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4. Italy, NRRP, and Industrial Policy

Giovanni Barbieri,¹ Floriana Cerniglia,² and Franco Mosconi³

This chapter assesses the National Recovery and Resilience Plan (NRRP) as an industrial policy tool within the Next Generation EU framework, despite limited explicit reference to an industrial strategy. The NRRP emerges during a unique moment for the European Union (EU), characterized by the suspension of the Stability and Growth Pact and the relaxation of state aid restrictions, which have collectively expanded public intervention opportunities. This marks a significant shift from the post-1990s ideological emphasis on competition over state involvement, particularly in Italy, where reductions in capital expenditure since 2009 have constrained public infrastructure and private investment. This chapter delves into the current landscape highlighting the potential for a more effective approach to industrial strategy using public investment. By focusing on "Mission 1" (Competitiveness) and "Mission 4" (Education and Research), the chapter aims to elucidate the NRRP's industrial policy direction including reinforcing the special economic zones (SEZs) established in 2017.

4.1 Introduction

The National Recovery and Resilience Plan (NRRP), the Italian adaptation of Next Generation EU, can be seen as an important tool of industrial policy, although the expression "industrial policy" is mentioned explicitly only once in the plan. Next Generation EU was launched in an unprecedented context for the EU: the suspension of the Stability and Growth Pact and the ban on "state aid" to firms and companies, one of the cardinal principles on which the European single market rests. These two "derogations" from the previous *status quo* have allowed Member States within the European Union (EU) to glimpse unprecedented room for manoeuvre in public

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intervention and new public policies. Among these, industrial policy certainly deserves a prominent place, as it also plays a very important role in accompanying the structural transformation processes of companies and industries, including innovation, companies' growth, and technological specialization. Throughout Europe, these areas have significantly declined since the 1990s, following a decisive ideological shift prioritizing limited state intervention, relying exclusively on the protection of competition. Italy had also followed this path. As documented in the chapters on Italy in the previous Outlooks, the reduction in capital expenditure, especially from 2009 onwards, affected public infrastructure investments and grants to private firms. Certainly, these grants, for many reasons, are not a panacea, and must be used with caution when pursuing an industrial policy. However, there is a very marked difference with the current scenario and what happened in the 1960s and 1970s, both in Italy and in Europe, where industrial structures were created through a combination of public investment and well-defined policies within a clearly structured industrial policy framework. Moreover, the recently reformed Stability and Growth Pact greatly reduces room for fiscal manoeuvring for certain Member States which will have to implement robust fiscal consolidation policies (i.e. Italy and France). This new fiscal scenario will likely impact the effectiveness of European industrial policies as it may distort the output of investment decisions under the Next Generation EU (NGEU) programme which is set in a fundamentally different fiscal regulatory framework.

In this chapter,⁴ we attempt to illustrate what (and if) an industrial policy direction can be traced in the Italian NRRP, looking specifically at the so-called "Mission 1" (i.e., Competitiveness) and "Mission 4" (i.e., Education and Research). This includes also strengthening (with investments and reforms) the SEZs established in 2017.

4.2 NRRP and Industrial Policy

4.2.1 A European Perspective

To assess the industrial policy measures in the NGEU (and thus in the Italian NRRP), it is necessary to start from a broader background, i.e., the varying industrial policy visions and perspectives that have emerged in the European Union in recent decades. The topic has been well researched in the economic literature and firmly anchored in an international debate that has been evolving since the very beginning of this century.⁵

Since the dawn of the twenty-first century, industrial policy has undergone a substantial evolution on a global scale. The EU has seen its share of changes in both

⁴ This chapter is a shorter version of a CRANEC Working Paper (Barbieri, Cerniglia, and Mosconi 2024).

⁵ Cf. Barbieri Goés and Viesti G. (2024); Mosconi (2015); Pianta, Lucchese, and Nascia (2020); Bianchi and Labory (2016); Andreoni (2017). See also chapters 11 and 12 in Di Tommaso et al. (2024), and Guerrieri and Padoan (2024).

theory and practice in this important area of public policy. The picture of the EU that emerges is one of lights and shadows. Does "manufacturing Europe" need an industrial policy? If so, what kind? The answer to the first question is yes, especially if one considers the current trend towards a "new industrial policy", which differs from the approach that prevailed in the last decades of the twentieth century.⁶

It seems useful to briefly retrace the stages of the evolution of industrial policy as conceived by the EU, mainly due to the driving role played by the European Commission. The Brussels-based approach that has emerged from the early 2000s to the present can be summarized in three phases (Mosconi 2022): (i) the "Integrated approach"; (ii) the "Holistic approach"; (iii) the "Twin transition".⁷

