Aligning Competition Policy and Industrial Policy in the EU±

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Summary:

Trade conflicts, geopolitical tensions, digital disruption, and the climate crisis pose major challenges for the European Union (EU) and its member states. As called for in the Draghi Report, industrial policy measures can increase competitiveness, strengthen resilience, and facilitate the twin transformation. This article explores ways in which competition policy can be realigned to better accommodate industrial policy objectives. Using German competition law as a reference point, it presents options with which legislatures and competition authorities can respond to current challenges, reconcile conflicting objectives, and adapt the decision-making framework. It then considers elements of a competition-oriented industrial policy, understood as an evidence-based, targeted approach in which competition serves both as a guiding principle and as a control variable.

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1 Introduction: Industrial policy developments in the EU

Trade conflicts, geopolitical tensions, the digital transformation, and the transformation of energy systems present the entire European Union (EU) and its member states with a variety of industrial policy challenges. The EU, however, finds itself in a weak position due to the continuing fragmentation of the single market and persistently low levels of investment. Further, confidence in the state's ability to act is low in some EU countries.[1]

The Draghi Report (Draghi 2024a, 2024b), the Letta Report (Letta 2024), and the European Commission's Mission Letters point to deficits in the EU's competitiveness compared to other parts of the world, such as the USA, China, and other parts of Asia.[2] The Draghi Report warns, 'Europe is stuck in a static industrial structure with few new companies rising up to disrupt existing industries or develop new growth engines' (Draghi 2024a, p. 1). The catalogue of measures proposed by the Draghi Report can be seen not just as an agenda for an active and far-reaching industrial policy but also as a response to the structural weaknesses of the European economy and its competitiveness.[3]

The role of competition policy is of central importance in strengthening competitiveness. The European Commission has repeatedly expressed this in the past. Already more than 20 years ago, it wrote: 'A competitive and open internal market is the best way for European companies to increase their efficiency and innovation potential. Intensive competition is therefore the central driving force for competitiveness and economic growth. Competition policy ... is an essential element of a coherent and integrated policy to strengthen the competitiveness of European industry ...' (European Commission 2004, p. 2). This continues to be the premise of the European Commission (European Commission, 2024). In this sense, EU competition policy is not just a mechanism for correcting market power and preventing the abuse of dominant market positions; it is also a constitutive element of the Single Market itself. It aims at ensuring that economic integration results in open, contestable and efficient markets across Member States. By creating a level playing field for firms and consumers, it transforms the legal framework of the Single Market into an economic reality.

The debate on whether and how competition law and practice need to be adapted in response to these new challenges is marked by significant controversy. The intentions of the new Commission are guided by the Draghi Report, which proposes a new

[1] This is particularly true for Germany. Based on a 2024 FORSA survey, commissioned by the German Civil Service Association, 70% of respondents say that the state is overstretched in terms of its tasks and problems, while 25% say that it is capable of fulfilling them. See page 4 in ww.dbb.de/fileadmin/user_upload/globale_elemente/pdfs/2024/240626_130624_Buergerbefragung_Oeffentlicher_Dienst_2024.pdf. However, according to another survey, trust in the EU institutions is high. See Eurobarometer 102 from 2024, available at https://europa.eu/eurobarometer/surveys/detail/3215.

[2] In her Mission Letters of September 19, 2024, Ursula von der Leyen points out the particular importance of the Draghi and Letta reports, 'I would like all Members of College to draw on recent or upcoming reports. This notably includes the Draghi Report on the future of European competitiveness, ... as well as the Letta report on the future of the Single Market' (cf. Mission Letter to Teresa Ribera Rodríguez, p. 2).

[3] When we talk about the European Economic Area or the European economy, this includes all EU member states as well as the associated EFTA states of Iceland, Liechtenstein and Norway. Switzerland is a special case because, although it is a member of EFTA, relations between the EU and Switzerland are governed by bilateral agreements and, therefore, it has access to parts of the EU single market.

approach to competition policy in support of a new industrial deal. In the future, merger controls should not only consider the current market situation, but also innovation potential and long-term competitiveness (Draghi 2024b, p. 299). Implementing the proposals in the Draghi Report would arguably lead to a partial weakening of competition law. Ursula von der Leyen can be interpreted in a similar way: 'Europe needs a new approach to competition policy - one that is more supportive of companies scaling up in global markets ... and is better geared to our common goals, including decarbonization and a just transition' (Mission letter from Ursula von der Leyen to Teresa Ribera Rodríguez dated 17.09.2024, p. 5). This raises the question of whether and how competition policy should be adapted or even overhauled to meet industrial policy objectives in the broader sense.

Even if effective competition plays a key role in overcoming the challenges, particularly in the course of the simultaneous digital and sustainability transformation – the twin transformation – it is not a panacea, as there may be reasons for market failure other than market power. The lack of internalization of external effects, unresolved coordination problems, and the resulting insufficient investment in public goods – such as infrastructure for innovation and decarbonization, as well as critical infrastructure – may justify targeted economic policy measures. These are part of a technology, infrastructure, regional, and trade policy. What role does industrial policy play here? This requires a definition.

We define industrial policy as a bundle of government strategies and measures aimed at influencing the structure and development of the economy (cf. Criscuolo et al. 2022).[4] Objectives can be, for example, to increase economic growth, strengthen competitiveness, increase innovation, or achieve desired distributional effects. Possible instruments include subsidies, tariffs, tax incentives, guarantees, accelerating approval procedures, state participation, infrastructure investments, regulatory interventions, and the design of intellectual property protection and public procurement procedures. Thus, technology, infrastructure, regional, and trade policies are part of industrial policy.

In the discussion on industrial policy, a distinction is made between horizontal and vertical policies. Horizontal industrial policy refers to measures that affect all companies regardless of industry or sector. Examples include the creation of a stable legal framework, the promotion of education and research, and the provision of other public goods. These measures aim to improve the general framework conditions for all companies, thus promoting overall economic growth. Vertical industrial policy, on the other hand, focuses on specific industries, sectors, or technologies. Here, targeted measures are taken to promote specific industries, for example through subsidies, tax breaks, or direct investments. The aim is to eliminate structural weaknesses in certain industries, achieve technological progress, or achieve strategic goals such as securing jobs. This means that growth sectors can be supported. Alternatively, support can also be directed toward sectors undergoing structural decline, with the aim of cushioning the effects of contraction and facilitating a smoother economic transition.

[4] Similarly, Juhász et al. (2025, p. 1) define industrial policy as 'intentional government action aimed at altering the composition of a domestic economy to achieve a public goal'.

Industrial policies are frequently employed by governments (Aiginger and Rodrik 2020). Juhász et al. (2023) document a significant increase: Between 2017 and 2022, the number of industrial policy interventions increased from 228 to 1,568, with the majority of these being implemented in highly developed economies such as Germany, Japan and the USA. Looking closely at government policies over the 2010 to 2022 peiod, Juhász et al. (2025) find a strong increase in the use of industrial policies over time both in absolute numbers and as a fraction of the total number of government policies in the respective time period: The share of industrial policies increased from 10% to 37%, with some variation in between.[5]

One might think that industrial policy – for example through the promotion of European champions, the erection of entry barriers for foreign companies, targeted subsidies for certain companies, or domestic investment – distorts and reduces competition in the internal market and that industrial policy and competition policy are inherently at odds with each other. However, this article shows how industrial policy and competition policy can complement each other without contradicting each other. By maintaining open markets, competition policy creates the conditions for a successful industrial policy (see OECD, 2024a, and Aghion et al., 2025). Industrial policy is most effective when it is implemented in a competitive environment, as competition ensures that public funds are allocated efficiently and that the benefits of innovation accrue to consumers. It is crucial that industrial policy is formulated in a way that neither distorts competition nor favours certain companies.[6] From an EU internal market perspective, there is a need for a coherent European location policy that promotes competition and ensures that distortions of competition between member states are avoided through state aid control. At the same time, there is also the need for a coordinated approach to a common industrial policy.

2. Objectives and instruments of competition and industrial policy

2.1 Objectives and instruments of competition policy

The competition policy framework in the EU is influenced by the competition policy approaches of its initial members. In Germany, the Act against Restraints of Competition (ARC) pursues two central objectives. First, it serves to protect competition as an institution. In line with the ordoliberal tradition, the aim is to safeguard

[5] See their figures G5 and 6. Juhász et al. (2025) develop a text-based approach (using supervised machine learning) to distinguish which announced economic policies are in fact industrial policy interventions. They do not simply assign all policies using certain instruments (e.g. tariffs, subsidies) to industrial policy — rather, they examine the language of the policy announcements to detect an industrial policy goal (i.e. the intention to reshape the composition of economic activity).

[6] There is a risk that certain companies will be favoured due to their ownership structure (e.g. state participation) or due to other characteristics such as the company's headquarters in a certain constituency. The transition to corrupt interventions is fluid. For example, aid can be structured in such a way that it goes to certain constituencies as a "reward" to influence elections, or it can be granted to companies that are associated with or financially support the ruling party. As we consider industrial policy on the basis of public welfare objectives, we do not address such industrial policies motivated by vested interests below. However, the danger that such cases will arise in the case of an activist industrial policy should not be underestimated. It should also not be overlooked that an industrial policy geared towards individual sectors and regions strengthens the incentives for lobbying and it is to be feared that the wrong companies will be supported as a result (cf. Baldwin and Robert-Nicoud 2007 and Cadot et al. 2006).

competition as a constitutive element of the market economy and as a guarantor of economic freedom.[7]

Secondly, competition policy aims to protect consumers and other market participants. It is assumed that functioning competitive markets lead to lower prices, greater product diversity, and higher quality as well as more innovation than would be the case in markets in which companies with market power operate and in which free market entry and exit is limited. Competition law also protects other market participants from abusing their superior market power.

At the European Union level, the objectives of competition law are codified in Articles 101 and 102 of the Treaty on the Functioning of the European Union. They consist of ensuring undistorted competition in the internal market by preventing anti-competitive agreements and the abuse of dominant market positions. This serves to protect consumers and promote innovation and economic progress.

Competition law in the EU and in its Member States contains a range of instruments to promote functioning competition. In sectors with specific structural challenges, competition law can be supplemented by specific sector regulation.

Merger control is a preventive instrument designed to prevent excessive market concentration through company mergers. At the EU level, the European Commission, and, in the Member States, National Competition Authorities examine whether planned mergers would significantly impede effective competition. In this case, a merger must be prohibited or suitable ancillary provisions (conditions and requirements) imposed to avert a prohibition; these can comprise behavioural and structural requirements such as the sale of parts of the merged company.

The ban on cartels prohibits agreements between companies that restrict competition, such as price fixing or market sharing. Abuse control is directed against dominant companies that exploit their position to the detriment of competitors or consumers. This includes, among others, excessive prices, refusal to supply, or the imposition of unreasonable business conditions.

Competition authorities in the EU and some Member States can use the sector inquiry tool to proactively analyse industries or markets in which competition problems are suspected. This enables a better understanding of market structures and dynamics, ultimately forming the basis for subsequent individual case proceedings or regulatory adjustments. In some Member States, like Denmark, Germany, Greece, and Italy, sector inquires are complemented by additional enforcement tools. For instance, since the 11th amendment to the ARC, which came into force in November 2023, the German Federal Cartel Office can also take remedial measures following a sector inquiry even without a finding of an antitrust infringement (Section 32f ARC). Thus, legislators have provided the Federal Cartel Office with an instrument with which it can, for example,

[7] On the influence of ordoliberal thinking on European competition law, see e.g. Talbot (2016).

counteract barriers to entry in highly entrenched markets.[8] This possibility does not exist at EU level.

Last, but not least, state aid control is a specific instrument in European competition law that serves the purpose of preventing distortions of competition through state subsidies, thus ensuring fair competitive conditions in the EU internal market. We will return to this in section 4.

