased, but only gradually up to its pre-crisis levels. However, since the outbreak of the Covid-19 pandemic, the level of state aid has more than doubled through the provision of crisis-related aid measures, peaking at an average of 2.2 percent of national GDP between 2020 and 2021. Indeed, over the recent years, EU governments have embraced generous state aid policies to shield domestic firms from the polycrisis affecting Europe, to promote the green and digital twin transitions, and to bolster industrial capacities in the quest for open strategic autonomy in an increasingly multipolar geopolitical order.

Yet, within this general trend, there has been substantial cross-country variation in the level and composition of national subsidies granted across the members of the Single Market, raising concerns that uncontrolled state aid by EU Member States could jeopardise the Single Market and hamper the competitiveness of European industry (Letta 2024). Thus, due to the lack of centralized fiscal resources and political authority to provide subsidies supranationally in the EU, Europe faces a dilemma between protecting and promoting its industrial base through state aid while while ensuring a resilient level playing field across the Single Market.

The aim of this policy paper is twofold. First, we map major regulatory changes in the EU state aid regime (in Section 2) and trace the distribution of state aid granted by EU Member States via three regulatory domains: aid granted under the General Block Exemption Regulation (GBER) (in Section 3); aid provided through the use of the Important Projects of Common European Interest (IPCEIs) framework (in Section 4); and crisis-related aid provided under the temporary frameworks enacted as a reaction to the Covid-19 pandemic and the energy crisis following Russia's invasion of Ukraine (in Section 5). Second, in the conclusions we elaborate on a set of policy recommendations on how to consolidate the evolved EU state aid regime with an eye to reducing the fragmentation of the current instruments and providing state aid in favour of European industry while minimising distortions of the Single Market (in Section 6).

FIGURE 1. State aid across EU27 countries for 2000-2022 (as % of GDP). Total for both non-crisis and crisis-related (Covid & TCF) aid.



▲ Source: Our elaboration based on data from the State aid Scoreboard, European Commission (2024).
Note: The blue dashed line represents the mean of the sample in each year.

I . Key changes in EU state aid law and policy (1951-2014)

State aid control is the Commission's primary tool to prevent national subsidies from jeopardising the Single Market's level playing field (Spector 2009, Defraigne et al. 2022). The importance of state aid policy in the Single Market stems from its supranational nature and the central regulatory, monitoring and enforcing competences entrusted by the treaties to the Commission (Ehlermann 1994, Frenz 2016). Apart from certain cases, any aid granted to European companies by a Member State or through state resources which distorts or threatens to distort competition is incompatible with the Single Market (Art. 107 TFEU). Exceptions include subsidies to promote the execution of an Important Project of Common European Interest (IPCEI), aid to remedy a serious disturbance in the economy of a Member State (both under Art. 107(3)b), aid to facilitate the development of certain economic activities or of certain economic areas where such aid does not adversely affect trading conditions to an extent contrary to the common interest (Art. 107(3) c). The Council can determine other categories of aid that may be authorized, based on a proposal from the Commission (Art. 107 (3)e). Through unanimous voting, the Council can also decide, at the request of a Member State, if specific state aid shall be considered compatible with the internal market in exceptional circumstances (Art. 108(2)).

Legal ambiguity concerning the authorization of national state aid has always been present in the European Treaties. The ECSC Treaty (European Coal and Steel Community) of 1951 prohibited state aid for the coal and steel industries,[1] but the application of this provision was limited by Article 26 ECSC which stipulated that general economic policy in member countries was the national governments' responsibility.[2] The EEC Treaty (European Economic Community), for its part, contained a more flexible system granting the authorisation of State aid in certain cases listed in Article 92 EEC. Other types of aid could also be authorised by the Commission if the proposal was adopted by a qualified majority of the EEC Council.[3] The prohibition of state aid in the EEC Treaty was therefore, as the European Court of Justice recognised, "neither absolute nor unconditional" (Mertens De Wilmars 1987: 427). In certain cases, state aid could be used as an economic policy instrument to achieve the objectives set out in the treaty (Etzenbach 1980: 72–73).

On this basis, since the 1960s, European institutions adopted regulations to clarify the cases in which state aid may be authorized. Their aim was to prevent national state aid interventions from distorting competition within the common/internal market, while enhancing the competitiveness of European industry by setting European criteria for the restructuring of companies (Doleys 2013, Ehlermann 1994, Zurstrassen, 2023). At the same time, horizontal objectives, like the promotion of R&D, environmental protection, and support to small and medium enterprises (SMEs), were increasingly promoted to make European industry more competitive. Eventually, specific State aid frameworks were adopted by the Commission to give guidance to Member States and increase the transparency of state aid, particularly regarding subsidies for public companies or for R&D objectives (Zurstrassen 2023).

1 Treaty establishing the European Coal and Steel Community (ECSC Treaty), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A11951K%2FTXT.

2 On this topic, see the judgment of the Court of Justice of 23 February 1965 concerning case 30-59 De Gezamenlijke Steenkolenmijnen in Limburg v High Authority of the ECSC, available in JO No 17 of 7 March 1961.

3 Article 92 of the Treaty establishing the European Economic Community (EEC Treaty), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A11957E%2FTXT

In the 2000s, the EU's growing technology gap with the US led the Commission to adopt various reforms of its state aid control procedures. The aim was twofold: firstly, to concentrate the Commission's activities on larger and most distortive cases and, secondly, to have Member States reduce their sectoral subsidies and redirect state aid policy toward horizontal aid – e.g. support for R&D, SMEs and the promotion of risk capital for undertakings.[4] This gradual but transformative process put an end to the hitherto application of *ad hoc* frameworks for state aid, generally used in favour of sensitive industrial sectors, like the automotive and the steel industries, and led to the consolidation of state aid policy into general frameworks targeted at broad categories of aid, such as regional or restructuring aid. In 2005, the Mid-Term review of the Lisbon Strategy[5] was accompanied by the adoption of the State Aid Action Plan.[6] This reform of EU state aid control aimed first to further rationalise and simplify its procedures to reduce the number of state aid to be notified and speed-up decision-making from the Commission. At the same time, the State Aid Action Plan aimed to encourage Member States to grant more aid for R&D, innovation, risk capital for SMEs, social and regional cohesion and the improvement of public services with a view to achieving the objectives of the Lisbon Strategy. It led to the adoption by the Commission of a new framework for state aid for R&D and innovation and new guidelines for state aid promoting risk capital in SMEs in 2006.[7] Finally, the State Aid Action Plan paved the way to the Commission's adoption of the first General Block Exemption Regulation in 2008.[8]

The need to support companies affected by the global financial crisis led the European Commission to adopt a temporary framework to provide emergency and horizontal aid to support the long-term competitiveness of industry. In 2009, the Commission adopted a temporary framework for state aid to support firms' access to finance in application of Article 87 §3 (b) of the Treaty establishing the European Community (TEC).[9] The framework allowed subsidies facilitating access to finance for businesses in the form of subsidised guarantees and loan subsidies on a temporary basis and under strict conditions.[10] Also, it provided information to Member States on the conditions for granting aid to promote the long-term competitiveness of European industry (for R&D, environmental protection, SMEs, venture capital).

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4 Official Journal of the European Communities 2001/C 235/03, State aid and Risk Capital, 21 August 2001, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2001:235:FULL

5 Commission Communication COM(2005) 24 final to the Spring European Council, Working together for growth and jobs. A new start for the Lisbon Strategy, 2 February 2005, https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0024:FIN:en:PDF

6 Commission Consultation Document COM(2005) 107 final, State aid action plan – Less and better targeted state aid: a roadmap for state aid reform 2005-2009, 7 June 2005, https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0107:FIN:EN:PDF

7 OJ C 194, 18 August 2006; OJ C 323/1, Community Framework for State Aid for Research, Development and Innovation, 30 December 2006.

8 OJ, L 214/3, Regulation (EC) 800/2008 of the Commission of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles87 and 88 of the Treaty (General Block Exemption Regulation), 9 August 2008.

9 Commission Communication 2009/C 83/01, Temporary Community framework for State aid measures to support access to finance in the current financial and economic crisis, 7 April 2009, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XC0407(01)

10 Those conditions included the fact that aid did not exceed a grant of EUR 500,000 per company, that it was granted to companies that were not in difficulty on 1 July 2008, and that the aid was granted no later than 31 December 2010.

In 2008, the General Block Exemption Regulation (GBER), for its part, allowed for an automatic approval from the European Commission without notification of state aid considered beneficial for strengthening of the competitiveness of EU industry or the cohesion of the Single Market.[11] It also brought together all the existing block exemptions, as well as new areas (innovation, environment, research and development, and risk capital aid for SMEs) in a single instrument. In 2012, a new process of state aid modernisation was launched to align national subsidies more closely with the objectives of the Europe 2020 Strategy, concentrate ex-ante control on the cases with the biggest impact on the Single Market and speed up procedures.[12] In the framework of this reform, in 2014 the Commission provided legal information to encourage the development by Member States of major collaborative projects that promote IPCEIs (Di Carlo and Schmitz 2023: 2084).[13] At the same time, the GBER was amended, to introduce new categories of exempted aid, higher exemption thresholds, more flexible eligibility criteria, higher maximum intensities.[14] The 2005 and 2012 state aid modernisation processes represented thus a landmark step in the reform of EU state aid law which will pave increasing use of GBER provisions, temporary frameworks and IPCEIs to reach industrial policy objectives in a challenging global environment, as we will see in the next sections of this paper.

II • GBER aid: evolution of the legal provisions and policy outcomes

THE EVOLUTION OF GBER PROVISIONS

According to the European Treaties, state aid must be notified to the Commission before implementation (Art. 108(3) TFEU). However, Article 109 TFEU grants the Council the authority to specify certain categories of aid that are exempt from this notification requirement. Additionally, Article 108(4) TFEU empowers the Commission to adopt regulations for aid categories that the Council, pursuant to Article 109 TFEU, has deemed eligible for exemption.

Given the growing number of state aid notifications to the Commission, to streamline and simplify the handling of state aid in the EU, a 1998 Council Regulation[15] empowered the Commission to establish via regulation that certain types of state aid are compatible with the common market and could thus be exempted from

11 Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General bloc exemption Regulation), 9 August 2008, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008R0800. The authorized national subsidies included State aid in favor of SMEs, for R&D, innovation, regional development, training, environmental protection and risk capital.

12 Commission Communication COM(2012) 209 final, Modernisation of EU State Aid Policy, 8 May 2012, https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0209:FIN:EN:PDF

13 Commission Communication 2014/C 188/02, Criteria for the analysis with the compatibility with the internal market of State aid to promote the execution of important projects of common European interest, 20 June 2014, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0620(01)

14 OJ L 187/1, Regulation (EU) 651/2014 of the Commission of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, 26 June 2014.