The "Integrated approach" was developed by the Commission between 2002 and 2014, during the presidencies of Romano Prodi and Manuel Barroso. There was, from the institutional and economic stances, the historical Eastern enlargement of the single market towards countries that, in more than one case, boasted significant industrial-manufacturing traditions. The term "integrated" was intended to mean a mix of the traditional horizontal approach (policies for all sectors, e.g., antitrust, deregulation, etc.) and vertical applications (i.e., for individual sectors deemed strategic from a technological point of view). In other words, a set of policies that must consider the specific needs and characteristics of individual industrial sectors and must therefore be applied differently.

As a matter of fact, when President Prodi presented his 2002-Communication (Prodi 2003), he offered an initial list of suitable industrial sectors as a breeding ground for growing so-called "European Champions": (i) biotechnology and life sciences; (ii) information and communication technology (where Italy's leadership position in mobile communication is at great risk in a new standards war); (iii) the so-called "hydrogen economy" (as a means of alternative energy storage and transfer); (iv) defence (the industry remains fragmented, hindered by the absence of political will to build a truly integrated European defence system); (v) European aerospace (which is still caught between civil and security applications).

The Presidential Communications continued in 2005 under the Presidency of José M. Barroso, which took up and developed the concept of an "Integrated approach", linking it more directly to the Lisbon Strategy (European Commission 2005).

The second phase is under the Juncker Presidency (2014-2019). Building from

The recent definition offered by Réka Juhász, Nathan Lane, and Dani Rodrik (2023: 216) is an excellent description of the state of the art: "We define industrial policies as those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal [...] The goal is typically to stimulate innovation, productivity, and economic growth. But it could also be to promote climate transition, good jobs, lagging regions, exports or import substitution [...] Since IP targets structural change, a key characteristic is the exercise of choice and discretion by the public authorities: 'we promote X but not Y', though the latter part of this statement is typically left implicit".

⁷ Details and further discussion on these three approaches are found in Barbieri, Cerniglia, and Mosconi (2024).

President Jean-Claude Junker's State of the Union Address (Junker 2017) and the 2017–Communication (European Commission 2017), there was a move towards a "Holistic approach" to industrial policy, that is, to bring all existing and new initiatives—horizontal and sector-specific—under a single strategy. This approach inspired the document entitled *Industrial Policy Strategy* (European Commission 2017), part of the broader 2017 State of the Union report, which expressly mentioned under the specific sectoral measures (as in the case of space, defence, automotive, and steel) the need for a strong focus on key enabling technologies.

Briefly, the main instruments of this new strategy were: (i) sector-specific measures in key enabling technologies (such as in the steel, space, and defence industries); (ii) green production and clean energy technologies with a special emphasis on the automotive industry and low-emission mobility, as well as looking at missing links in the relevant value chains (investments in batteries were considered of strategic importance); and (iii) improving new technologies' value chains—making them more robust to improve the competitiveness and assets of Europe's manufacturing industry.

Europe is currently in the third stage, which began in 2019. The von der Leyen Presidency set a new tone right from the start, with two speeches delivered to the European Parliament in July and November 2019 emphasizing the central role of the "dual—ecological and digital—transition" (von der Leyen 2019a, 2019b) and the need to strengthen Europe's industrial base and innovation capacity. Moreover, on March 10, 2020, the von der Leyen Commission issued its first industrial policy communication: "A New Industrial Strategy for Europe" (European Commission 2020). Other significant documents include the European Green Deal, which is "Europe's new growth strategy" (European Commission 2019).

To conclude, it emerges that over more than twenty years of deliberation, Brussels has consolidated a new European industrial policy, focusing on technological trajectories, strategic sectors, and a supranational cooperation. To this aim, the industrial alliances⁸ and the Important Projects of Common European Interest (IPCEI)⁹ appear to be the crucial instruments in this strategy pursued by the European Union which also focuses on public-private partnerships at the EU level. Table 4.1 summarizes the projects launched to date.

⁸ Industrial alliances are a tool to facilitate stronger cooperation and joint action between all interested partners (see https://single-market-economy.ec.europa.eu/industry/industrial-alliances_en). Since 2017, industrial alliances have been strengthened by European Commission communication, *A New Industrial Strategy for Europe* (European Commission 2020).