In addition to competition law, regulatory law can also be used to respond to competition problems. Sector-specific regulation is an option when the instruments of competition law reach their limits. For example, the tendency for digital markets to be dominated has led to new regulation or quasi-regulation (regulation through the Digital Markets Act (DMA) at EU level and quasi-regulation under Section 19a ARC in Germany or, outside the EU, the Digital Markets, Competition and Consumers Act 2024 (DMCC) in the UK). In network-based industries – such as telecommunications, rail, and energy – access regulation is often applied because natural monopolies[9] exist in parts of the value chain due to economies of scale and, without access regulation, other parts of the value chain would also be monopolized. Access regulation aims to guarantee competitors non-discriminatory access to this infrastructure. This enables functioning competition in upstream and downstream markets and avoids economically unsustainable or socially undesirable duplication of parts of the infrastructure.

2.2 Objectives and instruments of industrial policy

Traditionally, industrial policy is closely linked to the *promotion of national champions*, i.e. large companies that should gain or strengthen their international competitiveness with state support. In the context of discussions about the competitiveness of the EU, there has been talk of “European champions” for some years now. Targeted state support is intended to help these companies take on a leading role in global markets or contribute to the strategic autonomy of the EU. Such support is often criticized (see Monopolies Commission 2005, EFI 2025, Hottenrott et al. 2025), as state intervention can lead to distortions of competition and the promotion of national champions puts smaller companies at a disadvantage. There is also a risk that concentrating on a few large players will reduce innovation dynamics in the long term and increase economic dependencies within Europe.

Rather than starting from the question of national champions, it seems more fruitful to focus first on the fundamental objectives of industrial policy, such as strengthening competitiveness through economies of scale and scope or securing strategic autonomy. The role of national champions can then be assessed in light of these goals. Accordingly, we understand industrial policy as a policy mainly aimed at eliminating market failures, but also focusing on increasing macroeconomic efficiency, reaching

[8] An economic analysis of case constellations and possibilities for intervention can be found in Motta and Peitz (2022). On March 6, 2025, the German Federal Cartel Office began proceedings for the first time on the basis of the new Section 32f ARC, in which it is examining whether there is a significant and ongoing distortion of competition in the wholesale fuel trade.

[9] Alternatively, natural tight oligopolies can arise, which may not lead to effective competition.

geostrategic goals and pursuing other concerns for society as a whole, such as distribution policy objectives or basic rights to certain services (universal services).[10]

Market failures can take many different forms. These can be based on externalities and collective good characteristics; they also include inefficiencies due to information and coordination problems. For example, positive or negative externalities can result in companies not fully internalizing the social costs or benefits of their activities, such as pollution or knowledge transfer through innovation. Companies may have insufficient incentives to consider risks in global supply chains. Similarly, the positive externalities of creating good jobs are often not considered when companies do not factor the social value of quality jobs into their decisions. Missing or inefficiently provided public goods, such as critical infrastructure or basic research, also represent a market failure. Coordination problems can inhibit investment if, for example, networked decisions in technology or infrastructure are not coordinated. These diverse forms of market failure show that industrial policy measures may not just respond to classic economic failures but can also address structural and long-term challenges.

Industrial policy measures can help to strengthen economic resilience and technological sovereignty. An industrial policy geared towards resilience limits technological dependencies on individual companies, transportation routes, or countries. Such an industrial policy is a response to global uncertainties and existing structural dependencies. Technological sovereignty is of central importance in an increasingly knowledge-based economy in order to secure long-term competitiveness.

There are a variety of possible instruments for achieving industrial policy goals. Three exemplary and not always clear-cut components of an industrial policy deserve special attention in this context (cf. Council for Research and Technology Development, 2021): (1) innovation and technology policy; (2) infrastructure policy; and (3) regional and so-called place-based policies.

A central component of modern industrial policy is *technology policy*, which promotes innovation in order to internalize positive externalities and solve coordination problems. Spillover effects often occur in research and development (R&D): Companies generate new knowledge that benefits not only themselves, but also other economic actors. These externalities justify state support to better exploit the innovation potential of the economy as a whole.

Government support for innovation can take the form of both direct research funding and tax incentives. While direct R&D funding programs can be targeted at key strategic technologies, tax incentives help to stimulate a broader innovation dynamic in the economy. Differentiated funding for certain technologies can be justified, especially if they contribute to overcoming complex social challenges. Examples of this include climate change, demographic change, or the resilience of critical infrastructure.

[10] Our definition of industrial policy is broad and is based on Criscuolo et al. (2022), who define it as all measures that structurally strengthen the performance of the domestic corporate sector. This includes traditional industrial, innovation and SME policies as well as measures to promote skills, infrastructure, and research. Industrial policy is therefore not only aimed at the manufacturing industry, but also at the strategic development of the entire economy. For alternative definitions, see also Juhász et al. (2023) and Evenett et al. (2024).

Against the backdrop of global technology competition, investments in transformative technologies – such as intelligent robotics, artificial intelligence, and quantum technologies – are considered to be of central importance (EFI, 2025). The development of corresponding industrial capabilities requires a targeted transfer of knowledge between science and industry. In addition to pure R&D funding for such transformative technologies, funding can also be aimed at scaling and industrial applications. Thus, technology policy encompasses not only the promotion of R&D, but also the targeted implementation and dissemination of technological innovations in value chains.

In view of the considerable uncertainties surrounding the potential of different technologies, a technology-neutral approach that leaves room for multiple innovation paths is generally the most appropriate choice.[11] However, in the case of pronounced network effects or economies of scale, targeted promotion of certain technologies can be more efficient than a technology-neutral approach. The establishment of reliable standards and interoperable systems – for example in the feed-in of renewable energies or the harmonization of digital infrastructures – also plays an important role in achieving economies of scale and avoiding fragmentation. The combination of government investment, tax incentives, and a reliable regulatory framework can help to mobilize private capital and reduce inefficiencies.

Within the EU, innovation and technology policy is explicitly directed towards fostering sustainable and climate-neutral economic structures, as articulated in the European Green Deal and the “Fit for 55” package (European Commission, 2019; 2021). Industrial policy instruments are deliberately employed to support and accelerate this transformation.[12] These include measures to promote the expansion of renewable energy capacity, incentivize investments in energy-efficient technologies, and facilitate the diffusion of environmentally compatible production processes. In this way, industrial policy constitutes a central implementation mechanism for climate and environmental policy objectives, aligning economic development strategies with the EU’s legally binding commitment to climate neutrality by 2050 (Regulation (EU) 2021/1119).

Investments in energy networks, digital gigabit infrastructures, and sustainable mobility solutions not only have a sector-specific impact, but also strengthen the economy as a whole. Efficient infrastructure networks promote the diffusion of innovations, increase the attractiveness of a location and boost competitiveness.[13]

We see regional policy as part of industrial policy when it attempts to mobilize regional development, innovation and technology potential. Cluster promotion is a potentially effective instrument: it strengthens regional networks, facilitates regional knowledge and technology transfer, and can also promote industrial value creation in structurally weak areas (e.g. Siegloch et al., 2025).

[11] This aligns, for example, with the recommendation made by EFI (2025, p. 40): ‘Support decisions for vertical industrial policy measures should be made as technology-open as possible and as part of a competitive process’.
[12] Veugelers et al. (2024) provide an overview and critical assessment of green industrial policy in the EU.
[13] For example, several studies show that the expansion of broadband infrastructure can have positive effects on various economic outcomes, in particular including economic growth (Röller and Waverman 2001, Czernich et al. 2011) and productivity (cf. Bertschek et al. 2013, Cambini et al. 2023, Duso et al. 2025c).

Regional policy can fulfil an important distribution policy function. In regions particularly affected by structural change – for example in the course of the coal phase-out – support measures can be taken to create economic prospects, secure employment, and open long-term development paths.[14]

Industrial policy instruments can be used by the European Commission, its member states, or at sub-national level such as regions and federal states. The EU Commission is the guardian of the EU internal market in this respect: through its state aid control, it is intended to ensure that state aid does not lead to distortions of competition and impair the internal market.

2.3 Industrial policy and competition policy: conflicting or congruent objectives

The European Commission has repeatedly emphasized that competition policy is a central pillar of its economic strategy.[15] More recently, it also explicitly linked competition policy and industrial policy, frequently indicating that they should be seen as complementary tools. In a recent contribution submitted to the OECD, the European Commission stated that 'the competitiveness of the EU economy depends to a significant extent precisely on conjugating these two economic policies' (OECD 2024b, p. 2), highlighting the need for alignment between these domains.

Similar positions are held by member states. For instance, the German Federal Ministry for Economic Affairs and Energy (BMWi) writes on its website, 'The protection of competition has proven to be a core element of German economic and regulatory policy. It is an essential prerequisite for prosperity, sustainability and social participation in Germany. Competition promotes reasonable prices, high product quality and innovation'.[16] Based on this assessment, competition policy can be seen as generally congruent with an industrial policy that serves the goal of strengthening competitiveness.

In individual cases, however, there may be a conflict between industrial policy and competition law objectives. For instance, tensions can arise when industrial policy pursues strategic objectives—such as technological sovereignty or resilience—that may conflict with short-term competitive outcomes (Coyle, 2025). In Section 3, we discuss the extent to which competition policy is in line with industrial economic objectives and, if necessary, how competition policy decisions can be adjusted on the basis of industrial policy requirements in the broader sense. Here we consider different institutional approaches to conflicting objectives. In section 4, we examine components of a competition-oriented industrial policy and explore the extent to which competition can be integrated into a modern industrial policy both as a target and as a steering mechanism.

3 Competition policy with (industrial) policy ambitions

3.1 Adjustments to competition law

[14] In the EU, this is expressed in cohesion and structural policy, in particular the European Regional Development Fund (ERDF), the European Social Fund Plus (ESF+) and the Just Transition Fund (JTF), which specifically supports regions undergoing structural change (see Regulation (EU) 2021/1056).

[15] See https://competition-policy.ec.europa.eu/index_en.

[16] See https://www.bmwk.de/Redaktion/DE/Dossier/wettbewerbspolitik.html, last accessed on 16.04.2025.

Guided by the primacy of politics, i.e. the view that political objectives generally take precedence over purely economic or administrative considerations,[17] the limits of decisions guided purely by competition law must be determined.

In several Member States – Germany being a prominent example – the role of the legislature is clearly delineated: it decides upon changes to national competition law, thus delegating specific case decisions to the national competition authority, which then makes these decisions independently on the basis of this mandate. New challenges, such as the potentially anti-competitive behaviour of digital companies with market power, can be addressed by legislation. A key example is the introduction of Section 19a of the ARC in Germany (see Franck and Peitz 2021), which empowers the Bundeskartellamt to take *ex-ante* action against firms of 'paramount significance for competition across markets'. This gave the authority a powerful tool to intervene before the EU's Digital Markets Act (DMA) came into force.

Comparable approaches have also emerged in other jurisdictions. With the Digital Markets, Competition and Consumers Act 2024, the UK created a Digital Markets Unit (DMU) within the Competition and Markets Authority (CMA). The DMU is empowered to designate firms with Strategic Market Status (SMS) and impose binding conduct requirements, as well as enforce remedies against digital gatekeepers. These tools are broadly similar in spirit to Germany's Section 19a ARC but embedded in a distinct institutional framework.

Developments or deficits of a more general nature that have come to light can also be addressed by amending the law. One example from the recent past is the possibility for the Federal Cartel Office to take remedial action following a sector inquiry, irrespective of the infringement, pursuant to Section 32f ARC (cf. Franck and Peitz 2024a, 2024b).

In principle, legislation can provide an independent competition authority with a clear mandate to pursue competition policy objectives with certain available instruments. The independence of the competition authority means that legislators and government cannot influence individual proceedings and cannot exercise any right to issue instructions.[18] Companies affected are free to take legal action.

Such a solution can be described as a technocratic approach. However, the option remains – with effect for the future – to change the legal situation through laws and regulations. In particular, legislators can change competition law at their discretion in the event of new challenges or changed political realities. In addition to restricting or expanding instruments and limiting or expanding the group of addressees for competition policy interventions within the framework of competition law,[19] the legislature also decides on the allocation of funds.

Legislators can also intervene *ex post* by taking action based on specific experience and preventing specific entrepreneurial behaviour. The German Parliament, for

[17] Parliament, as the democratically legitimized legislature, is the central institution that implements the primacy of politics in a parliamentary democracy.

[18] This is analogous to a central bank that pursues the goal of price stability and independently determines interest rate policy.

