



Industrial policy in the EU and Spain: Recent debates

An examination of industrial policy in the EU and Spain reveals the need to reduce key external dependencies, or interdependencies, as well as arrive at an adequate path that avoids protectionist retaliation to the recently passed US Inflation Reduction Act, while at the same time harnesses the economic potential of the bloc. Going forward, taking into consideration current obstacles and limitations both at the EU and Spanish level, it will be necessary to embrace the appropriate industrial policy measures to ensure the transformation of the Spanish economy, in particular through maximisation of NGEU funds.

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Abstract: This paper provides an overview of the key elements of the current debate surrounding the conception, design, and implementation of industrial policy in the EU and Spain. Firstly, it outlines the six fundamental external dependencies, or interdependencies, characterising the EU and its member states, which are concentrated in the areas of: trade, energy, raw materials, digitalisation, finance and labour markets/immigration. Next, it looks at the Inflation Reduction Act (IRA) passed in the US in 2022, which includes certain protectionist

provisions, and the key responses being explored by the EU. There seems to be consensus around: the importance of avoiding an escalation in trade tensions, assessing the opportunities the IRA may imply for certain EU sectors and keeping trade negotiations open to limit the impact of the protectionist elements. Thirdly, turning to policy in Spain, we analyse some of the obstacles that have hindered the deployment of plans for the country's strategic sectors devised under the umbrella of the NGEU funds: structural/regional weaknesses of the Spanish economy;

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obstacles arising from regulation and lack of administrative agility; rigidity in tender terms; and, potential to increase agreement among business associations and local authorities. Tackling these obstacles will be key in order to implement appropriate industrial policy measures to ensure the transformation of the Spanish economy.

Introduction

Debates around industrial policy and direct state intervention in companies' productive decisions are frequent but have attracted growing interest of late. Discussions regarding the objectives and best instruments for “coordinating” or “orienting” the productive apparatus tend to receive increase attention during and after crises, which is why industrial policy has returned to the heart of the economic and political debate in the wake of the economic and financial crisis of 2008 and ensuing succession of crises, marked by the pandemic and Russia's invasion of Ukraine.

Despite the fact that the term “industrial policy” is widely used, there is no single definition that offers a good general fit for all countries or situations. In broad terms, industrial policy consists of public policies designed to restructure an economy, sometimes with the aim of correcting the odd market failure, other times with the goal of stimulating public-private partnership and still others with the objective of fostering social and economic transformation. The key instruments of industrial policy include public grants, loans, regulatory changes, state participation in private companies and, in their most interventionist form, a degree of protectionism or mandatory local production and/or local profit reinvestment clauses (Arrilucea *et al.*, 2020; IMF, 2022; Fuest, 2023; Myro, 2016; Rodrik, 2004, 2022).

The aim of this paper is to analyse the main industrial policy debates emerging in the EU and Spain since the COVID-19 crisis and draw some conclusions. The recent Inflation Reduction Act (IRA) passed in the US in 2022 is a key development and has sparked very important debate and reactions in the EU. This article is therefore structured as follows: a review of industrial policy in the EU prior to the IRA; an analysis of the EU's key reactions to the IRA; an assessment of implications for Spain; and lastly, a set of conclusions.

Industrial policy in the EU prior to the IRA

The most modern approaches to industrial policy acknowledge that national economies do not function in isolation, which is why it is necessary to understand how countries depend on each other (IMF, 2022; Rodrik, 2022). First, we introduce a set of dependencies, or interdependencies, that require concerted strategic action and can be viewed as the basis for approaching, designing, executing, and evaluating industrial policy in the EU. According to a recent and exhaustive study by the ECB (ECB, 2023) these key dependencies are as follows:

- *Trade dependencies.* External trade dependencies can be measured using different metrics, notable among which: the share of an economy's value-added that comes from imported value-added; the scarcity of a certain product; and country-level import or export concentration. It should be noted that trade dependency ultimately reflects the level of participation in global production chains and is, therefore, an ambiguous phenomenon that can be viewed as both an opportunity and a threat. Considering the level of imported value-added relative to total value-added and considering the three main trading

blocs (EU, US, and China), in the primary food sector, the EU and US present dependencies of close to 20%, whereas China's dependence is less than 10%. In manufacturing, the differences between the blocs are smaller, with all three moving within a range of between 15% and 20%. In services, dependencies are lower in the EU (10%) and the US (5%), while the Chinese economy is more dependent (11%).