^{9 &#}x27;Nine of these IPCEIs concern predominantly R&D as well as projects of first industrial deployment. One IPCEI is dedicated to infrastructure. The increasing number of participating Member States and companies shows a positive trend' (see https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis_en).

Table 4.1 European supranational industrial cooperation Source: adapted from the European Commission's website.

| Important Projects of Common European Interest (IPCEI) | European Industrial Alliances | | |
|---|---|--|--|
| First on Microelectronics (2018) | Zero-Emission Aviation | | |
| First on Batteries (2019) | SMRs (Small Modular Reactors) | | |
| Second on Batteries (2021) | Raw Materials | | |
| First on Hydrogen (2022) | Solar Photovoltaic Industry | | |
| Second on Hydrogen (2022) | Clean Hydrogen | | |
| Second on Microelectronics and Communication Technologies (2023) | Battery | | |
| Next Generation Cloud Infrastructure and Services (2023) | Circular Plastics | | |
| Third Hydrogen (2024) | Industrial Data, Edge and Cloud | | |
| Fourth Hydrogen (2024) | Processors and Semiconductors Technologies | | |
| Med4Cure (2024) | Renewable and Low-Carbon Fuels Value Chain | | |
| | Critical Medicines | | |

4.2.2 The NRRP and Industrial Policy

NGEU and the Italian NRRP, as previously said, have successfully brought public intervention instruments (including for industrial policy) back to the forefront after being largely sidelined over the past thirty years. Italy is the EU's second largest manufacturer with a strong export trend; therefore, this new European perspective deserves special attention.

The new European framework on industrial policy is evolving and is manifesting its influence on all Member States (also via NGEU). The Italian NRRP has clearly incorporated the industrial policy framework that emerges from the NGEU.¹⁰ In our view, the most important industrial policy instruments to be considered in the NRRP

¹⁰ The NGEU and NRPP are discussed in Barbieri, Cerniglia, Gori, and Lattarulo (2022).

are the measures dedicated to investment in knowledge.

Needless to say, Italy, in comparison with the other major EU founding countries, has for many years shown the lowest ratio of R&D investment to GDP. Figure 4.1 is self-explanatory.

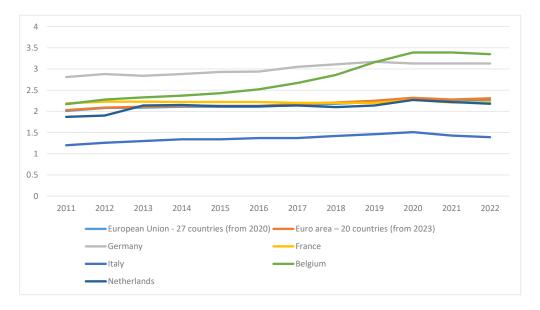


Fig. 4.1 R&D investment (all sectors), %GDP. *Source*: own elaboration based on Eurostat data 2023 (https://ec.europa.eu/eurostat/databrowser/view/tsc00001/default/table?lang=en&category=t_scitech.t_rd).

The NRRP is divided into six "Missions", which in turn are subdivided into sixteen "Components"; all in all, a total of over two hundred funded interventions. Another important NRRP feature is how it is structured around reforms and investments.¹¹

The six missions are: 1. Digitization, innovation, competitiveness, culture, and tourism; 2. Green revolution and ecological transition; 3. Infrastructure for sustainable mobility; 4. Education and research; 5. Inclusion and cohesion; and 6. Health. The €194 billion budget is allocated in the plan as follows: 21% for Mission 1; 31% for Mission 2; 13.3% for Mission 3; 16.1% for Mission 4; 10.4% for Mission 5; and 8.2% for Mission 6.12

¹¹ On reforms, the primary "horizontal or contextual" ones are the reform of public administration and the justice system. Within this framework, there are also two "enabling reforms": measures to simplify and rationalize legislation and the promotion of competition. Meanwhile, the "sectoral reforms" are contained within the individual missions.

¹² Italy's National Recovery and Resilience Plan (NRRP) is worth €235bn: €191.5bn come from the Recovery and Resilience Facility (RRF), €13.5bn from React-EU, and €30.6bn from direct Italian government funding through its Complementary Fund. The National Plan for Complementary Investments (PNC), established by Decree-Law No. 59/2021, is designed to supplement, with national resources, the interventions of the National Recovery and Resilience Plan (NRRP), totalling €30.6 billion for the period 2021 to 2026 (https://www.italiadomani.gov.it/content/sogei-ng/it/it/home.html).