[19] One example is the thresholds in merger control.

example, in 2019 passed Lex Apple Pay (Section 58a ZAG) in response to Apple denying third-party providers access to the NFC chip and software applications; previously Apple alone controlled the interface for contactless payments. Another concrete example is the French legislature's ban on price parity clauses on hotel booking portals.[20]

As described, competition authorities can be given a clear mandate and be obliged to strengthen competition. However, the legislature may not just have the objectives of promoting competition and increasing consumer welfare.[21] There may also be industrial, regional, or security policy objectives. There are various ways in which these objectives can also be pursued through the enforcement of competition law.

First, the competition authority may be required to take other objectives into account in its competition assessment, insofar as the relevant competition issue is evaluated within a particular context or against a specific standard. For example, resilience can be incorporated through appropriate counterfactual scenarios, as explained in more detail below in the discussion of merger control. Regional policy objectives can be partially reflected by prohibiting balancing – that is, the aggregation of consumer-welfare changes across regionally defined markets.

Secondly, the competition authority could be given a broader mandate encompassing a wider set of objectives. Such a “charged” competition authority would then need to weigh various, potentially conflicting, goals in specific cases and resolve any resulting trade-offs.[22] This could lead not just to greater uncertainty in decision-making practice (and, thus, a loss of legal certainty) but also the increased politicization of the authority. It also raises questions about the degree of the authority’s independence and the nature of any instructions it might receive from policymakers. As Tirole (2023) emphasizes, maintaining the independence of an authority requires that its powers remain limited and well-defined.

Thirdly, the legislature could decide to intervene directly or authorize third parties to revise or override decisions on the basis of objectives outside competition law, following a clearly defined procedure. For example, the legislature, another authority, a ministry, or – upon complaint – a court could intervene on industrial-policy or other public-interest grounds and overturn the decision of the competition authority if the pursuit of other objectives is deemed more important in a specific case. Such intervention could be structured in parallel with the work of the competition authority or subsequently.

An example of a parallel review is found in Germany, where mergers can be prohibited under the Foreign Trade and Payments Act on security or foreign policy grounds, even

[20] If a price parity clause applies, the hotel may not make better offers on certain alternative distribution channels. Legislators in Austria, Belgium, and Italy, have also taken action in this regard (see Peitz 2022).

[21] Extra-competitive considerations can also be smuggled in through the back door by adjusting the consumer welfare standard (which is the metric for the competitive assessment) so that negative externalities (such as pollution) must be taken into account. The problem with such an approach is that it introduces another market failure to be addressed by other regulatory instruments.

[22] This also applies to regulatory authorities, which often have a broader mandate. For example, when allocating frequencies for telecommunications services, the Federal Network Agency is obliged to promote competition (Art. 2 Para. 2 No. 2 TKG) and area coverage (Art. 87 Para. 2 TKG), which can conflict with each other.

if they do not raise competition concerns. Similarly, France has a mechanism under its 'code monétaire et financier' that allows its Ministry of Economy to block foreign investments in strategic sectors for reasons of public security or national interest.

An example of a successive review is the ministerial approval in German merger control, whereby the Federal Minister for Economic Affairs can override a prohibition by the Bundeskartellamt on public interest grounds. Comparable procedures exist in other jurisdictions: in Austria, merger decisions by the Federal Competition Authority can be appealed to the Cartel Court, while the Italian government has the power to exercise "golden powers" to veto or impose conditions on transactions in sectors deemed strategic, including energy, telecommunications, and defence.

These mechanisms illustrate how Member States balance strict competition enforcement with broader policy objectives, either by allowing interventions in parallel to competition authority proceedings or by providing for a structured review after the authority's decision.

Fourthly, exceptional areas can be defined *ex ante* in which competition law does not apply or only applies to a limited extent, thereby restricting the group of addressees – for reasons that lie outside competition law.

We examine these options and give concrete examples in merger control. We then look at agreements between competitors and vertical agreements.

3.2 Merger control

While the European Commission examines mergers relevant across the internal market,[23] National Competition Authorities, like the Bundeskartellamt, examine mergers with national or regional relevance in respective Member States. Merger control is an essential component of competition policy. The basic model of merger control at the EU level and in the member states is preventive *ex-ante* control. In individual cases, it is examined whether a planned merger would impair competition to such an extent that it must be prohibited or whether suitable remedies can eliminate the competition concerns.[24]

Forward-looking merger control takes into account not only the impact of a merger on prices, but also on product diversity and quality as well as on *investment and innovation*. This dynamic approach is playing an increasingly important role in the competition policy debate (see Federico et al. 2020, Duso et al. 2025c, Monopolies Commission, 2025). Merger control geared in this way can be seen as beneficial for strengthening competitiveness.

Anticipated market developments can be taken into account in various ways when examining a merger. For example, it is common practice that a merger may be justified

[23] The European Commission carries out merger control on the basis of Council Regulation (EC) No. 139/2004, the so-called EU Merger Regulation (Mergers Regulation).

[24] Independent *ex-post* evaluations are recommended in order to assess how successful merger control is in practice. One problem with this is that they are often less meaningful due to the limited availability of data. For a discussion, see Duso and Ormosi (2015) or Chapter 3.2. in Monopolies Commission (2024a).

on the grounds that the takeover target would have exited the market in the absence of the transaction – this is the failing firm defence.[25]

Other emerging or probable developments can also be relevant for the evaluation of a merger.[26] Imports may disappear due to trade sanctions, disruptions to transportation routes, or direct political intervention in response to a war. This means that foreign companies can suddenly "disappear" from the relevant market – in whole or in part. Forward-looking merger control can include the possibility of such external shocks in the analysis. This even applies if the merging companies are purely domestic companies that only produce domestically and, thus, are not directly exposed to the risk themselves.

In the case of mergers in markets with significant imports from risk countries (or with extensive production by companies headquartered in risk countries), Motta et al. (2024) see forward-looking merger control with a focus on resilience as including the potential exit or reduced reach of foreign competitors in the analysis when evaluating a merger. Thus, the market result both without and with a merger is determined as if the competition had already been weakened by the exit.[27] The less competitive the market would be after the exit, the more likely it is that the merger would harm consumers. Merger control is tightened accordingly.[28] This can be seen as part of an overall strategy to make the EU internal market more resistant to external shocks.

It is in the nature of merger control that possible positive and negative developments in the market are taken into account asymmetrically with regard to the intensity of competition: As explained, the competition authority must take risks into account in forward-looking merger control. In contrast, it can typically ignore possible positive developments in the market that are not intrinsic to the assessment of a merger, because a merger can also be applied for again at a later date. The authority can then base its subsequent assessment on the new developments.

If industrial-policy (or other public-interest) objectives are to be given greater consideration in merger control, the mandate of the competition authority could be changed: The authority could be obliged to also pursue such objectives and then take them into account in the overall assessment of a merger.[29] However, this would be countered by a possible overburdening of the authority and an increasing politicization of merger control.[30] Recent events in the UK highlight the risks and tensions that can arise when the political and industrial policy objectives of the government are expected to be pursued by the competition authority. In January 2025, the UK Chancellor unexpectedly removed Marcus Bokkerink from his position as Chair of the Competition

[25] This was the case in 2013 in the European Commission's decision to clear the merger between Aegean Airlines and Olympic Air, Case COMP/M.6796 - Aegean/Olympic II.

[26] The forecast period under merger control law is usually three to five years.

[27] This could be made explicit in the forthcoming revision of the Commission's guidelines for the assessment of horizontal mergers.

[28] This view is in line with that of Vickers (2025, p. 3): 'in some major sectors, relevant geographic markets for merger and other assessments might be significantly narrower ... In that case more competition policy intervention, not less, might be warranted as sources of international competition cease to be available'.

[29] For example, the Competition Commission of South Africa (together with the B-BBEE Commission) considers the impact of a merger on Broad-based black economic empowerment (B-BBEE).

[30] For example, the Kronberger Kreis (2020, p. 23) warns against such politicization.

and Markets Authority (CMA) – a move widely perceived as an attempt to align the agency's objectives with the government agenda for economic growth. His replacement, Doug Gurr (formerly of Amazon), stated that merger decisions may now be judged more in terms of industrial strategy and market attractiveness than on competition grounds alone.[31] This incident highlights the challenge of tasking the competition authority with pursuing additional objectives while preserving its independence at the same time.

There are several alternatives to such an approach. The legislature can stipulate that the prohibition of a merger (or the ancillary provisions with which the merger is approved) by the competition authority can be revoked by another institution (e.g. the Ministry of Economic Affairs) on the basis of overriding industrial-policy or other public-interest objectives. It is also conceivable that an institution could review and, if necessary, revise the approval of a merger for reasons not related to competition concerns.[32]

In Germany, there is the possibility of *ministerial approval* under Section 42 ARC: 'The Federal Minister for Economic Affairs and Energy shall, upon application, grant approval for a merger prohibited by the Federal Cartel Office if, in individual cases, the restriction of competition is outweighed by the overall economic benefits of the merger or the merger is justified by an overriding public interest' (Section 42 (1) sentence 1 ARC).

The subsequent sentence explicitly states that 'the competitiveness of the undertakings concerned on markets outside the scope of this Act must also be taken into account'. In spirit, this is in line with the industrial policy demands in the 2019 Franco-German manifesto for an adjustment of merger control at European level, according to which competition on global markets should be given greater consideration.[33] An important difference, however, is that under the ARC, such consideration is only given in exceptional cases of ministerial approval and is not part of the procedure at the Federal Cartel Office.

Before ministerial approval is granted, an opinion must be obtained from the Monopolies Commission, which is made publicly available. The purpose of this is presumably to make use of the independent expertise of the Monopolies Commission and, in the event that ministerial approval is granted despite the Monopolies Commission's recommendation to the contrary, to increase the political costs.[34]

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[31] See, for instance, https://www.gov.uk/government/news/former-amazon-boss-named-interim-chair-of-cma.

[32] Such an approach is possible in Spain. For example, the Spanish Minister of Economy has raised concerns about the takeover of Bank Sabadell by BBVA after it was cleared by the Spanish competition authority and approved by the European Central Bank. The Spanish government is now investigating this merger (as at 30.05.2025). Cf. Jesús Aguado, Spain's government puts BBVA's bid for Sabadell under scrutiny, Reuters, 27.05.2025, https://www.reuters.com/sustainability/boards-policy-regulation/spanish-government-examine-bbvas-bid-sabadell-2025-05-27/

[33] The manifesto entitled "A Franco-German Manifesto for a European industrial policy fit for the 21st Century" is available at https://www.bmwk.de/Redaktion/DE/Downloads/F/franco-german-manifesto-for-a-european-industrial-policy.pdf%3F__blob%3DpublicationFile%26v%3D2, last accessed on 15.04.2025.

[34] There is a special regulation for visual media. According to Section 42 (5) sentence 2 ARC, 'in the case of an application for approval of a prohibited merger in the area of nationwide distribution of television programs by

The practice of ministerial approval has been the subject of controversial public debate in Germany, for example in the cases of Eon/Ruhrgas in 2002 and Edeka/Tengelmann in 2016. Budzinski and Stöhr (2019) describe ministerial approval as a "much-discussed special case" of German competition policy and subject it to a critical economic analysis. Based on the 22 cases to date, they highlight tensions between political motivation and the competition protection objective of the ARC. Budzinski and Stöhr (2023) take a close look at the Eon/Ruhrgas merger and explain in retrospect how the merger damaged the resilience of the German energy industry. The most recent ministerial approval was granted in 2019 in the Miba/Zollern case subject to conditions and was criticized in particular by the Monopolies Commission (cf. Konrad 2020).

In order to make ministerial approval less susceptible to incorrect decisions, Budzinski and Stöhr (2019) and Stöhr and Budzinski (2019) argue for a reform to Section 42 ARC, particularly with regard to the decision-making structure and the permissible grounds for approval. Specifically, legislative control would be conceivable, as discussed in Konrad (2023). On a more abstract level, the question arises as to which legitimacy (legislative, executive, or judicial) is required to soften merger control under competition law and how high the political costs of permission after prohibition by the Federal Cartel Office should be.