15 Council Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01998R0994-20151014&qid=1730816891751
The regulation was later repealed and consolidated into Council Regulation (EU) 2015/1588 of 13 July 2015 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to certain categories of horizontal State aid, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015R1588#ntr2-L_2015248EN.01000101-E0002.

the treaty-based requirement of prior notification and *ex ante* Commission approval on the basis of group-exemption regulations. These exemptions would apply to specific state aid categories that meet predetermined conditions, and it would then be up to the Commission to specify the conditions for aid exemptions and the exact criteria in terms of aid purposes, the eligible beneficiaries, and the thresholds in terms of maximum amounts and intensities[16] of authorizable aid.[17]

Based on the Council's mandate, In the early 2000s, various specific block exemptions were adopted via separate regulations (covering SMEs, research, innovation, regional development, and training, employment and risk capital) until being consolidated in the 2008 General Block Exemption Regulation (GBER). The 2008 GBER was enacted as the cornerstone of the State Aid Action Plan (SAAP) which aimed to align the EU state aid regime to the objectives of the Lisbon Strategy.[18] The regulation outlined the aid categories that are compatible with the Single Market and the specific conditions[19] for authorization without prior notification to and approval by the European Commission. These included Regional Aid, SME Investment and Employment Aid, Aid for Female Entrepreneurship, Aid for Environmental Protection, Aid for Consultancy and Participation in Fairs, Aid in the Form of Risk Capital, Aid for Research and Development and Innovation, Training Aid, as well as Aid for Disadvantaged and Disabled Workers.

Since then, the Commission has repeatedly amended the GBER to widen its scope and further relax its conditions, especially by increasing the authorized thresholds. In 2014, in the context of the State Aid Modernisation (SAM), the 2008 Commission Regulation was repealed and replaced by a new GBER[20] aimed at aligning the EU state aid regime with the objectives of Europe 2020 Strategy for smart, sustainable and inclusive growth.[21] The 2014 amendment introduced new categories of exempted aid, higher exemption thresholds, more flexible eligibility criteria, higher maximum intensities. In 2017, the GBER was amended[22] to introduce additional simplifications and include aid for ports and airports.

16 Aid intensity refers to the percentage of the total eligible costs of a project that can be covered by State aid. In other words, it measures the extent to which public financial support (such as subsidies, grants, or tax reductions) contributes to the overall costs of a project or activity.

17 Member states must submit to the Commission a summary information sheet about each aid measure exempted under the regulation within 20 working days following the entry into force of the measure. They must also submit annual reports on the application of the regulation.

18 Commission Consultation Document COM(2005() 107 final, State aid action plan: Less and better targeted state aid: a roadmap for state aid reform 2005-2009, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52005DC0107

19 The various sections and articles of the Regulation specify the aid thresholds and intensities permissible for each specific state aid category, as well as the eligibility costs and ad hoc conditions.

20 Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0651

21 Commission Communication COM(2010) 2020: Europe 2020: A strategy for smart, sustainable and inclusive growth, https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52010DC2020.

22 Commission Regulation (EU) 2017/1084 of 14 June 2017 amending Regulation (EU) No 651/2014 as regards aid for port and airport infrastructure, notification thresholds for aid for culture and heritage conservation and for aid for sport and multifunctional recreational infrastructures, and regional operating aid schemes for outermost regions and amending Regulation (EU) No 702/2014 as regards the calculation of eligible costs, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1084&from=EN

The GBER was significantly amended again following the Covid-19 pandemic to address emerging economic and environmental challenges. Initially, its application was extended by three years, until December 2023,[23] and later, in June 2023, the Commission further extended GBER until 2026,[24] introducing broader exemptions for aid in key sectors strategic for the twin transition. These included increased support for renewable energy, decarbonization, green mobility, and biodiversity, as well as facilitating multi-member state projects, particularly through Important Projects of Common European Interest (IPCEIs) (see Section 4). Exemptions were expanded for training aid, energy price regulation, and risk financing for SMEs. Additionally, notification thresholds for environmental, research, and innovation aid were significantly raised, aligning GBER with new guidelines in areas like climate, energy, and regional aid policies.

GBER AID: SIZE

Overall, GBER aid has increased substantially over the course of the last decades: from close to 0 percent in the mid-2000s to an average of 0.5 percent of national GDP in 2020, especially as a result of the 2008 and 2014 regulations (Figure 2). As noted by the Commission's 2023 State Aid Scoreboard,[25] the share of block-exempted measures has been rising constantly over time. In 2022, Member States implemented 1901 new measures under GBER and, together with ABER[26] and FIBER[27] measures, exempted aid measures constituted 84 percent of the total number of new state aid measures in the EU. This is in line with the Commission's intention, after the modernization of state aid in the EU, to focus on the monitoring and approval of less cases constituting larger – and potentially more distortive – aid cases.

Countries vary substantially in the extent to which they have made use of GBER aid over time (Figure 2). Among those which have made the most extensive use of GBER aid are, especially, Hungary, Malta, Lithuania, Poland and Czechia. Thus, smaller and particularly Eastern European countries appear to have exploited the most the new regulatory flexibilities on state aid policy granted by GBER since 2008.

23 Commission Regulation (EU) 2020/972 of 2 July 2020 amending Regulation (EU) No 1407/2013 as regards its prolongation and amending Regulation (EU) No 651/2014 as regards its prolongation and relevant adjustments, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0972

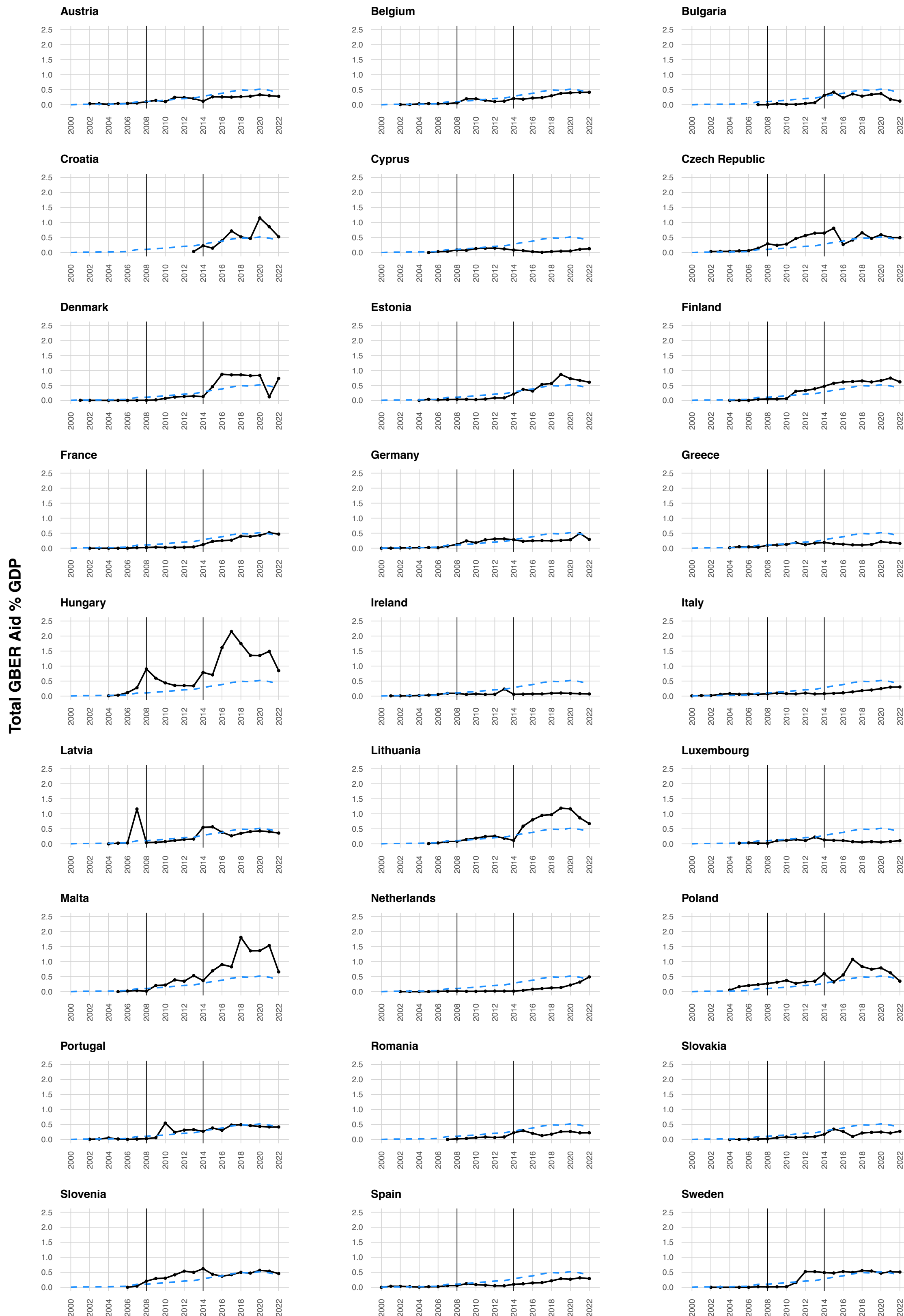
24 Commission Regulation (EU) 2023/1315 of 23 June 2023 amending Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R1315

25 Commission Press Release, 2023 State aid Scoreboard shows reduction in State aid expenditures in 2022 while crisis support to businesses, https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1890

26 Agricultural Block Exemption Regulation

27 Fishery Block Exemaption Regulation

FIGURE 2. GBER aid in EU27 countries for 2000-2022 (as % of GDP)