To identify the industrial policy measures, it is necessary to look at the individual components of the plan. Missions can be seen as a first-glance interpretation. It is therefore necessary to read through the components and look at their interconnections. Since our question is what role industrial policy plays in the NRRP, the first thing to mention is that the term industrial policy does not appear often in the text. Indeed, to be accurate, it appears only once, in Component 2 of Mission 1 where funding is provided for the so-called "industrial supply chain and internationalisation policies" (€1.95 billion). The NRRP clearly states that Component 2 of Mission 1 (M1-C2) has the objective of strengthening the competitiveness of the productive system by reinforcing the rate of digitalization, technological innovation and internationalization through a series of complementary interventions. However, it should also be noted that, according to Lucchese and Pianta (2021: 180), "The NRRP envisages various interventions in favour of the production system. The most significant nucleus of measures can be found in two specific Components of the NRRP: Digitisation, Innovation and Competitiveness in the Production System (Mission 1) and From Research to Enterprise (Mission 4)".

Moreover, if industrial policy is considered as a policy aimed at "structural change" in the economy, R&D must be taken into account. Component 2 of Mission 4 (M4-C2) aims to support investments in R&D, promote innovation and the dissemination of technologies, and strengthen skills, fostering the transition to a knowledge-based economy.

The following table offers a picture of the investment measures of the two components considered. The total amount rounds up to €30.4 billion of the total €194 billion NRRP budget, a significant figure in and of itself.

Table 4.2 Key investment measures of Missions 1 and 4. Source: Italia Domani (www. italiadomani.gov.it).

| M1-C2 | M4-C2 | | |
|---|---|--|--|
| Microelectronics innovation and technology | Creating and strengthening "innovation ecosystems", building "territorial R&D leaders" | | |
| Industrial supply chain and internationalization policies | Funding of projects submitted by young researchers | | |
| Ultra-fast networks—Ultra-wideband and 5G | Introduction of innovative doctorates that meet the innovation needs of companies and promote the recruitment of researchers from companies | | |

| Supporting the ecological transition of the production system and strategic supply chains for net zero tech | Introduction of innovative doctorates that meet the innovation needs of companies and promote the recruitment of researchers from companies | |
|---|---|--|
| Satellite technologies and space economy | Partnerships extended to universities, research centres, companies and funding for basic research projects | |
| 4.0 transition | Partnerships extended to universities, research centres, companies and funding for basic research projects | |
| | Research projects of significant national interest—PRIN | |
| | Strengthening research structures and creating R&D "national champions" on key enabling technologies | |

In presenting the missions, components, and investments of the plan in this way, we are not taking a minimalist approach to industrial policy within the NRRP. We are trying to present a view which emphasizes the strategic nature of many instruments; we wish to point out that fostering the process of research and innovation is fundamental in today's industrial policy. In this regard, an interesting perspective is the concept of "technological platforms" (Quadrio Curzio, Silvani, Fortis, and Cerniglia 2023). In other words, looking at the Italian scenario set up by the NRRP, one must consider also the wider European landscape shaped by "European technology platforms" (ETPs). Italy's NRRP represents a great opportunity for the construction of a potentially feasible "platform" (or "network") facility.

Some interventions of the NRRP under the component "From Research to Industry" align with this direction, such as the European KICs (Knowledge and Innovation Communities) networks that unite education, research, and innovation.

Table 4.3 lists the five research facilities and national R&D champions associated with key enabling technologies (KET) and the eleven "Innovation Ecosystems and Territorial R&D Leaders" selected by the Ministry of Universities and Research (MUR) in June 2022.

Table 4.3 The impact of knowledge: centres and ecosystems. ¹³ Source: adapted from MUR (2022).

| Five national centres associated with KET | Eleven innovation ecosystems at territorial level | | |
|--|---|--|--|
| Agritech National Centre | Ecosystem Innovation, digitization and sustainability for the widespread economy in Central Italy | | |
| Biodiversity National Centre | TECH4YOU ecosystem | | |
| National Centre for Simulation, Computation and High Performance Data Analysis | Ecosystem for Sustainable Transition in Emilia-Romagna | | |
| National Centre for Sustainable Mobility | MUSA ecosystem | | |
| National Centre for Gene Therapy and Drug Development with RNA Technology | INEST ecosystem | | |
| | NODES ecosystem | | |
| | RAISE ecosystem | | |
| | Roma Tecnopolo ecosystem | | |
| | SAMOTHRACE ecosystem | | |
| | e.INS ecosystem | | |
| | THE ecosystem | | |

These projects suggest that the most relevant technological trajectories of our time are part of the challenge launched with the NRRP. The instruments adopted and the chosen areas of action seem to confirm that, especially through M4-C2, many of the ingredients needed to build true European "platforms" exist. The refinement—now that centres, ecosystems, partnerships, and research infrastructures have been established—must be carried out on the links between the individual "phases". It is a matter of systematizing all those realities that have been financed through the NRRP's calls for proposals in order to create real technological platform models capable of independently surviving beyond the initial public capital funding phase and becoming real "incubators and hubs" of innovation and development (Barbieri and Gahn 2023).