The only other EU Member State that allows for governmental intervention based on broad public-interest considerations is Spain. Under the Spanish Competition Defense Act (Ley de Defensa de la Competencia, LDC), merger control is handled by the independent regulator CNMC (Comisión Nacional de los Mercados y la Competencia), which reviews transactions in two phases. If, after the second phase, the CNMC decides to block a merger or approve it subject to conditions, the Ministry of Economy has a 15-day period in which it can refer the case to the Council of Ministers for a final decision.[35] The Council then has up to one month to make a final decision – either upholding, modifying, or reversing the CNMC's ruling – but only for reasons of public interest ("general interest" according to Spanish law), such as national security, public health, environmental protection, research and development, or broader industrial policy objectives.

In other cases, this mechanism may lead to more-stringent conditions: A recent example was the Spanish government's involvement in BBVA's proposed acquisition of Banco Sabadell, where the Council of Ministers imposed additional conditions based on concerns over employment, territorial cohesion, and innovation – the decision was made on June 24, 2025.[36] This demonstrates how Spain's system allows the government to make an exceptional political intervention in merger control that goes

private broadcasters ... an additional opinion must be obtained from the Commission on Concentration in the Media'.

[35] The legal basis for this intervention is Article 60 of the Ley 15/2007 (LDC). Translated into English it says, 'The Minister of Economy and Finance may refer the decision on the concentration to the Council of Ministers for reasons of general interest when, in the second phase, the Council of the National Competition Commission [CNMC]: a) Has decided to prohibit the concentration. b) Has decided to make its authorization subject to compliance with certain commitments proposed by the notifying parties or conditions'.

[36] See https://accionistaseinversores.bbva.com/wp-content/uploads/2025/06/20250624_IP_esp.pdf

beyond purely competition-based analysis and allows for more stringent conditions by the Council.

A notable case where this mechanism produced less stringent conditions occurred in 2012, involving the merger of media companies Antena 3 and La Sexta. Initially, Spain's predecessor to the CNMC (the CNC) approved the merger but imposed stringent conditions aimed at preserving competition. These included separate marketing of TV advertising, limitations on exclusive content acquisitions, transparency in advertising offers, and restrictions on expanding free-to-air channels via leased multiplexes. The merging parties appealed and, in August 2012, the Council of Ministers softened those conditions based on public-interest considerations.[37]

At the EU level, there is no procedure for how industrial policy and other social objectives can be taken into account separately within European Commission merger control.[38] The Commission has the mandate to decide exclusively on the basis of competition aspects in accordance with the Merger Regulation.[39] Given the lack of an independent competition authority at the EU level, the institutional structure is ill-suited to include an explicit mandate to consider industrial policy and other social objectives in merger control.

The decision-making in the Commission involves considerable risks of political influence. A draft decision prepared by the Directorate-General for Competition must be confirmed by the College of all 27 Commissioners; the deliberations are confidential. Typically, the College follows the Competition Commissioner's proposal largely uncritically. In politically sensitive cases, however, it is unclear whether the protection of competition may be sacrificed.

An example of the European Commission facing political pressure but not giving in was the planned merger between Siemens and Alstom (maker of the TGV high-speed trains) of their rail operations. German and French government representatives claimed that the planned merger of Siemens Mobility and Alstom would create a "European champion". Both companies claimed that the merger was necessary to compete with CRRC, the Chinese state-backed rail giant. However, the Commission prohibited the merger on competition grounds (decision of February 6, 2019), thereby following its line of applying applicable competition law (see, for example, Buhart and Henry 2019).

Six years later, the European Commission can feel vindicated: both Siemens and Alstom have grown, strengthening their respective positions in North America. Even CRRC, the supposed "global competitor", still has a negligible European presence.

[37] The decision is available at https://www.cnmc.es/sites/default/files/211819_1.pdf

[38] According to Article 21 (4) of the Merger Regulation, however, Member States may prohibit mergers that fall under the Merger Regulation and that the Commission wishes to clear for non-competitive reasons or impose further conditions on them.

[39] However, the Draghi Report proposes weakening merger control for telecommunications companies in view of the high need for investment in digital networks. In other words, a weakening of competition law is being propagated for industrial policy reasons. In two opinion pieces, we take a highly critical look at the proposal (Duso et al. 2024, Duso and Peitz 2025b): We criticize the proposal to define EU-wide telecommunications markets, which is a fiction that is far removed from reality and would allow the markets in the member states to be increasingly dominated by mergers. See also Vickers (2025).

This example shows that strong competition within Europe does not preclude international competitiveness. On the contrary, it can promote it. The Siemens/Alstom case underscores that the logic for creating European champions through anti-competitive merger is not sound.

Additionally, both companies have made major advances in the development of hydrogen-powered trains, one of the first industrial applications of hydrogen ever – they did so independently of each other. Competition remains the key driver of innovation and technological strength.

In these trying times, it is to be seen whether the Commission will remain steadfast. In April 2025, the CEO of Bertelsmann, Thomas Rabe, expressed hope for a new opportunity for the merger of M6 and TF1. This was halted in 2022 due to concerns raised by the French competition authority. Due to a changed political climate, Rabe now sees potential to create a European media champion.[40]

Advocates of an industrial policy agenda that focus on European champions may want to campaign for a change to the Commission's guidelines for the assessment of horizontal mergers so that, for example, greater account is taken of global competition.[41] In the ongoing revision of the EU merger guidelines, it remains to be seen how merger policy will adapt to such proposals. The consideration of associated out-of-market efficiencies would still fall within the broader competition assessment and might serve as a limiting principle on the creation of European champions.

Secondly, procedures could also be amended at EU level in such a way that, following a decision by the Commission based solely on the current Merger Regulation, objectives outside of competition law could subsequently come into play, for example through an intervention by the European Parliament or the European Council; further objectives could also be included during the judicial review of a prohibition.

While the ministerial approval is a reaction to the merger decision by the competition authority, in other cases, the government or a different government agency of a Member State may scrutinize the merger in parallel to the competition authority. For example, the government may want to prohibit a merger because of different concerns, even though the competition authority lacks sufficient competition concerns to justify a prohibition. These include security policy concerns and resilience considerations regarding the acquisition of domestic companies by non-EU companies.

Security policy concerns have become considerably more important in recent years and may lead to a different outcome than the competition policy assessment. Thus, the acquisition of domestic companies by foreign companies not only requires merger control by the competition authority, but may also need to be reviewed on the basis of security policy aspects.[42]

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[40] See Pitel and Klasa, Bertelsmann chief seeks to revive €3.6 bn French TV merger, Financial Times, April 22, 2025).

[41] Such as in the manifesto mentioned in footnote 27. A critical analysis can be found in Motta and Peitz (2019, pp. 48-49).

[42] In addition to merger control, the transfer of knowledge, for example through the transfer and licensing of patents, can also be relevant to security policy. Other industrial policy considerations can also stand in the way of

We again use Germany as an example to illustrate how this may be implemented. German foreign trade law regulates the acquisition of domestic companies by foreign investors. This means that the provisions of the Foreign Trade and Payments Act (AWG) and the Foreign Trade and Payments Ordinance (AWV)[43] are currently relevant. According to Section 55 AWG, the acquisition of majority shareholdings or significant minority shareholdings in domestic companies by foreign investors may be subject to approval. In particular, this applies to companies active in security-relevant areas or operating critical infrastructures. This may include companies in the energy, water, IT security, and health sectors. The Federal Ministry of Economics and Climate Protection (BMWK) is responsible for reviewing and approving acquisitions. This is to ensure that there is no threat to public safety or order (Section 60 AWV). Thus, in Germany, the acquisition of a domestic company can be prohibited in separate proceedings due to competition concerns (under the ECMR and ARC) or due to security policy concerns.[44]

Similar procedures exist in other European countries. In France, for example, foreign investment screening is governed by Articles L.151-3 et seq. and R.151-1 et seq. of the French Monetary and Financial Code (Code monétaire et financier). These provisions enable the French Ministry of Economy to review foreign investments in companies operating in sensitive sectors, such as defence, energy, and critical technologies, and to block them if necessary. One notable example is the proposed acquisition of Photonis, a manufacturer of night vision technologies for the French military, by Teledyne, a US firm. The transaction was ultimately prohibited in 2020 due to national security concerns.

In Italy, foreign investment screening is regulated by the Golden Power Decree (Law Decree No. 21/2012), which grants the government special powers to block or impose conditions on transactions involving strategic assets in critical sectors.[45] These powers were expanded by the Liquidity Decree (Law Decree No. 23/2020) and further amended by Law Decree No. 21/2022. In 2021, the Italian government invoked these powers to prevent the acquisition of LPE S.p.A., a semiconductor equipment firm, by the Chinese state-owned Shenzhen Investment Holdings, citing threats to national technological sovereignty.

In the Netherlands, the Act on Security Screening of Investments, Mergers and Acquisitions (Wet Veiligheidstoets Investeringen, Fusies en Overnames – Vifo Act) came into force on June 1, 2023. It requires foreign investments in companies active in vital sectors or sensitive technologies to be notified and reviewed in advance. The law applies retroactively to transactions concluded after September 8, 2020. Although the attempted takeover of AkzoNobel by U.S.-based PPG Industries in 2017 occurred

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the transfer of technologies and intellectual property. We will not go into this point further below because it does not relate to competition policy.

[43] As of March 1, 2025, the 21st Ordinance amending the AWV of 22.07.2024 applies.

[44] At EU level, Regulation (EU) 2019/452 created a cooperation mechanism between the Commission and the Member States for the screening of foreign direct investments in the European Union. It entered into force on April 10, 2019, and has been binding since October 11, 2020. However, decisions are made by the individual member states.

[45] Critical sectors include the water, insurance, agricultural and food industries as well as artificial intelligence and biotechnology.

before the Vifo Act, it sparked national debate and contributed to the development of stronger investment screening mechanisms.

Legislators also have the option of defining areas of exemption from merger control, thus exempting sectors from merger control in whole or in part, as was the case in the hospital sector. Section 187 ARC was also amended with the Hospital Care Improvement Act (KHVVG) of December 5, 2024: Section 187 (10) ARC contains a temporary exemption from merger control for hospitals.[46] Accordingly, the examination of a merger is primarily the responsibility of the state authorities responsible for hospital planning and is primarily based on health policy considerations (the state authority confirms that it considers the merger to be "necessary" to improve hospital care). More generally, exemptions may be justified in sectors that are not, or are only partly, organized according to market principles.

3.3 The ban on cartels in the case of agreements between competitors

In general, Article 101 of the Treaty on the Functioning of the European Union (TFEU) prohibits agreements between companies that may restrict competition – this includes agreements between competitors that could lead to price increases. All EU member states are obliged to create procedural regulations that enable effective enforcement of the ban on cartels in accordance with Article 101 TFEU. In Germany, the ban on cartels is explicitly enshrined in the ARC (Section 1 ARC).

As part of a broader strategy that takes into account industrial policy and other public-interest objectives, it is legitimate to ask whether – and, if so, how – the general ban on cartels should be interpreted or possibly relaxed (see OECD 2024a). In particular, the question arises as to those cases in which cooperation between companies that do not serve to coordinate prices or volumes is permitted. There is the possibility of individual exemption pursuant to Art. 101 (3) TFEU and Section 2 ARC. The ARC also explicitly mentions SME cartels in which agreements are made that, according to Section 3 ARC, ‘have as their object the rationalization of economic processes through inter-company cooperation’. Such agreements are permitted if ‘the agreement or decision serves to improve the competitiveness of small or medium-sized enterprises’.

In the EU, exceptions are defined by horizontal block exemption regulations, which allow agreements between competitors on a group basis under certain conditions. This applies to R&D agreements, specialization agreements, and technology transfers, as these are expected to increase efficiency but not significantly impair competition.[47] R&D agreements can also include sustainability targets.[48] Further exemptions created to achieve the EU's environmental policy objectives must be clearly justified.

The European Commission can restrict the application of the ban on cartels in the agricultural sector (Art. 42 TFEU). Since December 2023, Article 210a of the EU

[46] The Monopolies Commission has taken a critical stance on this issue and recommended refraining from any exemption from antitrust law in the hospital sector (see Monopolies Commission, 2020).

[47] Regulations (EU) 2023/1066 and 2023/1067 of the European Commission, both dated June 1, 2023. The Technology Transfer Regulation, 316/2014, is currently being evaluated.