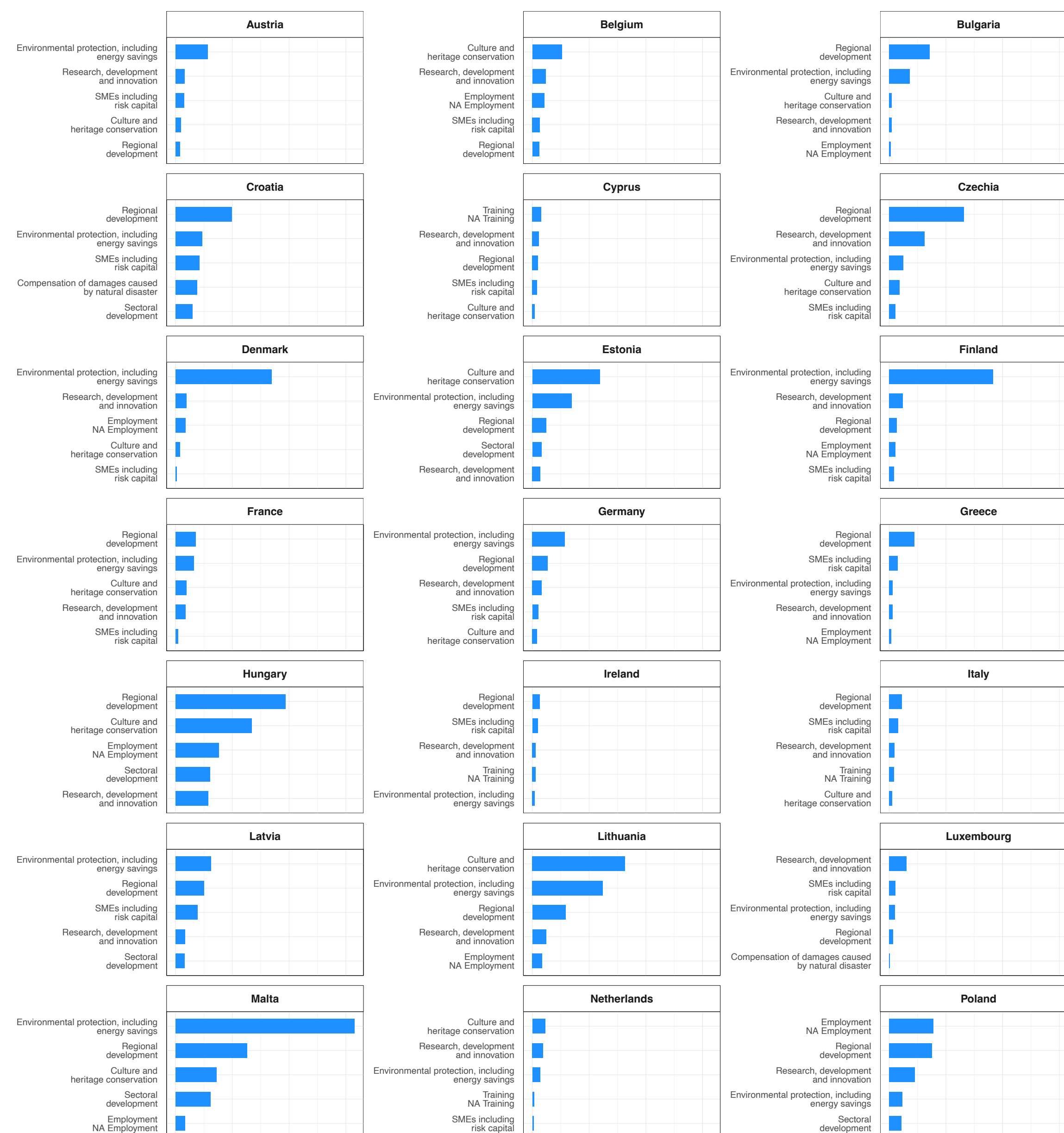


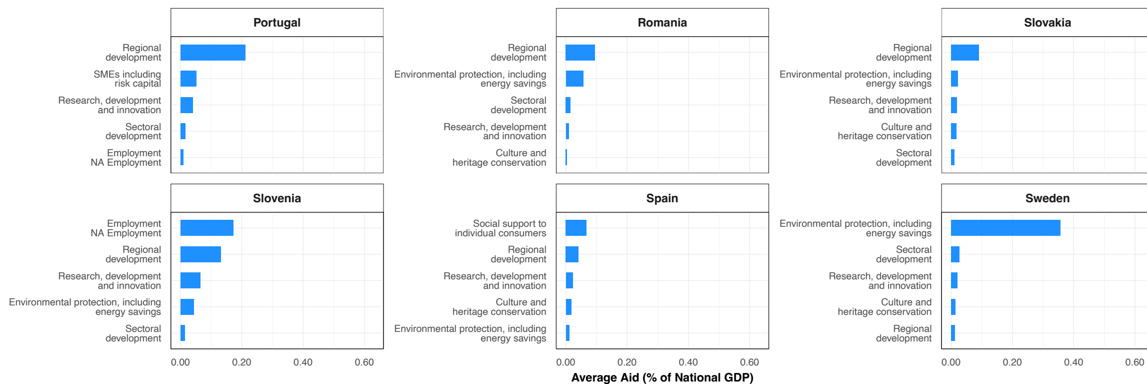
▲ Source: Our elaboration based on data from the State aid Scoreboard, European Commission (2024).
▲ Note: The blue dashed line represents the mean of the sample. The vertical lines represent the 2008 and 2014 GBERs.

GBER AID: COMPOSITION

GBER aid has been predominantly targeted at three major objectives: regional development, environmental protection, including energy savings, and research, development and innovation (Figure 3). Other minor objectives include culture and heritage conservation, aid to stimulate employment and to support SMEs, including through the provision of risk capital. Until 2014, overall, regional development was the major objective pursued by EU countries via GBER aid. After the 2014 GBER, however, environmental protection has grown to become the major objective pursued via GBER aid. The instruments most used across the EU to distribute GBER aid across countries are by far direct grants and interest rate subsidies, followed by tax advantages and tax exemptions (Figure 4).

FIGURE 3. GBER objectives by country, major five objectives by country as average aid for 2000-2022 (as % of GDP)





▲ Source: Our elaboration based on data from the State Aid Scoreboard, European Commission (2024)

Notable cross-country variation in GBER aid can be observed across countries, both in terms of the objectives pursued by different countries (Figure 3) and the instruments used (Figure 4). GBER aid for regional development is highly concentrated in Eastern European countries as well as small EU countries. Hungary leads in the amount of average fiscal resources allocated to the provision of GBER aid for regional development, followed by Czechia, Malta, Portugal, Poland, Slovenia, Bulgaria, and Croatia. This pattern clearly indicates that these countries, many of which are newer EU Member States, have made extensive use of GBER aid to foster regional development, enhance economic cohesion and reduce disparities within their jurisdictions.

The analysis of GBER state aid for environmental protection and energy savings indicates a different pattern, with smaller EU countries and the Nordics leading in the provision of environmental GBER aid. In terms of average fiscal resources allocated to GBER aid for environmental protection, Malta leads, followed by Sweden, Finland and Denmark. With much lower levels, Lithuania, Germany, Austria, and Estonia follow the Nordic countries' lead in environmental GBER aid.

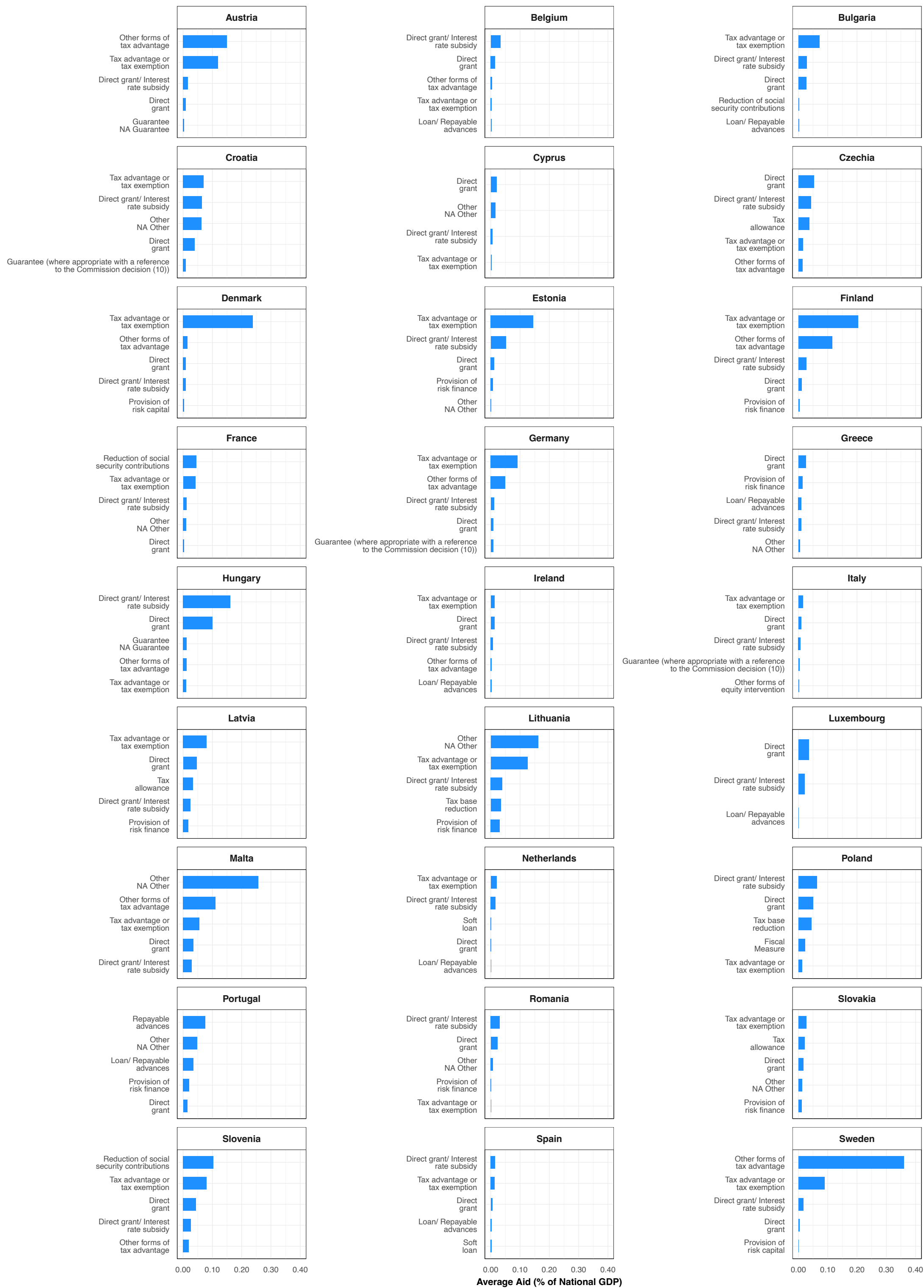
GBER aid for research, development and innovation is also highly concentrated in Eastern Europe. Czechia leads with the highest average allocation of fiscal resources, followed by Hungary, Poland and Slovenia. This pattern likely reflects Eastern European countries' strategic priorities to boost technological innovation within economic models focused on manufacturing (especially automotive) and the attraction of foreign direct investment (Ban and Adascalitei 2022).

When analysing the major instruments employed to allocate GBER aid (Figure 4), Eastern European countries (especially Hungary, Poland and Czechia) and the Baltics (e.g. Estonia) are the ones who have relied the most on the use of direct grants and interest rate subsidies. On the contrary, Nordic countries such as Denmark and Finland – but also Baltic countries like Lithuania and Latvia – have relied predominantly on the use of tax advantages and tax exemptions to distribute GBER aid.