¹³ The Ministry notes that more than \in 4.3 billion were allocated through competitive procedures for these two types of investment, as well as responses to a third Call on 'Research and Technology Infrastructure' (here the number is high, 49).

The NRRP could not (in the drafting phase) and cannot (in the implementation phase) be seen as a complete and exhaustive answer to all Italian bottlenecks (the North-South divide and growth-gap, the low factors productivity and so on) but rather as an extraordinary opportunity to deeply change some of the country's economic and social institutions.¹⁴

The general picture sketched above through the combination of the interventions—in short—on competitiveness (M1-C2) and industrial research (M4-C2)—should be integrated with other elements, such as the recent measures launched by the Italian government in August 2024: the Transition Plan 5.0. Despite having adequate resources (€6.5 billion), the business community identifies two main shortcomings of the measure: it was introduced too late, leaving little time for companies to prepare their plans, and its procedures are overly complex. Therefore, it cannot be assumed that the success of Industry Plan 4.0 (from 2016/2017 onwards) can be easily replicated.

To complete our overview, we looked at another component of Mission 4 (M4-C1), which refers to "Strengthening the supply of education services: from kindergarten to university". It addresses the issue of educating young people throughout their (potential) educational journey. Quite interestingly, the measure that goes by the name of "Development of the tertiary vocational training system" seeks to strengthen "Higher Technical Institutes for more widespread vocational training". Below is the NRRP description of the objective of this investment, to which €1.5 billion¹⁵ have been allocated:

Increase the number of ITSs and strengthen their scientific facilities and laboratories also through 4.0 technology while simultaneously investing in teachers' skills. The investment will include the creation of a national digital platform that allows students to find out about job offers for those who obtain their professional qualification.

This investment in Technical and Scientific High Schools (ITS) should be fully valorized, especially to solve the mismatch in the labour market. While there have been positive experiences in some regions (especially Lombardy, Emilia-Romagna, Veneto), there is still a long way to go: the employment rate of young people coming out of ITS is very high and still too few choose this track of post-diploma studies.

To sum up, Italy's gap in terms of investment in knowledge with respect to France and Germany are significant. To bridge this gap, at the very least two strategic lines of action are required. First, complete the NRRP's implementation of everything that concerns R&D measures related to industrial policy. Second, closely related to the first, strengthen the EU's involvement in all the interventions (investments and reforms) envisaged in the crucial missions/components examined here. Moreover, Italian companies participating in the IPCEIs (e.g. STMicroelectronics) and the construction of STPs (starting from centres/ecosystems/partnerships) can be seen as the first steps of Italy-EU intersections that the NRRP aims to stimulate.

¹⁴ For an insightful discussion on these issues see Viesti (2023).

¹⁵ See also the NRRP portal, 'Italia Domani': https://www.italiadomani.gov.it/content/sogei-ng/it/it/il-piano/missioni-NRRP/istruzione-e-ricerca.html

To conclude, science, research, technological innovation, and education may be seen as European public goods. The EU must strengthen them if it intends to play a leading role in the international arena, as was lucidly highlighted by the almost simultaneous publication of the reports edited respectively by Enrico Letta (2024) and Mario Draghi (2024).

4.4 SEZs: An Industrial Policy Bet for the Mezzogiorno

In this context of renewed interest in industrial policy, a significant measure implemented in Italy in recent years is the establishment of SEZs (special economic zones) that have been a widely used industrial policy tool for several decades and in various countries around the world. ¹⁶ In Europe, Poland sets the example by establishing its first SEZ in 1995 and now has fourteen SEZs throughout the country. ¹⁷ In brief, a SEZ is characterized by: a) a clearly delimited area where a single administration and governance system is envisaged; b) different kinds of benefits for investors physically located within the area; c) the inclusion of "free zones", i.e., areas that have a customs regime that differs from that applied to the rest of the state territory. SEZs should attract more investment by leveraging comparatively advantageous conditions. For this expectation of higher growth in these areas to have a chance of success, they should receive public investment in transport infrastructure. A highly qualified workforce must also be created where specialized SEZs are established.