[48] In its guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements (2023/C 259/01), which were published on July 21, 2023, the European Commission addresses sustainability agreements.

Regulation on the common organization of markets in agricultural products has provided that cartel agreements in the agricultural sector are permitted if the parties involved can credibly demonstrate that these agreements support sustainability objectives. In December 2024, the European Commission proposed extending the existing exemptions by three points: promoting the economic viability of small, predominantly family-run, farms; encouraging and supporting young farmers; as well as improving working and safety conditions in both agriculture and processing. This would result in even more far-reaching exemptions from the ban on cartels in the agricultural sector. Due to the alleged urgency, neither an evaluation of the existing exemptions nor an impact assessment of the proposal was carried out. Thus, the agricultural sector is generally moving towards less competition. Whether the lifting of cooperation bans will lead to more sustainability, better offers for consumers, and more resilience is an open question.[49] Overall, it should be noted that the selective softening of competition law is justified here with industrial policy objectives in a broader sense.

In Germany, until 2005, the Federal Minister of Economics was able to make an exception to the general ban on cartels for 'overriding reasons of the economy as a whole and the common good' (Section 8 (1) ARC) or in the event of an immediate 'threat to the existence of the majority of companies in an economic sector' (Section 8 (2) ARC) (see Budzinski and Stöhr 2020). With the 7th amendment to the ARC, this exemption – the so-called ministerial cartel – was deleted without replacement. As Budzinski and Stöhr (2020) rightly argue, a ministerial cartel poses fewer risks to competition than a ministerial approval in merger control in that cartels are reversible and can also be limited in time. Whether a ministerial cartel is therefore the lesser evil depends on whether possible efficiency gains in a merger can also be realized in a ministerial cartel and to what extent the market result of a ministerial cartel would correspond to that of a monopoly market. A revival of the instrument of a ministerial cartel appears unsuitable, at least in the case of hardcore cartels, that is agreements between competitors on production or sales volumes, pricing, or dividing customer groups or territories—often vulnerable to politically motivated interventions that do not serve the public interest.

Outside the EU, several countries allow for exceptions from the cartel prohibition. For example, Australia provides a formal legal mechanism under which certain cartel conduct may be exempted from prohibition. Specifically, the Australian Competition and Consumer Commission (ACCC) can grant authorisation under Sections 88(1A) and 90(7)-(8) of the Competition and Consumer Act 2010 (Cth) for cartel arrangements, such as price fixing or output restrictions, if they are likely to result in a net public benefit and would not substantially lessen competition. Not only is this authorisation process transparent and time-limited, it is also subject to public consultation and review by the Australian Competition Tribunal.

In the United States, statutory exemptions exist. For example, the Webb-Pomerene Act of 1918 (15 U.S.C. §§ 61–66) permits US companies to form export cartels, provided their activities do not restrict domestic trade. Similarly, The Capper–Volstead

[49] The Monopolies Commission recommends that exemptions from the ban on cartels should only be developed further with the utmost restraint. It does not consider an expansion of the exemption regulations to be justified in view of the existing exemptions (Monopolies Commission 2024b).

Act of 1922 (7 U.S.C. §§ 291–292) grants agricultural producers a limited exemption from U.S. antitrust law, allowing them to coordinate in the marketing and sale of their products.[50] These frameworks demonstrate how other jurisdictions have incorporated cartel exemptions into legislation, frequently justifying them on the basis of sectoral or public interest.

3.4 Exceptions for vertical agreements in the EU

The EU's Vertical Block Exemption Regulation regulates the block exemption of vertical agreements between companies from the ban on cartels (Article 101 TFEU) under certain conditions.[51] The block exemption allows such agreements if they meet certain criteria and do not significantly impair competition. In particular, this is intended to enable supply chain coordination to increase efficiency.

Hardcore restrictions, such as fixed and minimum prices or territorial restrictions, are generally excluded from a possible exemption. Fixed book prices are such a hardcore restriction because they are used by publishers to set fixed prices in the retail sector. However, it is exempt from EU competition rules because books are considered "cultural goods".[52] Fixed book prices are permitted in a number of EU countries (and also in some non-EU countries). In Germany, the Book Price Fixing Act obliges publishers to set a fixed retail price for German-language books.[53] All retailers, including online retailers, must then charge the retail price set by the publisher, which makes retail price competition impossible. Fixed book prices are generally viewed negatively in the economic literature with regard to the effects on competition (see, for example, Monopolies Commission 2018, Budzinski et al. 2024). However, a new study by Genakos et al. (2025) on the Italian book market arrives at comes to a positive assessment from the consumer perspective.

Store prices set by branded goods manufacturers were common practice in Germany historically speaking, until they became illegal on January 1, 1974, following the 2nd amendment to the ARC. The reason for this is that price competition is generally considered desirable from a competition perspective, even at the retail level. To our knowledge, no voices have yet been raised to move away from the general ban on fixed prices for reasons of industrial policy. The same applies to the other hardcore restrictions. When it comes to illegal coordination, the Member States' hands are largely tied by Article 101 TFEU.[54]

Even in the case of an abuse of market power (within the meaning of Article 102 TFEU), it is not apparent that exemptions can be justified on the basis of legitimate industrial policy considerations in the enforcement of competition law. If, for example, the market

[50] This exemption applies only when producers organise as genuine agricultural cooperatives that meet the Act's cooperative requirements – meaning that membership is restricted to agricultural producers, the organisation operates for members' mutual benefit on a cooperative basis, and its activities do not amount to monopolisation or other undue restraints of trade.

[51] The current regulation is Regulation (EU) 2022/720 and has been in force since June 1, 2022.

[52] The European Court of Justice has repeatedly confirmed that fixed book prices can be permissible for cultural reasons. This requires them to be justified by legitimate objectives such as the promotion of cultural diversity. A prominent example is the decision on fixed book prices in Austria (Case C-531/07 of April 30, 2009).

[53] It is the wisdom of the German legislature that this does not apply to audio books.

[54] This applies as far as interstate trade is concerned, for which the threshold here is very low.

access of competitors is hindered, this cannot be justified or relativized by the fact that only foreign competitors are affected.

3.5 Application of competition law following industrial policy interventions

So far, we have considered possible restrictions of competition law due to industrial policy considerations. Conversely, harm to competition that has arisen or been exacerbated due to industrial policy interventions can possibly be remedied by competition law. This may be achieved through traditional competition policy measures in the case of observed anti-competitive behaviour. In addition, in countries in which the competition authority can directly intervene as part of a market investigation, this provides another tool to address the fallout from an industrial policy intervention that turned out to be adverse to competition. For example, in Germany, the Federal Cartel Office can order remedial measures following a sector inquiry on the basis of Section 32f ARC.[55]

A similar instrument has been in place in the UK since 2002. One prominent example of how structural intervention can strengthen competition is the unbundling of airports. After its privatization, the British Airports Authority (BAA) owned four airports in southwest England, with over 90 percent of the passenger volume there, and three airports in Scotland, comprising 84 percent of Scottish passenger volume. Following an investigation completed in 2009, the competition authority obliged BAA to sell three specific airports: Edinburgh, Gatwick, and Stansted. BAA subsequently sold Gatwick in 2009, Edinburgh in 2012, and Stansted in 2013. An *ex-post* evaluation by the authority in 2016 concluded that the unbundling had benefited air travellers.

4 Evidence-based and competition-oriented industrial policy

4.1 Evidence-based industrial policy

Technological change, geopolitical uncertainty, and efforts toward decarbonization have led governments to adopt a more active role in shaping markets, raising questions about the extent to which such interventions align with pro-competition principles. In this section, we explore the potential misalignment between competition and industrial policy, examining how competition can serve as a guiding principle in designing and implementing industrial strategies. Modern industrial policy is characterized by an evidence-based and forward-looking approach, where political decisions are guided less by normative principles or historical precedent and more by systematic analysis of the effectiveness of policy instruments in achieving clearly defined objectives.

The challenge lies in reconciling efficiency with broader societal objectives, such as technological sovereignty, regional resilience, and sustainability. Thus, the first step consists of formulating economic policy objectives, for example correcting market failures, securing technological sovereignty, or promoting regional resilience. In a second step, suitable measures to achieve the objectives are selected on the basis of economic theory,[56] empirical evidence, and taking into account their potential

[55] Franck and Peitz (2024b) give some examples of structural problems in the market that were caused by government decisions in which industrial policy or other non-competitive considerations may have played a role. In particular, this applies to the privatization of Deutsche Telekom and Tank & Rast.

[56] This applies in particular to the incentive effects and feedback effects of the instruments under consideration.

effectiveness in achieving the objectives. Conflicting objectives between macroeconomic efficiency and other socially relevant criteria can be systematically identified and analysed. Cost-benefit analyses offer the possibility of making different target values comparable and thus weighable. Market competition can play a central role in both steps, as both a goal of industrial policy and a mechanism for achieving the defined goals efficiently.

Industrial policy is neither per se part of a successful economic policy that aims to strengthen competitiveness, nor is it per se ineffective, as recent empirical research shows (see for instance CMA 2025). Its effectiveness depends crucially on the institutional framework and the specific design of the instruments used. For purposes beyond strengthening competitiveness, success also depends on the coherence of policy objectives.

The impact of industrial policy measures is highly context-dependent. In South Korea, for example, the coordinated promotion of the heavy and chemical industries successfully served as a catalyst for industrial development (Lane, 2025), whereas other examples show that industrial policy measures implemented under conditions of weak governance – characterized by insufficient accountability and limited political capacity – resulted in inefficient resource use and little growth stimulus. China's industrial policy in shipbuilding is viewed ambivalently: although it has stimulated a significant expansion in market entry and production capacities, it has also generated structural overcapacity and low returns on capital (Barwick et al. 2025). Empirical evidence from Criscuolo et al. (2019), based on firm-level data from European countries, shows that investment subsidies can increase manufacturing employment by around 10 percent, but this effect is concentrated among small firms, with little to no impact on the activities of larger firms.

Focusing on innovation dynamics and firm size, research provides additional insights into how industrial policy may shape long-term competitiveness. If policy instruments disproportionately benefit large incumbents, they can unintentionally reinforce market concentration and reduce innovation incentives. Using U.S. data, Argente et al. (2020) find that the private value of patents is particularly high for large companies, suggesting that patents often serve to protect existing market positions rather than to spur new innovation. Pointing to another mechanism, Akcigit and Goldschlag (2023) show that large firms are increasingly hiring inventors, effectively capturing key human capital, thereby limiting innovation competition. This pattern supports concerns that poorly targeted industrial policies – those that strengthen large firms without fostering entry or diffusion – may slow the overall pace of technological progress (see also Fernández-Villaverde et al. 2025).

Empirical findings support an industrial policy that prioritises forward-looking investments in transformative technologies over long-term subsidies for existing industrial structures and is based on the identification of clear shortcomings absent such a policy. Measures that target specific stages of the value chain and address technological or infrastructural bottlenecks have the potential to generate system-wide spillover effects and are particularly effective (Siegloch et al., 2025). Investments in key enabling technologies, such as semiconductors (Goldberg et al., 2024), battery production (Barwick et al., 2024), and digital networks (Duso et al., 2025d), can foster

cross-sector innovation and significantly boost overall economic productivity. Furthermore, the effectiveness of industrial policy is enhanced when instruments such as research funding, infrastructure investment, and skills development are designed to complement one another (see Criscuolo et al., 2022). The challenge lies in creating an integrated industrial strategy that aligns diverse policy tools and objectives across sectors and governance levels (see section 4.4 and Coyle, 2024).