In all, since 2008 the Commission has expanded the breadth and scope of general block exemptions. As a result, over the last two decades, GBER aid has on average increased five-fold across the Single Market (Figure 2). Our analysis points to growing cross-country variation both in the levels and composition (objectives and instruments) of GBER aid across the EU. GBER aid is most used for regional development, environmental protection, including energy savings and research, development and innovation (Figure 3), and is disbursed predominantly via direct grants and interest rate subsidies (Figure 4). Overall, Hungary, Malta, Lithuania, Poland and Czechia have made the most extensive use of GBER aid. Eastern Euro-

pean countries have especially used GBER aid for regional development and for research, development and innovation. The Nordic countries have instead made strategic use of GBER aid for environmental protection and energy savings.

FIGURE 4. Instruments through which GBER aid has been granted, major five instruments by country as average aid for 2000-2022 (as % of GDP)



▲ Source: Our elaboration based on data from the State aid Scoreboard, European Commission (2024)

III • Important Projects of Common European Interest (IPCEIs)

I THE IPCEI INSTRUMENT AND ITS INDUSTRIAL POLICY PRIORITIES

Since the mid-2010s, Important Projects of Common European Interest (IPCEIs) have become an important tool for EU industrial policymaking (Lopes-Valença 2024, Lavery 2024, Bora and Schramm 2024). Based on Art. 107 (3)b TFEU, two Commission Communications – in 2014[28] and 2021[29] – have defined and refined the scope and design of the IPCEI instrument. Today, it can be used to finance industrial policy projects from the R&D phase and up until first-industrial deployment. Subsidized projects need to be highly innovative (global state-of-the-art) and address existing market failures. Furthermore, individual IPCEIs need to include projects from at least four EU Member States and contain an important cross-border component in terms of collaboration and knowledge dissemination (Di Carlo and Schmitz 2023: 2084)[30].

The process to develop individual IPCEIs has been largely *ad hoc*, especially for the first ones based on the 2014 communication. As Member States have to provide the funding and select the participating enterprises and projects, they play a key role in the definition and set-up of ICPEIs. The 2021 communication and a DG COMP Code of good practices[31], published in 2023, have sought to gradually standardise the IPCEI process. Today, the best practice approach consists of an identification phase, in which the scope of a planned IPCEI is defined and where all Member States have a 'genuine opportunity' to participate. To guide the process, the Member States agree upon a coordinating Member State, which has sufficient administrative and technical capabilities. So far, only Germany, France and the Netherlands have served in this role. The coordinator plays a key role in engaging with both Member States and Commission services and is responsible for drafting a so-called 'chapeau text', defining the overall IPCEI. Together with the individual project documents, the Commission evaluates this text during the pre-notification process of an IPCEI, before making a state aid decision on the whole package.

Until September 2024, the European Commission notified ten industrial policy IPCEIs: four hydrogen IPCEIs, two battery IPCEIs, two microelectronics IPCEIs, an IPCEI on cloud and edge technologies as well as an IPCEI in the pharmaceutical sector. Individual IPCEIs in specific sectors were developed jointly but some were eventually split into different waves of implementation. Table 1 provides an overview of all industrial policy IPCEIs that have been notified over the course of the last years. It covers the participating countries, the number of supported industry actors and projects/undertakings, the expected public and private funding to finance the individual IPCEIs, as well as the overall time frame for their realization.

28 Commission Communication 2014/C 188/02, Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0620(01)&from=FR

29 Commission Communication C/2021 8481 final, Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest, 21.11.2021. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=PI_COM:C(2021)8481

30 Exemptions from these criteria exist in the case of cross-border infrastructure projects. In 2020, the Fehmarn Belt fixed rail-road link between Germany and Denmark was declared an IPCEI.

31 DG COMP Code of good practices for a transparent, inclusive, faster design and assessment of IPCEIs, 17.05.2023, https://competition-policy.ec.europa.eu/system/files/2023-05/IPCEIs_DG_COMP_code_of_good_practices.pdf

TABLE 1. Overview of all notified industrial policy IPCEIs until September 2024

No	IPCEI	Member States (+ third countries)	Industry actors	Projects	Public funding (in bn €)	Private funding (in bn €)	Start date	End date
1	Microelectronics 1 (ME1)	4+1: Austria, France, Germany, Italy + United Kingdom (Austria joined in March 2021)	29	43	1.9	6.5	12/2018	2024
2	Batteries 1 (Bat1)	7: Belgium, Finland, France, Germany, Italy, Poland, Sweden	17	22	3.2	5	12/2019	2031
3	Batteries 2 (Bat2 | EuBatIn)	12: Austria, Belgium, Croatia, Finland, France, Germany, Greece, Italy, Poland, Slovakia, Spain, Sweden	42	46	2.9	9	01/2021	2028
4	Hydrogen 1 (Hy2 | Hy2Tech)	15: Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Netherlands, Poland, Portugal, Slovakia, Spain	35	41	5.4	8.8	07/2022	tbc
5	Hydrogen 2 (Hy2 | Hy2Use)	13+1: Austria, Belgium, Denmark, Finland, France, Greece, Italy, Netherlands, Poland, Portugal, Slovakia, Spain, Sweden + Norway	29	35	5.2	7	09/2022	2036
6	Microelectronics 2 (ME2 | ME/CT)	14: Austria, Czechia, Finland, France, Germany, Greece, Ireland, Italy, Malta, Netherlands, Poland, Romania, Slovakia, Spain	56	68	8.1	13.7	06/2023	2032
7	CIS	7: France, Germany, Hungary, Italy, Netherlands, Poland, Spain	19	19	1.2	1.4	2023	2031
8	Hydrogen 3 (Hy3 | Hy2Infra)	7: France, Germany, Italy, Netherlands, Poland, Portugal, Slovakia	32	33	6.9	5.4	2024	2029

9	Hydrogen 4 (Hy4 | Hy2Move)	7: Estonia, France, Germany, Italy, Netherlands, Slovakia, Spain	11	13	1.4	3.3	2024	2031
10	Medicines 1 (Med1 | Med4Cure)	6: Belgium, France, Hungary, Italy, Slovakia, Spain	13	14	1	5.9	2024	2036

Beyond the ten currently notified IPCEIs, several others are in different phases of the identification, planning and development processes (Table 2), with some proposed IPCEIs currently either on hold or abandoned. A 2019 report by the Strategic Forum for IPCEIs (2019) suggested six key strategic value chains that could be suitable for setting up IPCEIs: (1) clean, connected and autonomous vehicles, (2) smart health, (3) low CO2 emissions industry, (4) hydrogen technologies and systems, (5) industrial internet of things, and (6) cybersecurity. Some of these proposals have subsequently led to the creation of IPCEIs, partly in strongly modified forms (e.g. hydrogen, health, internet of things) while others did not move beyond the initial phase regarding the call for expressions of interest among Member States' companies (e.g. low carbon industry). A photovoltaics IPCEI, pushed by parts of the European solar manufacturing industry in 2021/2022 (ESMC 2022), equally did not materialize into a concrete IPCEI until now.

Set up in 2023, the *Joint European Forum (JEF) for IPCEI* agreed on a new list of potential IPCEIs during its first high-level meeting in March 2024.[32] Three value chains were prioritized: nuclear, cleantech and digital technologies. In addition, also biotechnologies and 'advanced materials' were identified as potential areas of interest for upcoming IPCEIs. According to the political guidelines for the 2024-2029 European Commission, "the first new set of common projects will be proposed in early 2025" (von der Leyen 2024).

32 JEF-IPCEI (2024): Joint European Forum for IPCEI (JEF-IPCEI). 1st high-level meeting of the JEF-IPCEI on 7 March, https://competition-policy.ec.europa.eu/state-aid/ipcei/joint-european-forum-ipcei_en

TABLE 2. Overview of proposed IPCEIs that have not been notified until September 2024

IPCEI	Member States (+ third countries)	Date of proposal	Status
Low-CO2 emissions industry	To be determined (tbd)	2019	Halted
Med2 (Tech4Cure)	16: Austria, Belgium, Denmark, France, Greece, Hungary, Irland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Romania, Slovenia, Spain	03/2022	Under development
Photovoltaics	5: Austria, Lithuania, Luxembourg, Poland, Spain	05/2022	Halted
Nuclear	12: Bulgaria, Croatia, Czechia, Finland, France, Hungary, Netherlands, Poland, Romania, Slovakia, Slovenia, Sweden	03/2024	Advanced exploration
Cleantech	tbd	03/2024	Exploration
Digital	tbd	03/2024	Exploration
Biotech	tbd	03/2024	Exploration
Advanced materials	tbd	03/2024	Exploration

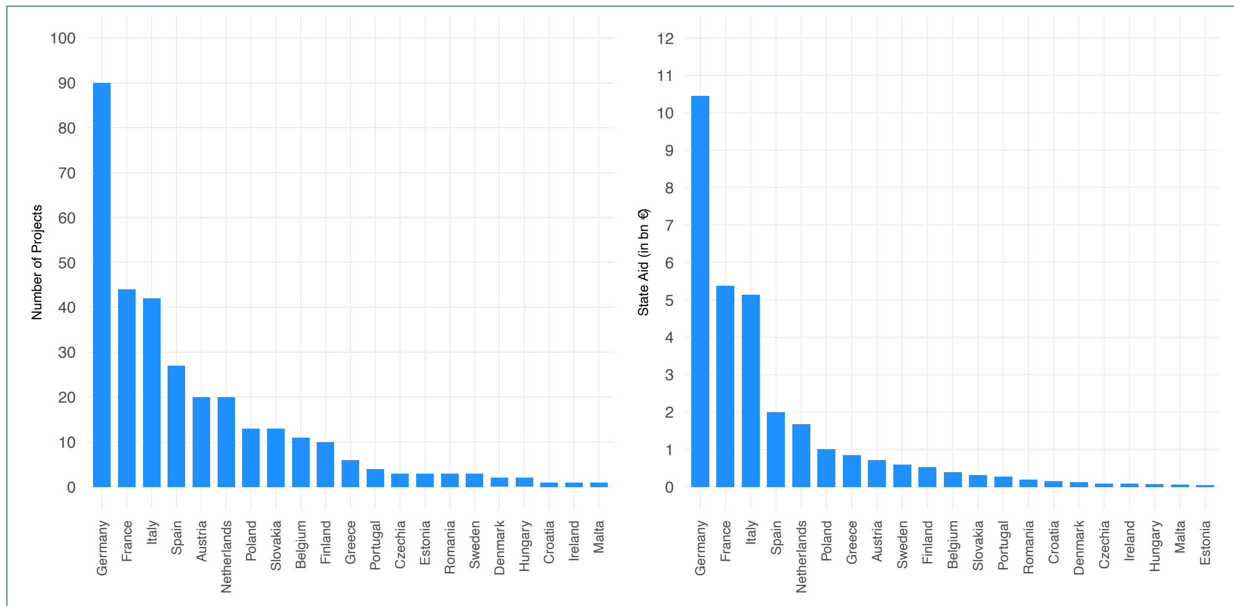
▲ Sources: Own elaboration, Joint Manifesto (2022), Messad (2024)
▲ Notes: This list of proposed IPCEIs contains suggestions by the Strategic Forum of IPCEIs, priorities selected by the JEF-IPCEI as well as other Member State or industry-led IPCEI proposals.