In Italy, SEZs were introduced as an urgent measure by Decree-Law No. 91/2017, later converted by Law No. 123 of August 3, 2017. Other regulatory interventions have taken place in recent years and between 2018 and 2021, eight SEZs were established (see Table 4.4). The industrial policy vision was linked to the logic of reshoring and the increasing role and integration of logistics within industrial processes. Therefore, the government envisaged one SEZ for each of the TEN-T core ports of Southern Italy. One of the Ten-T core ports of Southern Italy.

¹⁶ For further discussion and data see Barbieri, Cerniglia, and Mosconi (2024); Nisticò and Prota (2023); Buba and Wong (2017); and Viesti (2024).

¹⁷ In Poland, SEZs between 1995 and 2015 attracted investments of €170 billion and created 280,000 new jobs. Cf. PWC (2024).

¹⁸ See Coco (2020).

¹⁹ See Coco and Lepore (2018).

Table 4.4 SEZs in Italy by year of establishment, surface area, appointment of extraordinary commissioners, post SEZ-NRRP reform. *Source*: Nisticò and Prota (2023) based on data from agenziacoesione.gov.it.

| | Typology | Year of establish- ment | Total hectares | % of total surface area ZES | Commissioner (finalizing appointment decree post SEZ Reform) |
|----------------------------|--|-------------------------------|-------------------|---|--|
| SEZ Calabria | Regional | 2018 | 2,445 | 10.4 | August 2022 |
| SEZ Campania | Regional | 2018 | 5,154 | 21.9 | November 2021 |
| SEZ Adriatica | Interregional (Puglia- Molise) | 2019 | 3,406 | 14.5 | May 2022 |
| SEZ Ionica | Interregional (Puglia- Basilicata) | 2019 | 2,579 | 11 | February 2022 |
| SEZ Abruzzo | Regional | 2020 | 1,703 | 7.2 | October 2021 |
| SEZ Sicilia Occidentale | Regional | 2020 | 1,953 | 8.3 | January 2022 |
| SEZ Sicilia Orientale | Regional | 2020 | 3,627 | 15.4 | December 2021 |
| SEZ Sardegna | Regional | 2021 | 2,659 | 11.3 | August 2022 |

Various expectations are placed on this industrial policy measure of SEZs because it could serve to bridge the economic and social gap that still separates the South from the more developed areas of the country. Through SEZs, those who invest in the Mezzogiorno could have a great competitive advantage in terms of tax cuts, certain financing, and faster and more streamlined procedures for obtaining authorizations. Companies setting up in SEZs can enjoy higher tax credits than in other areas of southern Italy, with the possibility of reaching (after the latest regulatory interventions) a ceiling of €100 million per investment. The governance strategy is based on the involvement of regional governments that were charged with the task of selecting eligible areas and drafting strategic plans. Each SEZ is originally governed by a committee of members appointed by national government and regional government officials and chaired by the Head of the Port Authority. The minister responsible for the South and territorial cohesion in turn chairs the central SEZs steering committee.

The NRRP has identified SEZs as an important intervention in favour of the Mezzogiorno's economy: it includes investment programs (Mission 5, Component 3) 20 and provides for the reform of normative framework and governance (Decree Law No. 77/2021). The resources earmarked for the SEZs by the NRRP amount to €630 million for infrastructure works and further funding for investments for works in the main ports in southern Italy. The €630 million are broken down by region, implementing entities, and areas of intervention, and can be divided into three categories: a) "last mile" connections, i.e. between ports and industrial areas and the infrastructure and road network forming part of the main transport networks; b) digitalization and enhancement of logistics, green urbanization, energy and environmental efficiency in the back-ports and industrial areas of the SEZs; c) enhancement of the security and resilience of port access infrastructure. It should also be noted that the projects chosen for funding were already available for each region and selected because they were deemed to be more feasible, and executable given the constraints of the NRRP's timetable.

In essence, the interventions planned for SEZs implement a two-stage industrialization policy, i.e. to create an infrastructure that serves to strengthen the industrial production base that SEZs are supposed to promote through tax benefits to enterprises. SEZs are thus given an important role as part of an overall strategy to strengthen and complete the infrastructure and logistics networks for a revitalization of the Mezzogiorno. By connecting the main strategic ports located in southern Italy with the continental transport network, one could leverage the Mediterranean's strategic position globally, thus enhancing its privileged position with respect to the emerging African, Balkan, and Middle Eastern markets.