More generally, the empirical findings underline the importance of industrial policy to be evidence-based, transparent, and guided by clearly defined goals that do not shift by the day. Such policy is implemental through processes that entail effective evaluation and adjustment mechanisms. Such adaptive capacity is particularly crucial when designing new policy instruments from the ground up, ensuring they are responsive to changing technological and economic conditions. To this end, evaluation mechanisms that are designed to cover the entire policy cycle are suitable – from the *ex-ante assessment* of planned measures to accompanying or interim evaluations, on the basis of which measures can be adapted, to *ex-post evaluations*.[57]

Digital technologies and modern data analysis methods open new opportunities to record the effectiveness of industrial policy instruments efficiently, promptly, and with a higher degree of precision than in the past. Independent, scientifically sound expertise can play an important role in this context. The concrete institutions that could play such a role depend on the Member State. For example, in Germany, the German Council of Economic Experts (SVR), the Monopolies Commission, the Expert Commission on Research and Innovation (EFI), as well as the policy advisory institutes of the Leibniz Association and universities have the analytical know-how to provide expert support for evidence-based policy. Comparable institutions include the Austrian Institute of Economic Research (WIFO) and the Bureau for Economic Policy Analysis (CPB) in the Netherlands. In some cases, the evaluative role may be taken on by competition authorities or regulatory bodies themselves, potentially supported by external experts. Examples include the UK's Competition and Markets Authority (CMA) and the Netherlands' Authority for Consumers and Markets (ACM), both of which have integrated *ex-post* policy evaluation into their mandates.

An adaptive industrial policy requires institutionalised feedback mechanisms, continuous and systematic data collection, and, where feasible, links between different datasets, ideally on an EU-wide scale. Clear pre-defined criteria for policy adjustment are essential to ensure responsiveness and accountability. In this context, regulatory sandboxes have emerged as a promising tool for fostering industrial and technological innovation. These are controlled, real-world, experimental spaces in which new technologies, business models, or funding instruments can be tested under real conditions. By enabling experimentation within defined parameters of time and scope,

[57] As early as 2013, the Scientific Advisory Board at the Federal Ministry for Economic Affairs and Energy (BMWi) emphasised the importance of systematic and fact-based evaluations in its report "Evaluation of economic policy support measures as an element of evidence-based economic policy" in order to ensure that economic policy goals are achieved efficiently (available at https://www.bmwk.de/Redaktion/DE/Publikationen/Ministerium/Veroeffentlichung-Wissenschaftlicher-Beirat/wissenschaftlicher-beirat-evaluierung-wirtschaftspolitischer-foerdermassnahmen.html. Last accessed on 17.04.2025).

regulatory sandboxes allow policymakers to gather empirical evidence on the effects of innovation while managing potential risks.[58]

A notable example is the AgriFoodTech Sandbox in Navarra, Spain. This initiative provides startups and established firms with access to scientific and regulatory expertise in a controlled environment. It enables companies to test emerging food and agriculture technologies, such as sustainable packaging, precision nutrition, and novel production techniques, while regulators observe and adapt rules in real time.

Energy policy can also adopt the sandbox approach. In Denmark, for instance, the GreenLab project was designated a "Regulatory Energy Test Zone", temporarily lifting certain energy regulations to enable experimentation with renewable energy integration and large-scale green hydrogen production. Similarly, Germany has relevant examples in the form of the "real-world laboratories of the energy transition", which are funded by the Federal Ministry for Economic Affairs and Climate Action.[59] These laboratories test innovative technologies, such as hydrogen applications, cross-sector energy systems, and carbon capture processes, in a protected regulatory environment. The goal is to identify regulatory barriers early on, gain a better understanding of the mechanisms of action, and prepare for the scaling of successful approaches.

At the EU level, the AI Act (Regulation (EU) 2024/1689) formally introduces AI regulatory sandboxes. These are structured environments in which providers of artificial intelligence systems can develop, train, test, and validate innovative AI solutions under the supervision of the relevant authorities. The aim is to facilitate the safe experimentation of AI applications in real-world conditions while ensuring compliance with the EU's new risk-based regulatory framework. According to Article 53 of the AI Act, Member States must establish at least one such sandbox, operating in a transparent, non-discriminatory and inclusive manner with a particular focus on supporting SMEs and start-ups. The aim is to encourage innovation and speed up the adoption of trustworthy AI technologies while protecting fundamental rights and public interests as set out in EU law.

These sandboxes not only enable evidence-based adaptation, but also strengthen the legitimacy of industrial policy measures by promoting learning processes and limiting misguided measures at an early stage. This systematic integration of test environments can make a decisive contribution to the modernization and effectiveness of European industrial policy.

In the face of increasing technological uncertainties and accelerated transformation processes, a successful industrial policy cannot be based on static, once permanently fixed measures. Rather, it is part of a learning-oriented and adaptive policy design that responds to new evidence without resorting to hasty and opportunistic measures.[60]

[58] A new study (Markellos et al. 2024) analyses 199 sandboxes in 92 countries and shows that their prevalence and effectiveness depend heavily on the level of economic development and the legal framework.

[59] See https://www.energieforschung.de/spotlights/reallabore.

[60] For instance, as evaluation research on purchasing incentives in the automotive sector shows, the success of political interventions depends largely on their specific design, timing and market conditions such as demand elasticity (cf. Adda and Cooper 2000, Grigolon et al. 2016).

4.2 Competition-oriented approach

A growing body of empirical research highlights the importance of competitive framework conditions for the effectiveness of industrial policy measures. Aghion et al. (2015), for example, show that industrial policy interventions have positive effects above all when they are combined with functioning competitive mechanisms (see also Aghion et al. 2025). Competition ensures that subsidies and other support measures do not merely preserve inefficient structures but instead incentivise innovation and drive technological progress. In this sense, industrial policy is not in opposition to competition policy but rather operates most effectively within a pro-competitive framework (cf. Piechucka et al. 2024). This view aligns with the official position of the EU, which describes the relationship between industrial policy and competition policy as complementary: 'Both competition policy and industrial policies are policy tools that can foster industrial competitiveness and economic growth.... They are complementary because industrial policy interventions are more effective when deployed on competitive markets and because industrial policies can, on the one hand, address market failures to improve the functioning of competitive markets and, on the other hand, unintendedly undermine competition and competitiveness of poorly designed. Hence the need for pro-competitive industrial policies' (OECD 2024b, p.3).

We also contend that an effective industrial policy is one that adopts a competition-oriented approach (Duso et al. 2025a). This approach forms the foundation of an industrial policy strategy that understands the competitiveness of an economy and functioning competition in the market not as conflicting but as complementary principles. On the one hand, competition is a regulatory policy objective in its own right – as an instrument for limiting concentrations of economic power – and, therefore, can be supported by industrial policy measures. On the other hand, competition acts as a central design principle of industrial policy instruments. This concerns not only competition among the beneficiaries, but also the overall openness of the affected markets. A competition-friendly and transparent design of state support reduces market distortions and uses competition as a driving force for innovation, efficiency, and economic restructuring. This is in line with the recommendation by EFI (2025, p. 41) that, 'in conjunction with competition policy, industrial policy should stimulate competition in order to stimulate innovation activities'. More specifically, according to EFI (2025, p. 41), this means that, 'good industrial policy is characterized by the fact that it promotes entrepreneurial activity. It should primarily facilitate the creation and growth of new companies and largely hold back on supporting established companies'.

State aid control can serve as a model for a competition-oriented approach. The "balancing test" applied in EU state aid control creates an analytical framework for reconciling state aid measures with competitive neutrality (see Duso et al. 2025b, Piechucka et al. 2024). This test serves to weigh the positive effects of state aid – particularly with regard to market failure, external effects, or distributional objectives – against its potential negative effects on competition. Specifically, three central questions are examined: Is the measure necessary to address a clearly defined market failure or to achieve a policy objective? Is the measure proportionate – that is, limited to what is necessary to achieve the objective? Do the positive effects of the aid outweigh any resulting distortions of competition?

In a competition-oriented industrial policy, demand-side instruments also come into focus - such as public procurement, standardization, or CO2 pricing. These instruments can promote competition by increasing market dynamics and counteracting monopolistic structures. The targeted combination of such instruments with supply-side promotion – for example in the form of project-related financing or the promotion of key industrial technologies – offers potential for an effective transformation policy.

Competitive award procedures, such as green procurement, innovation procurement, or defence procurement can be used in a targeted manner to stimulate innovation and support market ramp-ups (Krieger et al. 2024, Chiappinelli et al. 2025). Auction processes – for example in the allocation of emission allowances, frequency spectrum or access to network infrastructures – have also proven to be efficient instruments for allocating resources and ensuring competition. Resilience (security of supply) can be strengthened through the application of competition-oriented capacity mechanisms (Fabra et al., 2022).

Regulatory measures, such as open access obligations, interoperability standards, or the avoidance of exclusive usage rights, are of central importance in order to ensure that state-funded technologies and infrastructures are also accessible to third parties and that no new barriers to market entry are created (Duso et al., 2025b). An industrial policy that not only allows competition, but systematically incorporates it into its design, not only increases economic efficiency, but also resilience to external shocks and technological upheavals. It creates the institutional conditions for a long-term dynamic, innovation-driven market structure.

The implementation of a competition-oriented approach in industrial policy requires institutional anchoring. Institutions such as the UK's Advanced Research and Invention Agency (ARIA), the Federal Agency for Leap Innovations (SPRIND) in Germany, or the Defence Innovation Agency in France offer different models for this. Such agencies pursue an open, competitive, and unbureaucratic approach to steer mission-oriented innovation for competitiveness and security: through ideas competitions, flexible financing instruments – often coordinated with private investors – and experimental funding formats, the diversity of technological solutions is promoted in a targeted manner instead of defining technological paths in advance. This competitive structure favours disruptive innovations and, at the same time, lowers the barriers to entry for start-ups and research-intensive small and medium-sized enterprises (SMEs). For instance, thanks to its institutional autonomy and experimental orientation, SPRIND is an example of an adaptive funding practice. The model is scalable – for example by transferring central principles to other policy areas, such as defence. The decisive factor here is the willingness to deal with uncertainty and create space for targeted experiments.

4.3 Supranational coordination

There are benefits for the EU member states if industrial policy measures are coordinated more closely, decision-making processes are accelerated, and investments are bundled in strategically relevant areas. These include not just an improved financial framework for start-ups, scale-ups, and technological innovation but also a more efficient EU research program.

The integration of the EU internal market and, as explained in Section 3, the consistent application of competition law strengthens the competitiveness of the EU economy. By reducing internal barriers to trade and harmonizing regulations, transaction costs within the EU are eliminated, which leads to better use of resources and economies of scale. In turn, this promotes the efficiency and innovative capacity of companies. An effective competition policy ensures that market power is not abused and that markets remain contestable, dynamic, and innovation-friendly.

A competition-oriented European industrial policy strengthens the EU's ability to strategically address global challenges such as the digital transformation and climate change, issues that transcend national borders and are not typically tackled effectively through isolated national approaches. Coordinated measures such as the European Green Deal Industrial Plan or the European Chips Act can be seen as attempts to design policies that combine competitiveness with sustainability and sovereignty goals.

It is crucial for the success of such initiatives in terms of strengthening competitiveness that they are not characterized by protectionist considerations but rather understand international competition and open markets as drivers of innovation and efficiency. Finding the right balance between strategic autonomy and open markets, between targeted promotion and competitive neutrality, is the central challenge for a sustainable European industrial policy.

As called for in the Draghi Report, in an increasingly multipolar global economy, it may be important for the EU to establish strategic partnerships to secure supply chains in certain areas (Draghi 2024a, p. 7) to become more resilient and not jeopardize competitiveness. The aim is to reduce dependencies – for example, in critical raw materials or key digital technologies – in order to reduce the structural vulnerability of the European economy. Its implementation requires the EU as a whole and not individual member states.

The Important Projects of Common European Interest (IPCEI) represent a prominent example of a coordinated European approach. They enable the targeted promotion of strategically important technologies and value chains through joint efforts by several EU member states combining public and private investments. IPCEIs provide a legal framework that complies with EU state aid rules and, at the same time, opens up more flexible support options for key technologies. For example, joint projects have been initiated in the areas of microelectronics, battery cell production, and hydrogen technology with the aim of strengthening European technological sovereignty and reducing critical dependencies (see OECD 2024b).

What characterizes the IPCEI is the ambition to go beyond what individual companies or member states could achieve alone, generating positive spillover effects for the entire EU economy. Ensuring transparency in procedures and open access for companies are key principles to minimise competition-distorting effects. The recently established "Joint European Forum for IPCEI" (JEF-IPCEI), which is made up of representatives of the EU Commission and the member states, aims to identify strategic areas for future IPCEI and to make the design, implementation, and governance of these projects more efficient.