MARKED DIFFERENCES BETWEEN COUNTRIES: THE USE OF THE IPCEI INSTRUMENT SINCE 2018

The strategic use of the IPCEI instrument strongly differs between EU Member States (see Figure 7). While France and Italy have participated in each of the ten IPCEIs that were notified until June 2024, six other countries have not taken part in any IPCEIs (Bulgaria, Cyprus, Latvia, Lithuania, Luxembourg, Slovenia). Among the countries that have made significant use of the IPCEI instrument are also Germany (8), Poland, Slovakia, and Spain (7 each), the Netherlands (6) as well as Austria, Belgium, and Finland (5 each).

Country differences in the use of the IPCEI instrument are more pronounced when looking at the number of supported national undertakings/projects and the amount of public state aid given to them. As Figure 5 shows (left panel), Germany alone accounts for 90 subsidized projects – more than France and Italy taken together. Germany's projects thus amount to 28,2% of all projects, levels higher than Germany's population (18,8%) and GDP share (24,2%) inside the EU.

FIGURE 5. Individual projects financed through the IPCEI instrument per country (left panel) and notified state aid in billion euros per country (right panel)

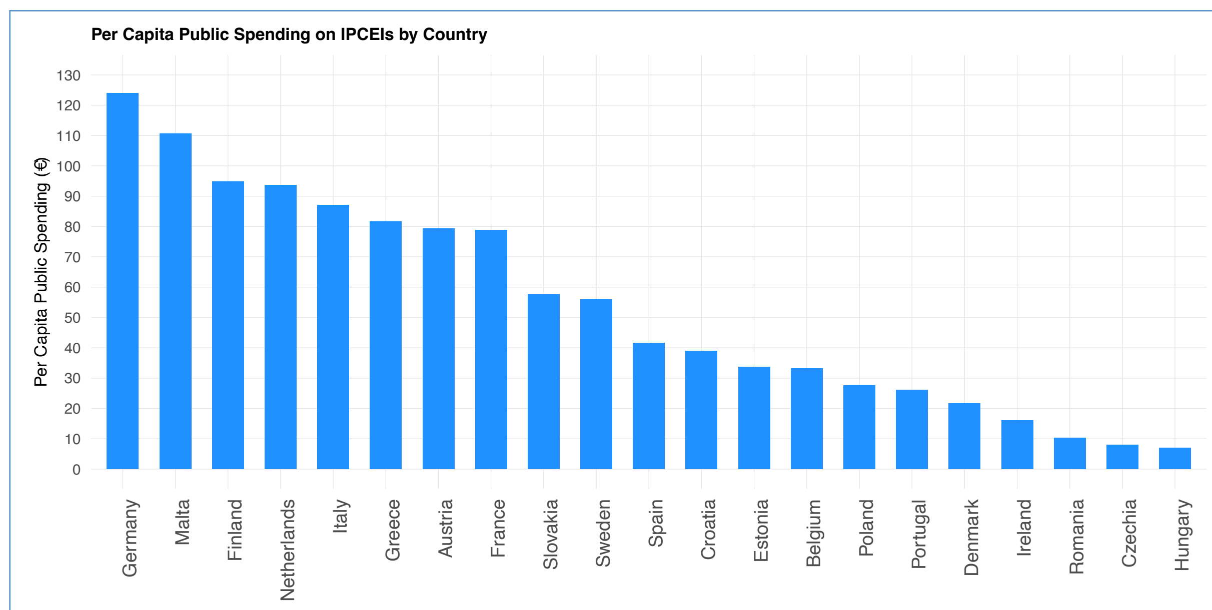


▲Notes: Data includes all IPCEIs presented in Table 1. Notes: Data includes all IPCEIs with published state aid decisions (ME1, Bat1, Bat2, Hy1, Hy2, ME2, CIS).

Looking at the state aid decisions that have been made public so far (i.e. the two microelectronics IPCEIs, the two battery IPCEIs, the first two hydrogen IPCEIs and the cloud technology IPCEI) allows us to identify how much of the overall public funding for the various IPCEIs was granted to individual EU Member States (Figure 5, right panel). Here, the country differences are even greater. With roughly €10,5bn of granted stated aid, German public funding for IPCEIs accounts for 34,7% of overall public subsidies. The shares of France and Italy are 17,8% and 17,1%, respectively. Together, these three countries account for about 70% of granted IPCEI state aid across Europe.

Even when looking at granted national IPCEI state aid per capita, Germany remains on top with roughly 124€ (Figure 6). The per capita view shows that beyond the three biggest EU economies, also some of the smaller rich EU Member States, such as Finland, the Netherlands and Austria, made significant public subsidies available for their IPCEI participations.

FIGURE 6. Granted national state aid for IPCEIs per capita



▲Notes: Data includes all IPCEIs with published state aid decisions (ME1, Bat1, Bat2, Hy1, Hy2, ME2, CIS).

THE SOURCES OF PUBLIC IPCEI FUNDING

Since the IPCEI instrument has been reoriented toward the financing of industrial policy projects, individual IPCEIs have largely been funded through national *ad hoc* financing. This means that the government and/or the responsible ministries need to be able to prioritize IPCEI subsidies over other spending needs. The Recovery and Resilience Facility (RRF) of the EU's NextGenerationEU plan temporarily allows Member States to finance IPCEI projects with EU funding, which facilitates the IPCEI participation of countries with lower fiscal capacity. The National Recovery and Resilience Plans (NRRPs) of 13 Member States included IPCEI spending, amounting up to €10,5bn of EU-financed state aid (Eisl 2022). In addition to RRF money, Member States can also make use of the EU cohesion policy funds,[33] while projects can potentially also profit from EIB support[34]. However, so far there is insufficient communication and coordination between the different Commission DGs (DG COMP, DG GROW, DG REGIO, etc.) and between the Commission and the EU and national promotional banks, missing out on crucial synergies in a time of increasing budgetary constraint. Unless a more comprehensive approach is adopted, IPCEIs will remain heavily dependent on national financing with the expiry of the RRF and fragmented other EU funding opportunities.

33 Commission Newsroom, EU Cohesion Policy: €79 million in EU funds for research and development of semiconductor technologics in Sicily, Italy, 18.07.2024, https://ec.europa.eu/regional_policy/whats-new/newsroom/18-07-2024-eu-cohesion-policy-eur79-million-in-eu-funds-for-research-and-development-of-semiconductor-technologies-in-sicily-italy_en

34 European Investment Bank Newsrooom, EIB offers financing and advisory support for renewable hydrogen projects, 05.12.2022, https://www.eib.org/en/press/news/eib-offers-financing-and-advisory-support-for-renewable-hydrogen-projects

THE INTEGRATION OF IPCEIS WITH OTHER EU STATE AID INSTRUMENTS

Since the inception of the IPCEI instrument, the increasing number of participants (both in terms of countries and companies) has rendered the development and notification process of IPCEIs highly complex (Schmitz et al. 2024), causing significant delay and difficulties in implementation. Many of the most recent IPCEIs have taken more than two years from the initial proposal until the final adoption.

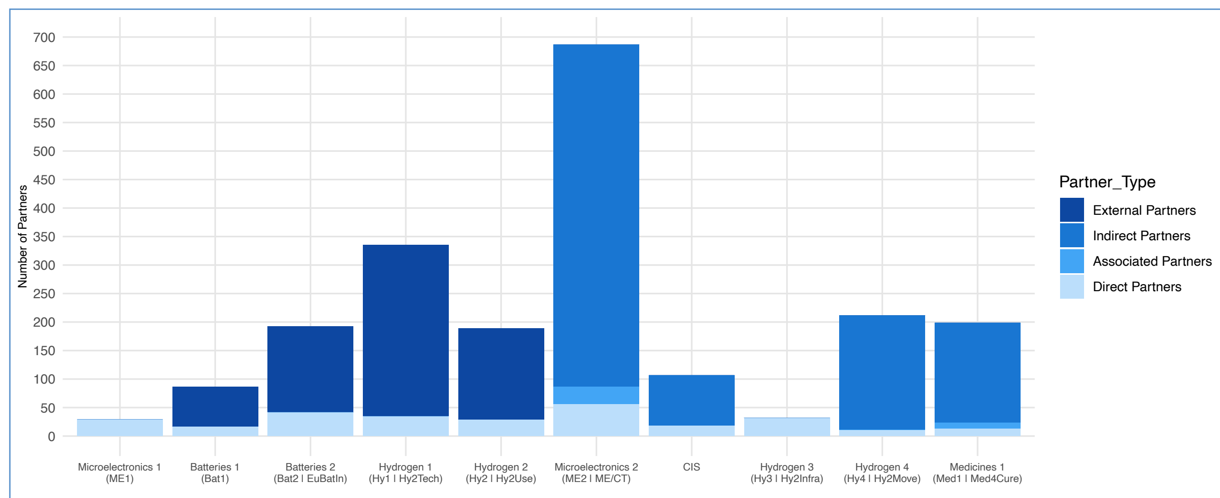
To speed up the notification process, two different strategies were developed. First, some of the proposed IPCEIs were split into different waves, allowing more advanced projects to move forward, while giving others more time to improve their project ideas. Second, starting with the second microelectronics IPCEI and further developed with the Cloud technology IPCEI, the IPCEIs now include not only 'direct partners' (with state aid granted through the IPCEI instrument) but also 'indirect' and 'associated partners', which are part of individual IPCEIs but are granted state aid through other mechanisms, most notably based on the General Block Exemption Regulation (GBER). The IPCEIs notified before the second Microelectronics IPCEI already included the category of external partners, but whose participation remained in overall IPCEI projects remained very vague.

To facilitate the utilization of the GBER and reduce the number of projects that need to go through the IPCEI notification, the GBER rules were modified in summer 2023 (see Section 3 above). Most importantly, R&D projects related to multi-country projects such as IPCEIs can now receive aid up to €50 million with mandatory notification to the Commission.[35] At the same time, these projects are still recognized as part of the ecosystem created by an IPCEI. While there hasn't been a clear distinction between indirect and associated partners so far, there are plans to better specify these categories for future IPCEIs.

Figure 7 shows the number of direct, associated, indirect and external partners for all IPCEIs currently notified. Especially for the second microelectronics, the fourth hydrogen and the medicines IPCEIs, the number of partners not subsidized based on IPCEI-relevant state aid was considerable, reducing the administrative burden for the Commission, enterprises and Member States.