- *Energy dependencies.* The EU imports around 55% of the energy it consumes, and that dependency is very uneven from one economy and sector to the next. The countries with more developed renewable energy infrastructure (such as Denmark, Finland, and Sweden), more nuclear power capacity (Bulgaria, France, Slovakia, and Sweden) or relatively high production of fossil fuels (Czech Republic, Poland, and Romania) are less energy dependent.
- *Critical raw materials dependencies.* The EU classifies 30 raw materials as “critical” based on an evaluation across two dimensions: their economic relevance and their supply risk. According to the most recent data available, in 2019, the EU imported 15 billion dollars’ worth of critical raw materials from the rest of the world. Moreover, the imports of some of these critical raw materials are highly concentrated among a very small number of trading partners and some of the raw materials are virtually impossible to substitute.
- *Digital transition.* According to the European Commission’s International Digital Economy and Society Index (I-DESI), the EU ranks 12th when it comes to overall digital performance. The difficulties impeding swifter adoption of digital technologies in the EU are related with structural weaknesses in terms of digital infrastructure, skills of the population and regulation. It is foreseeable that, given the rising volume of data processed in different digital tools and solutions (cloud computing, AI, 3D printing), and the increasing needs in processing power, the EU’s dependencies in this sector could become even more

important if measures are not taken to revert the lag.

- *Financial interdependencies.* According to the ECB (2023), there are four channels of financial dependency of relevance to the EU: (1) cross-border investments, with the eurozone characterised by a high degree of financial openness and with advanced economies as its main FDI partners; (2) limits to investment finance in the EU, as the European banking sector remains partly segmented along national lines and lacks deeper and broader capital markets; (3) payments and financial market infrastructures, the concern here being the dominant position of non-EU payment-related service providers; and, lastly, (4) the role of currencies, as the international use of an issuer’s currency can lead to broader, cheaper and more easily accessible funding for the domestic economy and the euro has an undersized role relative to trade patterns and international investments involving the EU.
- *Labour market and migration interdependencies.* In the last 20 years, the number of immigrants from outside the EU and of EU citizens living in other EU countries has increased by 60%. On aggregate, migrant workers help to ensure a better match between supply and demand in the various segments of the labour market and are therefore a pillar of progress. According to the ECB (2023), there are several outstanding challenges: (i) intra-EU mobility remains lower than in the US, limiting potential growth; (ii) the EU could stand to make itself more attractive to more skilled immigrants; and, (iii) the prevailing level of geopolitical uncertainty is likely to have a major impact on migration flows.

These dependencies and interdependencies shape a first set of industrial policy aspirations and goals for the EU. Given that these dependencies ultimately imply risks for the EU and its members states, the first goal of industrial policy must be to anticipate, manage and, to the extent possible, mitigate these risks. It is important to point out that the interests of the members states and of

the EU as a bloc are generally aligned in this respect and any risks mitigated at the national level should make the bloc more solid as a whole.

Beyond these dependencies, prior to passage of the Inflation Reduction Act (IRA) in the US, another factor clearly driving industrial policy in the EU was the decarbonisation of the economy. The EU is striving to be climate neutral by 2050 but “decarbonising industrial production without deindustrialising Europe is a major challenge” (Fuest, 2023) around which there appear to be more questions than answers at present. Russia’s invasion of Ukraine has further highlighted the importance of decarbonising the European economy and what a thorny issue it is.

It appears that taxing and regulating CO₂ emissions alone will not do the job. By way of example, in the automotive sector, which is key on account of its size, the jobs it creates and knock-on effects on other sectors, an American company, Tesla, seems to be taking the lead in climate-friendly technologies, despite the environmental consciousness that characterises the Germans and the fact that Germany is a hub for top-flight car-makers (Fuest, 2023).