Supranational coordination and alliances are not necessarily limited to EU Member States and can include other European and/or non-European countries.[61]

4.4 Whole-of-government approach

An effective competition-oriented industrial policy requires an integrated whole-of-government approach (see Aoki et al. 2024) that systematically brings together different policy areas. Cross-sectoral coordination is intended to overcome diverse and complex challenges, such as digital and ecological change. Climate, energy, trade, and consumer policy shall be conceived and designed together with industrial and competition policy in order to exploit synergies and avoid contradictions. The fragmented consideration of individual policy areas, on the other hand, can lead to inconsistent incentive structures and inefficient allocation of resources. Effective competition is one of the central guiding principles for all economic policy decisions.[62]

A central element of this integrated approach could be a systematic *ex-ante* analysis of the impact on competition ("competition check") that is carried out by an independent external institution. Similar to the regulatory impact assessment, industrial policy measures would be examined for potential distortions of competition and dynamic market effects prior to their implementation. This institutionalised mechanism would help to ensure that industrial policy interventions actually serve the defined social objectives and are not driven by vested interests or opportunistic political considerations of the day. The involvement of external institutions – such as the German Council of Economic Experts, the Monopolies Commission or specialized scientific institutions – can also strengthen the independence and credibility of the assessment.

As part of a coherent industrial policy strategy, the role of state investments and ownership must also be critically reflected upon. While public investments can play a strategic role, state shareholdings carry the risks of political influence over corporate decisions and in the allocation of subsidies in the sector. This can lead to market distortions, inefficient resource allocation, and potential barriers to innovation.[63]

In strategically important sectors, so-called "golden shares" could serve as a targeted instrument to secure state influence without this being associated with comprehensive entrepreneurial control or financial influence. These specific shareholding rights allow the state to exercise a veto right on clearly defined strategic decisions such as changes

[61] A concrete example in technology policy is the European Molecular Biology Laboratory (EMBL) which, in addition to EU member states, also has the UK, Israel, and Switzerland as members and Australia as an associate member.

[62] The US government provided an example of such an integrated whole-of-government approach with Executive Order 14036 of July 9, 2021, with which President Biden initiated a cross-departmental strategy to strengthen competition in the US domestic market. The order requires over a dozen federal agencies to implement specific measures to combat anti-competitive practices and promote open markets and coordinates these via a specially established White House Competition Council.

[63] Mang and Schmidt (2023) provide empirical evidence of the preferential financial support for state hospitals compared to non-state hospitals in Germany during the 2009 financial crisis.

in ownership or the relocation of critical infrastructure,[64] while the operational management and economic direction of the company remain independent of the state.

However, to prevent creeping state control or industrial policy micromanagement, the use of such an instrument should be strictly limited to clearly defined strategic areas and embedded within transparent governance structures. Alternatively, the state can create a legal framework that allows it to block the acquisition of domestic companies by foreign companies in the event of security policy and resilience concerns (see section 3.2). Such intervention mechanisms can apply to several sectors that are considered critical and address not only takeovers, but also shareholdings and direct investments. When coordinating different economic policy instruments, it should not be overlooked that this can be associated with risks. If industrial policy or geopolitical considerations begin to influence the enforcement of competition law, this could potentially undermine the legal integrity, predictability, and credibility of the regulation itself and of the institution that is supposed to enforce it; Section 3 explains how these risks can be reduced.

It should also not be overlooked that an adjustment of competition policy practice (including procurement practice) in pursuit of industrial policy ambitions may provoke countermeasures from international partners, ultimately damaging the EU's reputation as a rules-based player. A relevant example is the discussion surrounding the enforcement of competition policy and regulation in the digital sector (DMA and Digital Services Act, DSA) as a strategic response to the trade disputes triggered by the imposition of new tariffs by the Trump administration in April 2025. While geopolitical considerations may well influence the EU's broader industrial or innovation policy, it seems problematic to allow these to feed into the enforcement of competition and regulatory law (such as DMA and DSA). This would lead to more legal uncertainty and expose the authorities to greater external political pressure from companies and foreign governments.[65]

5 Conclusion and outlook: Industrial policy in uncertain times

In times of major challenges – ranging from climate change and digital disruption to geopolitical power shifts – Europe is faced with the task of redefining its industrial policy orientation. The Draghi Report proposes a set of measures for Europe to address these diverse and urgent challenges. This article examines how a sustainable, competition-oriented industrial policy could be designed, in which traditional regulatory principles are combined with pragmatic approaches to strengthen industrial capacities and technological sovereignty. In this context, European competition law alongside the national competition laws of its Member States provides essential anchors for designing a coherent European industrial policy. They help ensure that industrial policy remains grounded in market principles and prevent a drift toward corporatism or excessive state intervention.

[64] One concrete example is the Brazilian government's golden share in Embraer. Embraer's articles of association stipulate which decisions the Brazilian government can veto. For example, the right of veto applies to the establishment and/or modification of military programs as well as the discontinuation of the supply of spare parts for the maintenance of military aircraft.

[65] Franck et al. (2025), for example, point out this problem in a newspaper article.

Competition policy can be seen as an indispensable component of a comprehensive industrial strategy, as the institutional stability and predictability of competitive framework conditions represent an often underestimated, albeit decisive, location factor for the long-term attractiveness of investment and innovation. Conversely, if competition law is applied selectively or is politically influenced, it jeopardizes competition on the merits and erodes trust in the regulatory system. Empirical studies show that transparently enforced competition rules lead to higher productivity (Buccirossi et al. 2013) and innovation rates (Aghion et al. 2005).[66] Industrial policy measures that distort competitive processes may yield short-term gains but tend to weaken the economy's innovative capacity in the long term. In this light, competition policy is not a constraint on industrial policy, but rather a central component that ensures long-term competitiveness.

This article examines how industrial policy objectives and competition law principles can be meaningfully reconciled. Legislators have the option of adapting competition law in response to evolving market dynamics or emerging policy challenges, for example by amending the law to take account of new facts or by adjusting the scope of action of the competition authorities. It is also conceivable to integrate industrial policy, regional policy or security policy objectives into competition assessments, provided that the functioning of markets is not jeopardized. In exceptional cases, it may be desirable to reverse the decision of the competition authority, for example in the area of merger control, when other important societal goals are at stake. However, to not endanger the role of competition policy, interventions overturning a prohibition must remain the exception, not just being guided by transparent criteria that preserve the integrity and credibility of competition enforcement but also being subject to judicial review. The competition authority is arguably not the right institution to deal with this and such interventions may be undertaken by other bodies.

Modern industrial policy should be geared towards several objectives: enhancing competitiveness, strengthening strategic resilience, and ensuring security policy robustness. Such a policy will promote both efficiency and innovation, while at the same time aiming to reduce critical dependencies, thus responding to geopolitical challenges. The key challenge lies in addressing potential trade-offs between these objectives within a coherent institutional framework that does justice to the existing institutional and economic structures in Europe.

A competition-oriented industrial policy relies on evidence-based approaches, integrating competition both as a goal and as a mechanism for the efficient allocation of public support. The use of digital technologies and modern analytical tools enable precise and timely measurement of the effectiveness of industrial policy measures. Policy sandboxes can be used to increase the effectiveness of these measures. Such an industrial policy pursues the desired objectives without significantly impairing the functioning of markets and, in the best case, strengthens them. The so-called balancing test from EU state aid control – which identifies market failures, examines

[66] International trade and competition from imports also influence the rate of innovation. In certain cases, more competition can lead to less innovation, namely if it reduces the additional profits from innovation. See Shu and Steinwender (2018).

the proportionality of measures, and weighs up competition effects – offers a valuable analytical toolbox for structuring industrial policy measures.

The implementation of a competition-oriented industrial policy at the EU level requires coordination between the member states and the European institutions. Whereas state aid control remains central in order to avoid fragmentation through 27 independent national industrial policies, a common European framework for a coordinated industrial policy could contribute to coherence and efficiency. Moreover, an *ex-ante perspective* in which the EU formulates industrial policy guidelines for strategic sectors is becoming increasingly important. Programs such as the Important Projects of Common European Interest (IPCEI) show how coordinated investments in key technologies – such as microelectronics, hydrogen, or battery cell production – are possible without significantly restricting competition. However, stronger governance, greater transparency, and a move toward common European financing would further enhance the effectiveness and legitimacy of these instruments.

Amid intensifying global competition, Europe is facing the task of developing an independent, sustainable concept. A large-scale subsidy race with players like China and the USA brings the risk of fiscal burdens and potential disincentives for private investment. Thus, it is crucial to strengthen structural location factors to improve long-term conditions for private sector innovation and investment activities, ultimately strengthen competitiveness. These factors include not only the depth and integration of the EU internal market, but also its regulatory capacity and institutional frameworks that support innovation processes and efficient resource allocation.

A holistic European industrial policy can also incorporate preferential trade agreements with third countries, coordinate direct investment in resource-rich countries, build strategic stocks in selected critical areas, and develop industrial partnerships that secure supply chains for key technologies.[67]

[67] The interplay between industrial and trade policy is an important topic that lies outside the scope of this article.

Bibliography

Adda, J. and R. Cooper (2000), Balladurette and Juppette: A discrete analysis of scrapping subsidies, *Journal of Political Economy* 108(4), 778-806.

Aghion, P., N. Bloom, R. Blundell, R. Griffith and P. Howitt (2005), Competition and innovation: An inverted-U relationship, *Quarterly Journal of Economics* 120(2), 701-728.

Aghion, P., J. Cai, M. Dewatripont, L. Du, A. Harrison and P. Legros (2015), Industrial policy and competition, *American Economic Journal: Macroeconomics* 7, 1-32.

Aghion, P., M. Dewatripont and P. Legros (2025), Competition-friendly industrial policy, *CPI Antitrust Chronicle* 2025(2), pp. 34-38.

Aiginger, K. and D. Rodrik (2020), Rebirth of industrial policy and an agenda for the twenty-first century. *Journal of Industry, Competition & Trade* 20, 189-207.

Akcigit, U. and N. Goldschlag (2023), Where have all the "creative talents" gone? Employment dynamics of US inventors, NBER Working Paper 31085.

Aoki, N., M. Tay and S. Rawat (2024), Whole-of-government and joined-up government: A systematic literature review, *Public Administration* 102(2), 733-752.

Argente, D., S. Baslandze, D. Hanley and S. Moreira (2020), Patents to products: Product innovation and firm dynamics, CEPR Discussion Paper 14692.

Arjona, R., W. Connell and C. Herghelegiu (2023), An enhanced methodology to monitor the EU's strategic dependencies and vulnerabilities, Single Market Economics WP 2023/14, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (European Commission), Chief Economist Team.

Baldwin, R.E. and F. Robert-Nicoud (2007), Entry and asymmetric lobbying: Why governments pick losers, *Journal of the European Economic Association* 5(5), 1064-1093.

Barwick, P.J., H.-S. Kwon, S. Li, Y. Wang, and N. B. Zahur (2024), Industrial policies and innovation: Evidence from the global automobile industry, NBER Working Paper No. w33138.

Bertschek, I., D. Cerquera and G. J. Klein (2013), More bits - more bucks? Measuring the impact of broadband internet on firm performance, *Information Economics & Policy* 25(3), 190-203.

Buccirossi, P., L. Ciari, T. Duso, G. Spagnolo and C. Vitale (2013), Competition policy and productivity growth: An empirical assessment, *Review of Economics and Statistics* 95(4), 1324-1336.

Budzinski, O., A. Stöhr and J. Schmid (2024), Die Buchpreisbindung: Evergreen oder Auslaufmodell?, *List Forum für Wirtschafts- und Finanzpolitik* 50, 229–247.

Budzinski, O. and A. Stöhr (2019), Die Ministererlaubnis als Element der deutschen Wettbewerbsordnung: eine theoretische und empirische Analyse, *ORDO* 69, 216–258.

Budzinski, O. and A. Stöhr (2020), Ministererlaubnis für Kartellfälle: Kooperation im Sinne des Gemeinwohls?, *Zeitschrift für Wettbewerbsrecht* (ZWeR) 2020, 437–457.

Budzinski, O. and A. Stöhr (2023), Energieversorgungssicherheit als Gemeinwohl: Auswirkungen des Instrumentes Ministererlaubnis - Teil 2, *Wirtschaft und Wettbewerb* (WuW) 2023, 463–467.