As previously mentioned, to enhance the SEZs appeal to new enterprises, in addition to the NRRP-funded infrastructure, tax cuts are provided of up to 45% for investments of up to €100 million (the rate varies by company size), provided that the firm invests in and remains in the SEZ for at least seven years. This tax credit was later increased to a maximum of 65% and applied both to the expansion of the company's capital goods and to the purchase of land and real estate. In addition, the 2021 budget law included a 50% tax reduction for up to six tax periods for companies undertaking new economic initiatives in the SEZs. Companies wishing to benefit from the measure will have to meet three requirements: they must not be in a state of liquidation or dissolution, they must maintain their activity in the SEZ, and they must keep the related jobs created for at least ten years. Additional facilities for companies are also envisaged through resources from the Development and Cohesion Fund. The governance structure was simplified as well and each of the eight SEZ was entrusted to a single commissioner with full power of authorization over private investments and procurement for new infrastructure.

²⁰ Labelled "Interventi speciali per la coesione territoriale" (Special interventions for territorial cohesion). https://politichecoesione.governo.it/it/NRRP-e-coesione/la-missione-5-componente-3-del-NRRP-su-interventi-speciali-per-la-coesione-territoriale/

The regulatory framework and SEZ set-up recently experienced an important turnaround: Decree Law No. 124 of September 19, 2023. Minister Fitto used this to abolish the eight existing SEZs and replaced them with a so-called single SEZ that extends over all the regions of southern Italy. A "special" territory of such enormous size has no parallel in any international experience. In essence, two years after Decree Law No. 77/2021, both the governance and the incentive system of a single SEZ have been (re)configured. For 2024, €1.8 billion have been earmarked in the budget law for the 2024 tax credit. However, this is only valid for investments made up to November 2024. Therefore, there have been no tangible economic and entrepreneurial results related to the single SEZ. More generally, an overall vision of industrial policy is still lacking for the Mezzogiorno within which a single SEZ is now being set up that adopts a "sprinkling automatic aid" approach to the entire Mezzogiorno. Any connection with possible strategies for attracting investment in port areas is thus lost. The jury is still out on the effectiveness of such a policy experiment. While the super-charged tax credit attracted a large number of applications (totalling €9 billion in July 2024) it is unlikely that in the short time (up to November 2024) firms will be able to deliver such large investments.

4.5. Conclusion

As we have reported in previous chapters on Italy in past *Outlooks*, Italy's austerity measures between 2009 and 2017 led to a loss of €200 billion in public investment, which is almost equivalent to the NRRP's total budget. Resources coming from the plan might represent a unique opportunity for industrial policy in Italy. While this chapter has explored potential projects, particularly those connected to other industrial policy initiatives, the future beyond 2026 remains uncertain for both Italy and Europe. The Draghi report emphasizes the need for swift action.

Surely, programs such as Next Generation EU and Horizon Europe, as well as cohesion policies, represent important elements of a European industrial policy that can foster the transition to a green economy, support research and innovation in numerous technological fields, and hopefully reduce inequalities. Still, the Multiannual Financial Framework for 2021–2027 foresees the allocation of resources equal to only 1.11% of the EU-27's gross national income. This amount is inadequate to support an effective European industrial policy. As for Italy, it is entirely uncertain what will happen after 2026, even considering the recent Stability and Growth Pact rules that require Italy to undertake significant adjustments to its public finance budgets.

Since the 1990s, neoliberal trends in Italy have consolidated a bipartisan consensus for economic policies favouring austerity and limiting industrial policy intervention, making it challenging to consider the possibility of a national industrial strategy. The neglect of the Southern Question in the political agenda has further widened the North-South gap. The changing global landscape (completely different from that of the 1990s), however, calls for new policies and a more active role for the state.