Industrial policy in the EU since the IRA

In 2022, the US passed the Inflation Reduction Act (IRA), a legislative package made up of three sets of measures: tax reform, healthcare reform and new energy and climate legislation. The climate-related part of the package includes up to 400 billion dollars of spending over 10 years, articulated around the following measures (Kleimann *et al.*, 2023):

- Subsidies for electric vehicle purchases (for individuals and companies buying them);
- Production and investment subsidies for manufacturers of clean-tech products, including batteries and components used in renewable electricity generation; and,
- Subsidies for producers of carbon-neutral electricity, as well as hydrogen and other clean fuels.

The IRA contains protectionist aspects as some of the subsidies are conditional upon local manufacturing or purchasing requirements, in violation of World Trade Organisation (WTO) rules. The new legislative package is also likely to generate other distortive effects, such as increasing industrial concentration by subsidising large-scale production.

As a result, the IRA was not well received by the EU and it has sparked intense debate on the optimal response. For further analysis and assessment of the IRA, its impact, and proposals as to how the EU should react, refer to Buti and Messori (2023), Business Europe (2023), Caixabank (2023), Fuest (2023), Hoyer (2023), Kleimann *et al.* (2023), Ruiz (2023) and Sweeney (2023).

On the one hand, the IRA clearly harms European industry as the production subsidies will make American products, services, and energies more competitive. On the other hand, to the extent that the IRA accelerates the decarbonisation of the American, and even the global, economy, it could have positive effects on sectors of the European economy specialised in supplying clean technologies and services related with the

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transition towards sustainability. In fact, the IRA could create opportunities for European companies in sectors which are at the technological forefront and that boast strong market presence and positioning, such as the wind power industry, potentially providing a stimulus for new large-scale investments in these sectors (Business Europe, 2023; Hoyer, 2023).

Elsewhere, there appears to still be room for negotiation around application of the legislative package with scope for cushioning the negative impact in the EU of the IRA's more protectionist measures, such as making the subsidies entirely conditional on local production in the US (Kleimann *et al.*, 2023).

Another reaction that has been suggested is to tackle the challenge implied by the IRA together with other challenges being pursued by the EU: (i) the twin green and digital transition; (ii) preservation of Europe's social inclusion model; (iii) moving past policies based exclusively on demand; and (iv) combined articulation and exploitation of synergies with the projects financed by the NGEU funds. All of this could be handled if the institutions define targeted “European public goods” (EPGs) for channelling the investment efforts of the member states and of the EU (Buti and Mesori, 2023). This initiative still needs to be fleshed out in greater detail but its proponents believe that it could unleash several positive transformations across the EU's economies: revision of the productive specialisation pattern; redesign of the labour markets and social welfare systems; downward pressure on prices and containment of inflation; and, the curbing of euro depreciation.

It is also worth noting that there is widespread –albeit not unanimous– consensus that the EU should not respond to the IRA with protectionist countermeasures.

The dominant opinion, borne out by analysis, is that any such response would be dangerously short-sighted, potentially unleashing a global escalation in trade tensions and deepening international market disintegration and deregulation, with adverse consequences for all concerned.

Recent debate around industrial policy in Spain

These debates are also relevant for Spain. Traditionally, the main objectives of industrial policy in Spain have been articulated around the following priorities: increasing the weight of the manufacturing sector in GDP; diversifying and specialising the productive apparatus; increasing the economy's R&D intensity; halting premature deindustrialisation in certain regions; fostering business' international expansion; boosting labour productivity and tightening cooperation between the public and private sectors (Myro, 2016, 2017, 2021; Xifré, 2014, 2017; Arrilucea *et al.*, 2020).

In addition, in the current setting, heavily marked by the NGEU programme for modernising Europe's economies, it is timely to ask how to best articulate both lines of initiative in Spain: the country's conventional industrial policy objectives and implementation of the NGEU funds in Spain through the Strategic Economic Recovery and Transformation Plans (hereinafter, PERTEs for their acronym in Spanish).