Buhart, J. and D. Henry (2019), Industrial policy to trump competition? The Siemens/Alstom railway merger and its aftermath, *Concurrences* No 2-2019, 6-12.

Cadot, O., L.H. Röller and A. Stephan (2006), Contribution to productivity or pork barrel? The two faces of infrastructure investment, *Journal of Public Economics* 90(6-7), 1133-1153.

Cambini, C., E. Grinza and L. Sabatino (2023), Ultra-fast broadband access and productivity: Evidence from Italian firms, *International Journal of Industrial Organization* 86, 102901.

Chiappinelli, O., L.M. Giuffrida and G. Spagnolo (2025), Public procurement as an innovation policy: Where do we stand? *International Journal of Industrial Organization* 100, 103157.

CMA (2025), Industrial policies: New evidence for the UK, Report no. 3, 9 April 2025.

Coyle, D. (2024), Everything everywhere all at once: Competition policy and industrial policy choices in an era of structural change, *Oxford Review of Economic Policy* 40, 718-728.

Coyle, D. (2025), From Conflict to Coordination: Europe's Industrial and Competition Policies Amid Geoeconomic Uncertainty, *Intereconomics*, *4*, 205–209.

Criscuolo, C., L. Díaz, G. Lalanne, L. Guillouet, C.-É. van de Put, C. Weder and H. Zazon Deutsch (2023), Quantifying industrial strategies across nine OECD countries, OECD Science, Technology and Industry Policy Papers.

Criscuolo, C., N. Gonne, K. Kitazawa and G. Lalanne (2022), An industrial policy framework for OECD countries: Old debates, new perspectives. *OECD Science, Technology and Industry Policy Papers*, No. 127, OECD Publishing, Paris, https://doi.org/10.1787/0002217c-en.

Criscuolo, C., R. Martin, H.G. Overman and J. Van Reenen (2019), Some causal effects of an industrial policy, *American Economic Review* 109(1), 48-85.

Czernich, N., O. Falck, T. Kretschmer and L. Woessmann (2011), Broadband infrastructure and economic growth, *Economic Journal* 121 (552), 505-532.

Draghi, M. (2024a), The Future of European Competitiveness - A Competitiveness Strategy for Europe, Part A, report for the European Commission.

Draghi, M. (2024b), The Future of European Competitiveness - A Competitiveness Strategy for Europe, Part B, report for the European Commission.

Duso, T., L. Bernhardt and J. Piechucka (2025c), The evolution of 'theories of harm' in EU merger control, *Oxford Review of Economic Policy* 40(4), 729-762.

Duso, T., M. Gornig and A. Schiersch (2025a). For a strategic, European, and competition-oriented industrial policy, *Intereconomics* 61(3), forthcoming.

Duso, T., M. Motta, M. Peitz and T. Valletti (2024), Draghi is right on many issues, but he is wrong on telecoms, VoxEU, September 17, 2024.

Duso, T., M. Nardotto and A. Schiersch (2025d), Broadband and productivity: Structural estimates for Germany, *Journal of Economic Behavior & Organization* 237, 107133 .

Duso, T., M. Nardotto and J. Seldeslachts (2025b). A retrospective study of State Aid Control in the German broadband market, *Journal of the European Economic Association*, forthcoming.

Duso T. and P. Ormosi (2015), Capacity building workshop on the ex-post evaluation of competition authorities' enforcement decisions: A critical discussion, OECD Paper DAF/COMP/WP2(2015)8.

Duso, T. and M. Peitz (2025a), Wettbewerbspolitik und Industriepolitik unter einem Hut, *Perspektiven der Wirtschaftspolitik* 26, 323-343.

Duso, T. and M. Peitz (2025b), Facts and fiction in the Draghi report, *Concurrences* No. 2-2025, 1-8.

EFI – Commission of Experts for Research and Innovation (2025), *Report on Research, Innovation and Technological Performance in Germany 2025*. Berlin: EFI. European Commission (2004), Communication from the Commission: A proactive competition policy for a competitive Europe, COM (2004) 293.

European Commission (2019), The European Green Deal, COM(2019) 640 final, Brussels, 11 December 2019.

European Commission. (2021), 'Fit for 55': Delivering the EU's 2030 Climate Target on the Way to Climate Neutrality, COM(2021) 550 final, Brussels, 14 July 2021.

European Commission (2024), Protecting competition in a changing world - Evidence on the evolution of competition in the EU during the past 25 years. Report.

Evenett, S., A. Jakubik, F. Martin and M. Ruta (2024), The return of industrial policy in data, IMF WP 24/1, Washington, DC, International Monetary Fund.

Federico, G., F. Scott Morton and C. Shapiro (2020), Antitrust and innovation: Welcoming and protecting disruption, *Innovation Policy and the Economy* 20(1), pp. 125-190.

Fabra, N., M. Motta and M. Peitz (2022), Learning from electricity markets: How to design a resilience strategy, *Energy Policy* 168, 113116.

Fernández-Villaverde, J., Y. Yu and F. Zanetti (2025), Defensive hiring and creative destruction. NBER Working Paper w33588.

Franck, J.-U., J. Haucap and M. Peitz (2025), Wettbewerb stärken in unsicheren Zeiten, Frankfurter Allgemeine Zeitung, April 8, 2025, p. 16.

Franck, J.-U. and M. Peitz (2021), Digital platforms and the new 19a tool in the German competition act, *Journal of European Competition Law and Practice* 12, 513-28.

Franck, J.-U. and M. Peitz (2024a), Germany's New Competition Tool: Sector Inquiry with Remedies, *Journal of European Competition Law & Practice* 15, 515-525.

Franck, J.-U. and M. Peitz (2024b), Reparatur am Markt: Die Sektoruntersuchung nach der 11. GWB-Novelle, *Perspektiven der Wirtschaftspolitik* 25, 20-27.

Fumagalli, C., M. Motta and M. Peitz (2020), Which role for state aid and merger control during and after the Covid crisis?, *Journal of European Competition Law & Practice* 11, 294-301.

Genakos, C., M. Pagliero, L. Sabatino and T. Valletti (2025), Cultural exception? The impact of price regulation on prices and variety in the market for books, Centre for Economic Performance Discussion Paper No. 2085.

Goldberg, P.K., R. Juhász, N. Lane, G.L. Forte and J. Thurk (2024), Industrial policy in the global semiconductor sector, NBER Discussion Paper No. w32651.

Grigolon, L., N. Leheyda and F. Verboven (2016), Scrapping subsidies during the financial crisis-evidence from Europe, *International Journal of Industrial Organization* 44, 41-59.

Guillard, C., R. Martin, P. Mohnen, C. Thomas and D. Verhoeven (2023), Efficient industrial policy for innovation: Standing on the shoulders of hidden giants, CEP Discussion Paper No. 1813.

Hottenrott, H., Inderst, R., Janeba, E., Schmidt, K., Wambach, A., & Zulehner, C. (2025), Industriepolitik in Europa, *Perspektiven der Wirtschaftspolitik*, 26, 272-289.

Juhász, R., N. Lane, E. Oehlsen and V. C. Pérez (2025), Measuring industrial policy: A text-based approach, NBER Working Paper No. w33895.

Juhász, R., N. Lane and D. Rodrik (2023), The new economics of industrial policy, *Annual Review of Economics* 16, 213-242.

Konrad, M. (2020), Die Ministererlaubnis Miba/Zollern und die Reform der Ministererlaubnis mit der 10. GWB-Novelle, *Wirtschaft und Wettbewerb* (WuW) 2020, 244-249.

Konrad, M. (2023), Von der Ministererlaubnis zur Parlamentserlaubnis?, in: A. Kirk, P. Offergeld and T. Rohner (eds.): *Kartellrecht in der Zeitenwende*, Nomos, pp. 281-286.

Krieger, B., L. Füner, and M. Prüfer (2024), Which start-ups win public procurement tenders? ZEW Discussion Paper No. 23-072.

Kronberger Kreis (2020), Kein Rückzug in die Festung Europa!, Kronberger Kreis-Studien, No. 66.

Lane, N. (2025), Manufacturing revolutions: Industrial policy and industrialization in South Korea*, Quarterly Journal of Economics* 140, 1683–1741.

Letta, E. (2024), Much more than a market: Speed, Security, Solidarity. Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens (https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf).

Mang, C. and K.M. Schmidt (2023), Does state ownership bias support government? Evidence from the financial crisis, CEPR Discussion Paper 18080.

Markellos, R.N., S.F. Ennis, B. Enstone, A. Manos, D. Pazaitis and D. Psychoyios (2024), Worldwide adoption of regulatory sandboxes: Drivers, constraints and policies, *CCP Working Paper 24-02.*

Monopolies Commission (2005), *Hauptgutachten 2002/2003 - Wettbewerbspolitik im Schatten `Nationaler Champions´*, Nomos Verlag.

Monopolies Commission (2018), *Die Buchpreisbindung in einem sich ändernden Marktumfeld*, Special Report 80.

Monopolies Commission (2020), *Main Report XXIII: Competition 2020*, Nomos Verlag

Monopolies Commission (2024a), *Main Report XXV: Competition 2024*, Nomos Verlag.

Monopolies Commission (2024b), Monopolies Commission on the competitive situation in the food supply chain, *Policy Brief*, Issue 13.

Monopolies Commission (2025), EU competition law: More speed, more impact!, *Policy Brief*, Issue 14.

Motta, M., V. Nocke and M. Peitz (2024), Geopolitical risks and prudential merger control, *Journal of European Competition Law & Practice* 15, 341-348.

Motta, M. and M. Peitz (2019), Challenges for EU merger control, *Concurrences* No. 2-2019, 44-49.

Motta, M. and M. Peitz (2022), Intervention triggers and underlying theories of harm, in: M. Motta, M. Peitz and H. Schweitzer (eds.), *Market Investigations: A New Competition Tool for Europe?* Cambridge, Cambridge University Press, 16-89.

OECD (2024a), Pro-competitive industrial policy, OECD Roundtables on Competition Policy Paper, DAF/COMP(2024)3.

OECD (2024b), Procompetitive industrial policy - note by the European Union, version of June 12, 2024, DAF/COMP/WD(2024)18.

Peitz, M. (2022), The prohibition of price parity clauses and the Digital Markets Act, *TechREG Chronicle*, Competition Policy International, January 2022.

Piechucka, J., L. Sauri-Romero and B. Smulders (2024), Competition and industrial policies: Complementary action for EU competitiveness, *Journal of Competition Law & Economics* 20(4), 384-408.

Council for Research and Technology Development (2021), Council recommendation for a reorientation of Austrian industrial policy, 20.10.2021, available at https://forwit.at/archive/files/rat-fte-pdf/einzelempfehlungen/2021/211020_Empfehlung_Industriepolitik.pdf

Röller, L.-H. and L. Waverman (2001), Telecommunications infrastructure and economic development: A simultaneous approach, *American Economic Review* 91(4), 909-923.

Shu, P. and C Steinwender (2019), The impact of trade liberalization on firm productivity and innovation, in: J. Lerner and S. Stern (eds.), *Innovation Policy and the Economy, Volume 19*, National Bureau of Economic Research.

Siegloch, S., N. Wehrhöfer and T. Etzel (2025), Spillover, efficiency, and equity effects of regional firm subsidies, *American Economic Journal: Economic Policy* 17(1), 144-180.

Stöhr, A. and O. Budzinski (2019), Gemeinwohl durch Marktmacht? – Eine Ex-Post-Analyse der Ministererlaubnis-Fälle, *Wirtschaft und Wettbewerb* (WuW) 2019, 509-514.

Talbot, C. (2016), Ordoliberalism and balancing competition goals in the development of the European Union, *Antitrust Bulletin* 61, 264-289.

Tirole, J. (2023), Socially responsible agencies, *Competition Law & Policy Debate* 7, pp. 171-177.

Vickers, J. (2025), Should competition monopolize merger policy? *International Journal of Industrial Organization* 101, 103174.

Veugelers, R., S. Tagliapietra and C. Trasi (2024), Green industrial policy in Europe: Past, present, and prospects, *Journal of Industry, Competition & Trade* 24, Article 4.