35 Commission Press Release (2024): Commission approves up to €1 billion of State aid by six Member States for the first Important Project of Common European Interest in the health sector. 28.05.2024. https://ec.europa.eu/commission/presscorner/detail/en/ip_24_2852

FIGURE 7. Evolution of direct, associated, indirect and external partners across the different IPCEIs



▲ Notes: Data includes all IPCEIs presented in Table 1, presented in chronological order of their notification. The first five IPCEIs also mentioned the cooperation with external partners, which are also shown in this figure. The data on associated/indirect partners are approximate, as the respective press releases only provide numbers such as 'more than 200' or 'about 175'. The Commission did not provide any concrete number for the external/indirect partners in the Microelectronics 1 and the Hydrogen 3 (Hy2Infra) IPCEIs.

In all, while the RRF and recent GBER modification have made IPCEI participation – at least temporarily – more inclusive across EU Member States, the analysis above has highlighted remarkable cross-country differences. Especially the three largest EU economies, Germany, France and Italy, have made ample use of the ICPEI instrument. Smaller advanced economies such as Finland, the Netherlands and Austria were able to provide significant amounts of state aid to national projects. In contrast, many Eastern European and Baltic countries did not take part in any IPCEIs or only to a minor extent.

IV • State aid under the Temporary Frameworks: Covid-aid and the TCTF

I THE COVID STATE AID TEMPORARY FRAMEWORK

To mitigate the health emergency caused by the outbreak of the Covid-19 pandemic in early 2020, EU Member States implemented various emergency measures, including lockdowns and travel restrictions, which caused a severe contraction in economic activity (Van Hove 2020). To enable Member States to ensure liquidity assistance to firms affected by the pandemic's fallout, in March 2020 the Commission adopted the Temporary Framework (TF) for State aid measures to support the economy during the Covid-19 outbreak[36] – later amended various times.[37] As happened after the 2008 global financial crisis, this constituted a major relaxation of

36 Commission Communication 2020/C 91 I/01, Temporary Framework for State aid measures to support the economy in the current Covid-19 outbreak,19 March 2020, https://competition-policy.ec.europa.eu/state-aid/coronavirus/temporary-framework_en

37 The Temporary Framework was later amended various times and was set to expire - for most of the tools provided – by 30 June 2022 due to the improvement of Europe's health crisis and the phasing out of restrictive measures.

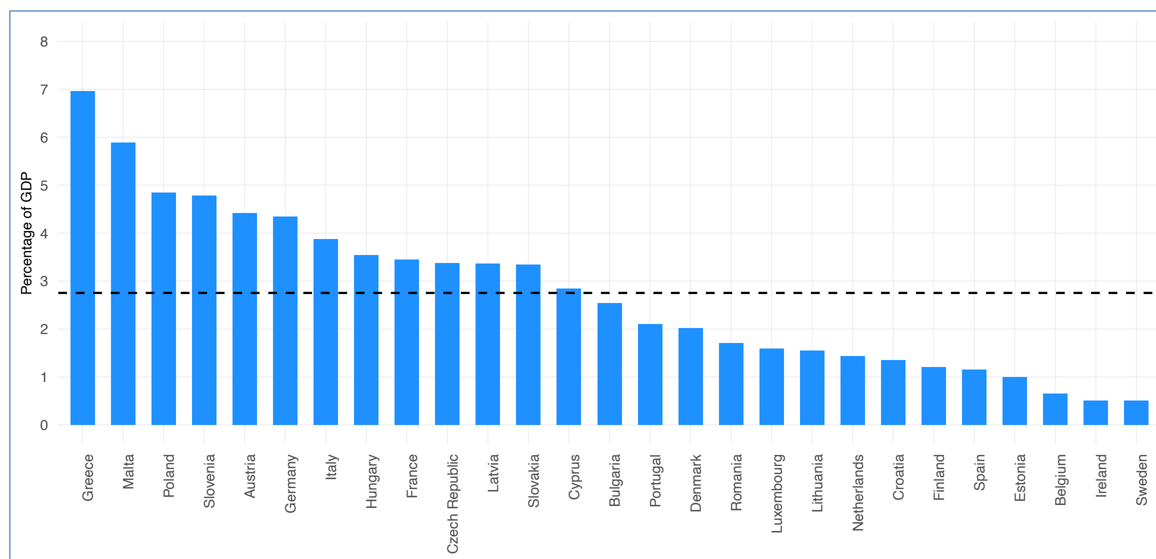
state aid prohibitions in Europe. The Commission's aim was to enable enough flexibility in the use of state aid during crisis times while orchestrating a coordinated response to the pandemic and minimizing distortions in the Single Market.

The Commission adopted the TF based on Art. 107(3)b TFEU, enabling Member States to use state aid to remedy a serious disturbance across the EU economy. Moreover, state aid could also be authorized under specific treaty provisions, such as article 107(2)b, allowing aid to repair the damage caused by natural disasters or other exceptional occurrences (Maczkovics 2020). In its first version, the TF deemed admissible five categories of aid aimed at ensuring liquidity and access to finance for businesses affected by the pandemic's restrictive measures (subject to notification) until December 2020. These included aid in the form of (1) direct grants, repayable advances or tax advantages (limited to €800.000 per undertaking), (2) guarantees on loans, (3) subsidised interest rates for loans, (4) guarantees and loans channelled through credit institutions or other financial institutions, and greater flexibility in (5) short-term export credit insurance.

– Covid aid: Size

During the pandemic, state aid across the EU more than doubled: skyrocketing from an average of around 1 percent in 2019 to above 2 percent of GDP across the Member States in 2020 (Figure 1).

FIGURE 8. Total Covid-related aid percentage of national GPD for 2020-2022 (Cumulated values as yearly values of state aid as % of yearly national GDP)



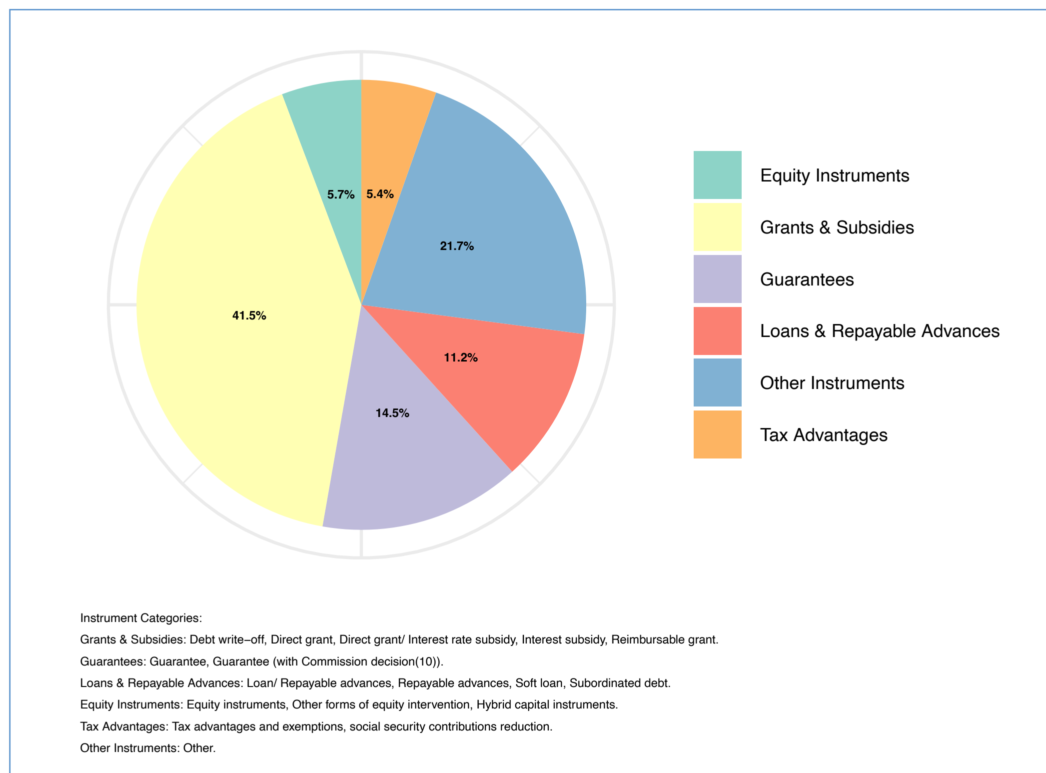
▲ Source: Our elaboration based on data from the State Aid Scoreboard, European Commission (2024). Note: The horizontal red line represents the mean of the sample.

Looking specifically at Covid-related aid during 2020-2022 – that is aid granted under the TF and similar principles – the great variation of aid levels granted across countries becomes evident. If, on average EU countries disbursed cumulated Covid aid for around 3% of GDP during 2020-2022, Greece disbursed more than double: around 7 percent of GDP in Covid-related cumulated state aid between 2020 and 2022. Malta and Poland follow with 6 and 5 percent, respectively. At the opposite extreme, countries like Belgium, Ireland and Sweden all granted less than 1 percent of GDP in Covid-related aid (Figure 8).

– Covid aid: Composition

The predominant aid instrument used to channel Covid-related emergency aid was direct grants and interest rate subsidies,[38] accounting for about 41.5 percent of the total aid value (Figure 9). Direct grants constitute the single largest instrument used to channel Covid-related aid, reflecting governments' need to provide immediate and unrestricted financial support to firms facing liquidity crises during the lockdowns. This is followed by guarantees which represented 14.5 percent of the total aid. State-backed guarantees mitigate banks and lenders' fears about the solvency of borrowing firms, thus maintaining the flow of credit to businesses and the real economy. The third most used instrument was loans and repayable advances, which constituted around 11.2 percent of the total aid value distributed. Repayable advances are financial instruments provided by governments that serve as a middle ground between grants and loans and must be repaid potentially with interest and additional payments conditional on the success of the project or the firm funded. Equity instruments and other forms of tax advantages accounted for approximately 5.7 and 5.4 percent, respectively.

FIGURE 9. Share of Covid-related aid granted during 2020-2022 by instrument (as % of GDP)



Instrument Categories:
Grants & Subsidies: Debt write–off, Direct grant, Direct grant/ Interest rate subsidy, Interest subsidy, Reimbursable grant.
Guarantees: Guarantee, Guarantee (with Commission decision(10)).
Loans & Repayable Advances: Loan/ Repayable advances, Repayable advances, Soft loan, Subordinated debt.
Equity Instruments: Equity instruments, Other forms of equity intervention, Hybrid capital instruments.
Tax Advantages: Tax advantages and exemptions, social security contributions reduction.
Other Instruments: Other.

▲Source: Our elaboration based on data from the State aid Scoreboard, European Commission (2024).
▲Notes: Instruments shares are calculated based on aid values. The categories merge several instruments for analysis. The category "Other" is largely attributed to a single German Covid-19 State aid scheme (SA.56790 - Federal Framework "Small amounts of aid 2020" - Covid-19), which involved significant spending of EUR 44.01 billion reported as "Other" by the German authorities. See Commission's State aid Scoreboard 2022 (p.30).