The PERTEs are a tool for public-private partnership inspired by the Important Projects of Common European Interest (IPCEIs) (Domínguez and Gomariz, 2023), related with the concept of the EPGs mentioned above (Buti and Mesori, 2023), which have the scope to play a key role in implementing new forms of industrial policy. There are currently

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12 PERTEs: plans for the development of electric and connected vehicles; avant-garde healthcare; renewable energy, renewable hydrogen and energy storage; agro-food; the new language economy; circular economy; the shipbuilding industry; aerospace; water cycle digitalisation; microelectronics and chips; the care economy; and, industrial decarbonisation. In total, they have been earmarked 40.09 billion euros of public investment, with significant disparity from one plan to the next in terms of budget size and execution pace (Domínguez and Gomariz, 2023).

Given the conceptual proximity between the PERTEs and industrial policy in Spain, an analysis of the barriers to execution of the former could shed light on the challenges facing the latter. These challenges can be classified into the following categories (Domínguez and Gomariz, 2023; FEDEA, 2023; Hidalgo, 2020; Myro, 2021; Xifré, 2020):

- i. Structural, circumstantial or regional weaknesses of the Spanish economy that impede absorption of investments related with technological innovation and the knowledge economy. These weaknesses can take the form of insufficient market size, a shortage of private funds available at the regional level to complement public investment, when both are necessary, and low private R&D intensity.
- ii. Obstacles derived from regulation and a lack of administrative agility. For example, we are seeing difficulties in getting all of the initiatives contemplated in the PERTEs completed within the stipulated deadline (end of 2026) for a mix reasons. It is also noteworthy the traditional bias in Spain in favour of *ex ante* controls to the detriment of *ex post* controls, and a weak

culture of assessing the impact of public policies (despite recent progress in this area).

- iii. Rigidity in the tenders' design and specific requirements. For example, in addition to the tight project execution timeframes, it is proving hard to form the groups of SMEs required for participating in the lever projects that encompass two or more regions and for SMEs in general to come up with the guarantees required. Here it is also worth mentioning the requirement that the investments translate into a net reduction in emissions and do not harm the environment significantly (DNSH certification), which can cause problems on account of its ambiguity.
- iv. There is also room for increasing the level of involvement in decision-making by different key agents such as business associations or the regional and local authorities. The goal should be for these economic transformation projects to be underpinned by maximum levels of institutional, social, and economic consensus from the initial stage.

That being said, it is worth noting that in the face of many of these obstacles, the affected parties are encountering a comprehensive and flexible attitude, within reasonable limits, on the part of the fund managers (refer to Domínguez and Gomariz, 2023; and FEDEA, 2023 for proposals for surmounting some of these obstacles). Nevertheless, these challenges and difficulties are relevant, as explained earlier, insofar as they provide valuable lessons for designing and adopting modern industrial policy measures in Spain.

Conclusions

This paper provides an overview of the main current debates around the conception,

design, and implementation of industrial policy in the EU and Spain. Firstly, it itemises the six fundamental external dependencies of the EU and its member states. These (inter) dependencies provide the basic context for the development of any industrial policy measures. They were set down prior to passage of the Inflation Reduction Act (IRA) in the US in 2022, which includes certain protectionist measures. We then examine the IRA and the main responses being considered by the EU, highlighting three messages: (1) there is virtual full consensus that protectionist countermeasures should be avoided; (2) the IRA could emerge as an opportunity for European companies focused on the transition to sustainability; and, (3) the EU still has room to negotiate limits on the most harmful and protectionist aspects of the IRA. The paper concludes with a review of some of the main obstacles encountered in implementing the PERTEs under the umbrella of the NGEU funds. These obstacles are relevant as they offer important lessons learned.

They yield a series of recommendations for industrial policy in Spain, notable among which: (i) simplification of red tape and transition away from *ex ante* to *ex post* controls, coupled with reinforced accountability; (ii) building maximum economic, political and social consensus around the design and execution of industrial policy measures; (iii) decisive political commitment in favour of structural economic reforms (education, innovation, international expansion) and efficient organisation of economic activity from the local and regional perspectives; and, (iv) stimulation of public-private partnership.

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