38 According to the Commission, much of the aid granted under this category can be attributed to the use of direct grants by member states. See, Commission's State aid Scoreboard 2022 (p.29), https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2407.

The use of state aid instruments to disburse Covid-related aid varied across countries (Figure 10). Over the period 2020-2022, most countries relied predominantly on the use of direct grants and interest rate subsidies to effectively support domestic ailing undertakings. Countries like Croatia, Finland, Italy, France, Romania and Spain relied also on state guarantees. Countries like Croatia, Estonia, Germany, Greece, Poland and Portugal also made extensive use of loans and repayable advances.

FIGURE 10. Total Covid-related aid as percentage of national GDP by instrument (Cumulated values over the period 2020-2022)

▲ Source: Our elaboration based on data from the State aid Scoreboard, European Commission (2024).

In all, the Covid TF has enabled Member States to flexibly provide emergency aid to struggling domestic firms. During 2020-2022, EU countries disbursed an average of cumulated aid of around 3 percent of GDP in Covid aid (for the three-year period). But there was enormous variation in the amount of cumulated aid disbursed across countries. Greece disbursed more than double the EU average: around 7 percent of national GDP during the whole period. Malta and Poland follow with 6 and 5 percent, respectively. At the opposite extreme, countries like Belgium, Ireland and Sweden all granted less than 1 percent of GDP in Covid-related aid (Figure 8). The most used instruments to disburse Covid aid were direct grants, loans and repayable advances, and guarantees (Figure 9). Countries varied greatly also in their use of preferred instruments to disburse crisis-related aid (Figure 10).

THE TEMPORARY CRISIS (AND TRANSITION) FRAMEWORK (TCTF)

Following Russia's invasion of Ukraine and Europe's sanctions against Russia, an energy crisis ensued as Russia retaliated by cutting off gas supplies to Europe. A major supply-side economic shock hit Europe from February 2022 onwards. In this context, the Commission swiftly adopted a Communication for a Temporary Crisis Framework for State aid Measures (TCF) enabling Member States to support ailing firms hit by the energy price shock.[39] This framework was designed to complement existing EU state aid instruments and is grounded in Article 107(2)b TFEU, which allows Member States to mitigate damage directly caused by exceptional occurrences. Besides the TCF, the so-called treaty-based aid allowed Member States to provide aid to remedy a serious disturbance in the economy under Article 107(3)b TFEU.

In March 2023, the TCF was replaced by the Temporary Crisis and Transition Framework (TCTF).[40] The TCTF[41] expanded the TCF with an eye to fostering the support of renewable energy deployment and industrial decarbonization. Recognizing the urgency of reducing dependency on fossil fuels and promoting the green transition, a new section was included in the TCTF aimed at accelerating investments in critical sectors essential for the transition to a net-zero economy. This includes support for the manufacturing of strategic equipment such as batteries, solar panels, wind turbines, heat pumps, electrolysers, and carbon capture, usage, and storage technologies. The TCTF also supports the production and recycling of key components and critical raw materials necessary for these technologies. Thus, the TCTF has shifted the focus of the TCF from the immediate response to the energy crisis toward the objective of facilitating the green transition across Europe.

While the previous analysis of state aid could rely on data from the European Commission State Aid Scoreboard (updated until 2022 included), there is no data available yet on the size and distribution of state aid granted under the TCTF. Our empirical analysis relies on the Commission's surveys of national competition

39 Commission Communication 2022/C 131 I/01, Temporary Crisis Framework for State Aid measures to support the economy following the aggression against Ukraine by Russia, Brussels, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XC0324(10)

40 Commission Communication, 2023/C 101/03, Temporary Crisis and Transition Framework for State Aid measures to support the economy following the aggression against Ukraine by Russia, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023XC0317(01)

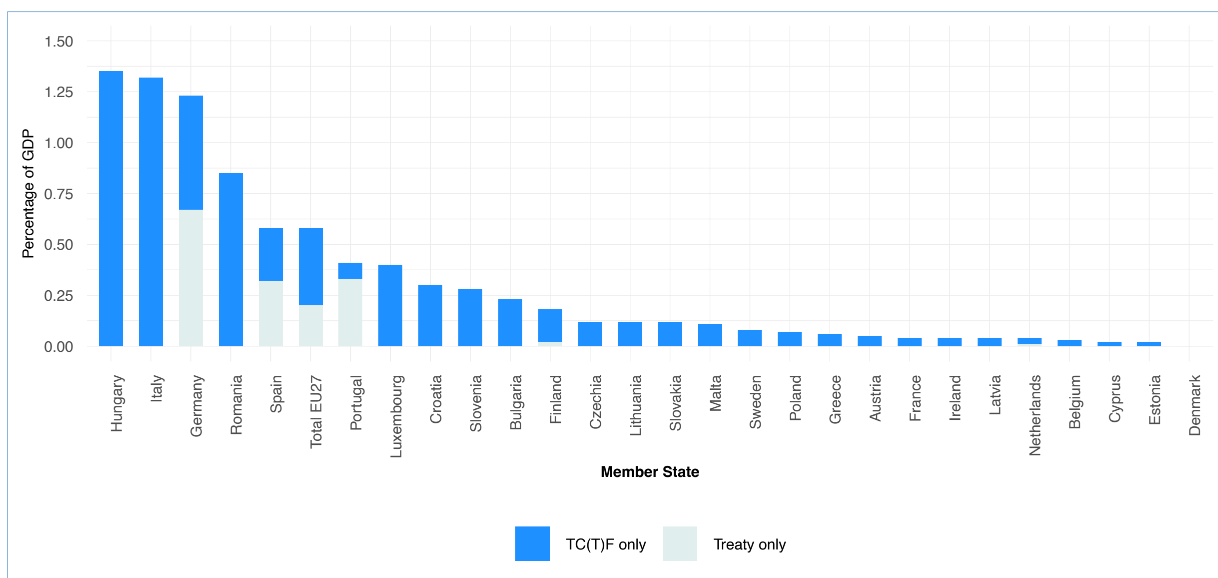
41 The TCTF was further amended in November 2023 and in May 2024, see https://competition-policy.ec.europa.eu/state-aid/temporary-crisis-and-transition-framework_en
The Commission extended the phase-out of limited aid amounts and aid compensating for high energy prices until the end of June 2024. Other crisis-related sections of the TCTF, such as liquidity support in the form of State guarantees and subsidized loans, and measures to support electricity demand reduction, expired on 31 December 2023. The provisions for accelerating renewable energy deployment, industrial decarbonization, and investments in key sectors for the net-zero transition remain in effect until 31 December 2025.

authorities[42] which provide the nominal amounts of aid granted through various instruments from March 2022 until the end of June 2023.

– TCTF aid: Size

Countries such as Hungary, Italy, and Germany have relied extensively on state aid granted via the TCTF. Hungary granted up to 1.35 percent of national GDP in aid under the TCTF (for the period from March 2022 until the end of June 2023), followed by Italy (1.32%) and Germany (1.23%). These values stand for more than double the average level across the EU27 countries, at 0.58 percent of EU GDP (Figure 11).

FIGURE 11. State aid granted under the TC(T)F or similar treaty-based principles for March 2022-June 2023 (as % of GDP)



▲Source: Our elaboration based on data from the European Commission's (2024) Surveys on state aid.

Most countries granted aid via the legal provisions of the TCTF. However, in some cases, countries granted "treaty-based aid" under Article 107(3)b TFEU. While still adhering to the principles laid out in the TCTF, such aid is more general in nature and can be used for broad economic disturbances in the economy when intended national measures do not strictly fit with the TCTF's provisions. During the energy crisis, treaty-based aid was typically used for larger, systemic cases, such as the recapitalization of significant companies, and cases more substantial in scale (e.g., the recapitalization of energy companies like Uniper SE in Germany).[43] Overall, the reliance on treaty-based aid is concentrated in just a few countries like Germany, Spain, and Portugal (Figure 13).

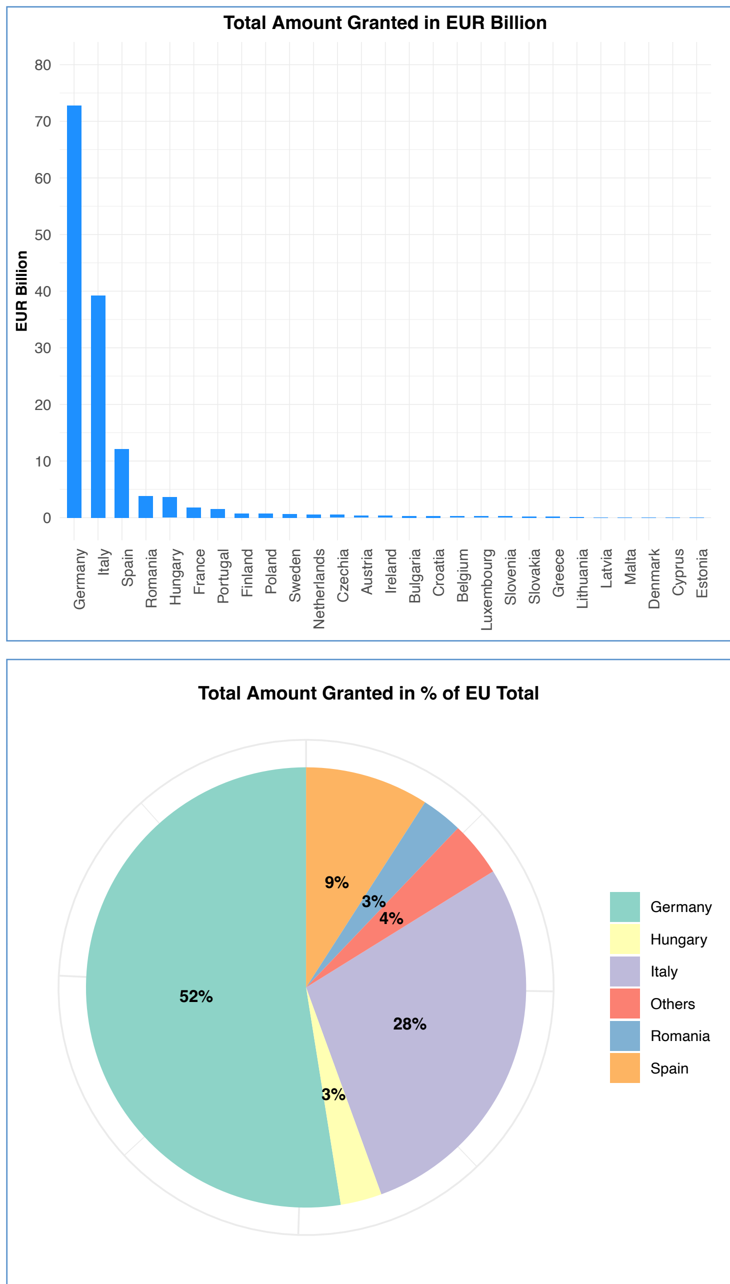
In absolute terms (€ billion), the distribution of state aid across EU Member States reveals significant disparities across the Single Market. Germany stands out as the largest provider of aid under the TCTF, having disbursed € 72 billion (Figure 12, top),

42 Competition State Aid Brief, European Commission, Issue 1/2024 – February 2024, https://competition-policy.ec.europa.eu/document/download/22938d94-beaa-44bf-97ca-8a1785ca1a1c_en
Values for 2023 refer to the period up to the end of June 2023. The data provided is preliminary and may be revised by Member States in the future.

43 Competition State aid Brief, European Commission, Issue 1/2024 – February 2024, p.3.

which accounts for a substantial 52% of the total aid granted across the EU (Figure 12, bottom). Italy follows with € 39 billion, representing 28% of the total EU aid. Spain is the third-largest provider (€ 12 billion), making up 9% of the total, followed by Hungary (€ 3.6 billion) and Romania (€ 3.8 billion) with around 3% of total TCTF aid.

FIGURE 12. State aid granted under the TC(T)F and its principles in billion euros, by country for March 2022-June 2023



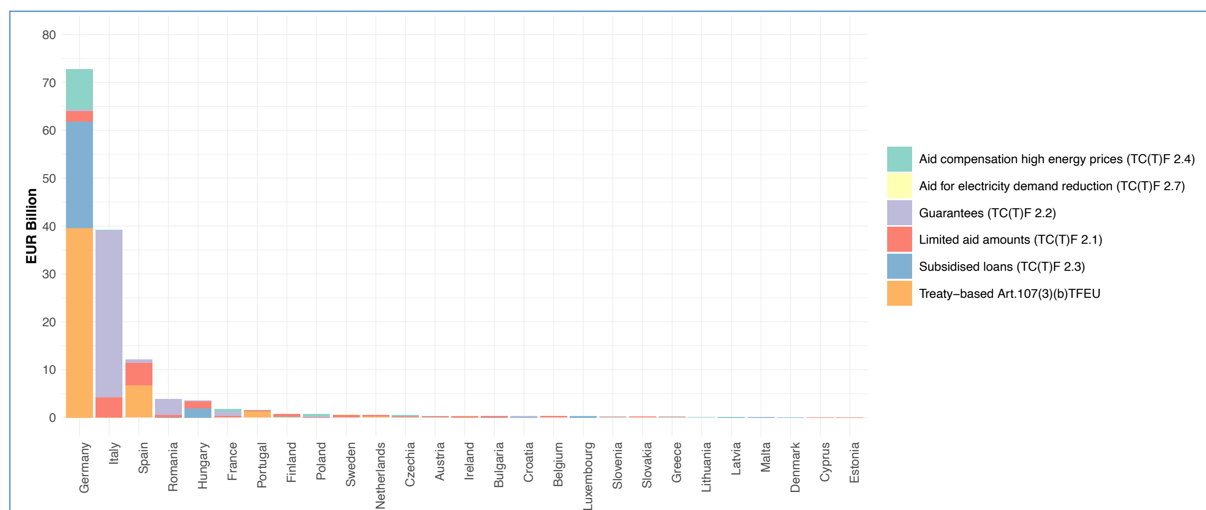
▲Source: Our elaboration based on data from the European Commission's (2024) Surveys on state aid.[44]

44 Competition State Aid Brief, European Commission, Issue 1/2024 – February 2024. Values for 2023 refer to the period up to the end of June 2023.

TCTF aid: Composition

Germany, Italy, Spain, Romania and Hungary – the top 5 spenders under the TCTF – all used different legal provisions under the TC(T)F to grant State aid during the energy crisis (Figure 13).

FIGURE 13. State aid granted under the TC(T)F and its principles in billion euros, by legal provision and by country for March 2022-June 2023



▲Source: Our elaboration based on data from the European Commission's (2024) Surveys on state aid.[45]

Germany has made extensive use of treaty-based aid under Article 107(3)b TFEU, under which it provided € 39.5 billion. It also provided €22 billion in subsidized loans (under the TCTF, section 2.3) to offer firms credit at reduced interest rates during the economic downturn; it also granted € 8.4 in aid to compensate for firms' high energy prices (TCTF 2.4); and distributed € 2.2 billion in direct financial aid (TCTF 2.1), providing immediate relief to domestic undertakings. Overall, the German government has intervened substantially in the economy with large fiscal resources and subsidies to support its core export-oriented and energy-intensive manufacturing industries (Di Carlo et al. 2023).

Italy's state aid policy during the energy crisis was instead predominantly focused on the use of guarantees, with the country providing € 35 billion (under the legal basis TCTF 2.2). This suggests that Italy has prioritized the use of contingent liabilities to secure credit and loans for businesses and stabilize the economy in crisis times instead of disbursing immediate fiscal resources, which could have jeopardised Italy's public finance profile, especially vis-à-vis international financial observers (Di Carlo and Simoni, 2024).

Overall, the distribution of state aid granted under the TCTF highlights great cross-country variation across the EU. In national GDP terms, Hungary, Germany, and Italy, are the countries which have granted the most aid in the context of the energy crisis (Figure 11). However, countries with different fiscal profiles, most notably Germany and Italy, employed diversified state aid strategies. With stronger public finances, Germany have made extensive use of direct aid granted to rescue its large utility

45 Competition State Aid Brief, European Commission, Issue 1/2024 – February 2024. Values for 2023 refer to the period up to the end of June 2023.

firms and subsidised loans. Italy has relied predominantly on the use of guarantees (Figure 13).

Conclusions: Policy recommendations

This empirical analysis has documented the increasing use of state aid in the EU over the last two decades. Since 2008, but increasingly so since the mid-2010s, EU Member States have enjoyed greater flexibility in the use of national state aid policy. Greater flexibility has resulted from changes in both "structural" and "temporary" provisions of the EU state aid regime. On the one hand, the Commission has expanded the scope of state aid which can be granted without prior notification via the GBER (see Section 3) and has incentivised greater use of the treaty-based IPCEI instrument (see Section 4). These constitute structural changes in the EU state aid regime. On the other, in crisis times, the Commission has made strategic use of *ad hoc* instruments, such as the Covid TF and the TCTF to temporarily give Member States flexibility in granting support to domestic undertakings in the face of exceptional economic shocks. However, greater flexibilization has brought greater fragmentation: Member States have increasingly diverged in the level of national state aid granted. They also differ in the objectives they pursue through state aid policy and the instruments they employ to grant subsidies.

Temporary frameworks have certainly proved a flexible and effective tool in hard times. However, taking these developments together raises concerns. The first concern pertains to the legitimacy, transparency and accountability behind the increasing use of *ad hoc* and soft law instruments of state aid beyond the legislative and democratic remits of EU policymaking (Biondi 2020). Secondly, greater flexibility in the EU state aid framework in favour of significant national fiscal support exposes the European Single Market to considerable fragmentation risks: if together we trade, divided we aid increasingly, and national state aid strategies and selection procedures have aggravated the risks of subsidy races and corporate welfare – with deep-pocketed Member States standing to disproportionately benefit from new regulatory flexibilities (Agnolucci 2022, Eisl 2022).

Due to the lack of of supranational fiscal resources for EU state aid policy, European policymakers face a trade-off between the need to grant subsidies for the twin transition and open strategic autonomy, while minimising distortions of the Single Market, whose integrity constitutes a European public good for EU citizens and firms.

To address these concerns, we advance the following policy recommendations:

- *Ad hoc* temporary frameworks for the provision of crisis state aid should be phased out without renewal after its current expiry date. It is important to move away from the temporary frameworks that have played a defining role in recent times. By the end of 2025, the remaining elements of the TCTF are due to expire (see Section 5.2). It is important that the EU and its Member States do not agree on yet another temporary extension but rather reflect on the lessons learned from the use of the various state aid instruments deployed. They should then decide on which elements of more active and sectoral industrial policies they want to make permanent and which ones are not adapted when moving away from a mode of absolute economic urgency.

- The layered expansion of various state aid provisions and instruments over the last two decades should now be followed by a phase of consolidation aiming for more coherence and better integration of different instruments. The recent GBER amendment to create synergies with IPCEIs (see Section 4.4) is a step in this direction, which should be followed by others.

- To reduce fragmentation risks and improve the efficiency of State aid spending, a more European approach, based on the logic of IPCEIs, should be promoted. Inside the Single Market, the best projects across Europe for a given industrial policy objective should be selected rather than those that are situated in a country with larger fiscal means. Recent high-level reports by Enrico Letta (2024) and Mario Draghi (2024) make clear suggestions in this direction, also regarding the improvement in governance arrangements and the smart use of conditionalities to achieve desired policy outcomes. This includes the continuation and reinforcement of existing conditionalities such as the 'do-no-significant-harm' principle and the development of additional conditionalities to level the European and global playing field (e.g. on working conditions, local content requirements). While the IPCEI instrument seems to be the most appropriate one to develop a more common industrial policy, it should be further improved based on lessons learned from its application over the course of the last years. For these purposes, steering capacity and a greater orchestrating role by the Commission is needed.

- To level the European playing field, EU industrial policy needs more predictable and common funding together with more fiscal space for Member States constrained by the European fiscal framework:

  - On the one hand, Ursula Von der Leyen's (2024) proposal for a European Competitiveness Fund should be brought to fruition, providing more EU (co-) financing of industrial policy projects in support of the IPCEI state aid instrument. Beyond such an initial endowment, there should also be a reflection on medium- to long-term revenues that would allow an EU industrial policy, e.g. through the introduction of profit-sharing mechanisms such as claw-back mechanisms (see Eisl 2024).

  - On the other hand, greater EU co-funding for national IPCEIs has the potential to create the right incentives necessary to crowd in Member States' financing for IPCEIs and exploit the full flexibility potential of the new EU economic governance framework entered into force in April 2024. Under the new rules, all national expenditures on the co-financing of EU funded programmes will be excluded – at least partly – from the rules of the reformed Stability and Growth Pact. While such spending will be included in the definition of a country's net expenditure path, which will define its fiscal policy trajectory for a 4- to 7-year period (inscribed in national fiscal-structural plans), national co-financing will not be evaluated in the monitoring phase of the fiscal-structural plans (De Lemos Peixoto & Loi 2024). Conditional on the EU expanding the co-funding for national IPCEIs (and other investments), these legal provisions create both the incentives and the fiscal space for EU Member States to earmark budgetary resources for IPCEIs despite the EU's fiscal straitjacket.

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