References

- Aiginger, K., and D. Rodrik (2020) "Rebirth of Industrial Policy and an Agenda for the Twenty-First Century", *Journal of Industry, Competition and Trade* 20: 189–207, https://doi.org/10.1007/s10842-019-00322-3
- Andreoni, A. (2017) "Strategies for Emerging Technologies and Strategic Sectors: Evidence from OECD Countries and Some Critical Reflections on the Italian Case", L'Industria. Rivista di Economia e Politica Industriale 1: 3–14, https://doi.org/10.1430/87136
- Barbieri, G., and S. J. Gahn (2023) "Le piattaforme tecno-scientifiche europee: sviluppi recenti in Italia", in A. Quadrio Curzio, A. Silvani, M. Fortis, and F. Cerniglia (eds) (2023) *Le piattaforme tecnico-scientifiche in Europa. Ricerca, economia, innovazione*. Bologna: Il Mulino, Collana Fondazione Edison, pp. 297–318.
- Barbieri, G., F. Cerniglia, G. F. Gori, and P. Lattarulo (2022) "NRRP—Italy's Strategic Reform and Investment Programme Sustaining an Ecological Transition", in F. Cerniglia and F. Saraceno (eds), *Greening Europe, European Public Investment Outlook* 2022. Cambridge: Open Book Publishers, pp. 55–70, https://doi.org/10.11647/OBP.0328.04
- Barbieri, G., F. Cerniglia, and F. Mosconi (2024) "Italy and Industrial Policy at the Time of the NRRP", CRANEC Working Paper 01/2024, https://centridiricerca.unicatt.it/cranec-home-pubblicazioni-22134
- Barbieri Goés, M. G., and G. Viesti (2024) "The Revival of Industrial Policy in the EU?", Review of Political Economy: 1–25, https://doi.org/10.1080/09538259.2024.2368210
- Barbini, M., et al. (2024) "L'anno della crescita differenziata. Le regioni italiane nel 202", Informazioni Svimez 4.
- Bianchi, P., and S. Labory (2016) Towards a New Industrial Policy. Milan: McGraw-Hill Education.
- Bratta, B., et al. (2020) "The Impact of Digitalization Policies. Evidence from Italy's Hyper-depreciation of Industry 4.0 Investments", *Ministero dell'Economia e delle Finanze*, *DF Working Paper* 20, https://www.finanze.gov.it/export/sites/finanze/.galleries/Documenti/Varie/dfwp6-1_ultimo.pdf
- Buba, J., and M. D. Wong (2017) *Special Economic Zones: An Operational Review of their Impacts*. Washington, DC: World Bank Group.
- Capriati, M., M. Deleidi, and G. Viesti (2022) "Che impatto macroeconomico può avere il PNRR nel Mezzogiorno?", *Menabò* 174, https://eticaeconomia.it/che-impatto-macroeconomico-puo-avere-il-pnrr-nel-mezzogiorno/
- Cerniglia, F., and F. Saraceno (eds) (2022) *Greening Europe.* 2022 *European Public Investment Outlook*. Cambridge: Open Book Publishers, https://doi.org/10.11647/OBP.0328
- Cerniglia, F., A. Silvani, and A. Quadrio Curzio (2023) "La ricerca del Centro Cranec dell'Università Cattolica", in A. Quadrio Curzio, A. Silvani, M. Fortis, and F. Cerniglia (eds), *Le piattaforme tecnico-scientifiche in Europa. Ricerca, economia, innovazione.* Bologna: Il Mulino, Collana Fondazione Edison, pp. 263–277.
- Chiapperini, C., and G. Viesti (2024) "Il PNRR e i divari territoriali", Menabò 210, https://eticaeconomia.it/il-pnrr-e-i-divari-territoriali/
- Coco, G. (2020) "Investimenti, disintermediazione, capacità: come superare la retorica delle politiche per il Mezzogiorno", in G. Coco, and C. De Vincenti (eds), *Una questione nazionale. Il Mezzogiorno da "problema" a "opportunità*". Bologna: Il Mulino, pp. 203-226

- Coco, G., and A. Lepore (2018) "Per un nuovo modello di intervento pubblico nel Mezzogiorno", in G. Coco and A. Lepore (eds), *Il risveglio del Mezzogiorno. Nuove politiche per lo sviluppo.* Bari: Laterza, pp. 175-196
- Di Tommaso, M. R., L. Rubini, E. Barbieri, and C. Pollio (2024) *Industry Organization and Industrial Policy. Production and Innovation, Development and Public Interest*. Bologna: Il Mulino.
- Draghi, M. (2024) *The Future of European Competitiveness*. Brussels: European Commission, https://commission.europa.eu/document/download/97e481fd-2dc3-412d-be4c-f152a8232961_en
- European Commission (2005) "Implementing the Community Lisbon Programme: A Policy Framework to Strengthen EU Manufacturing—Towards a More Integrated Approach for Industrial Policy", COM(2005) 464, October 5, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52005DC0474
- European Commission (2012) "A Stronger European Industry for Growth and Economic Recovery Industrial Policy Communication Update", COM(2012) 582, October 10, https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0582:FIN:EN:PDF
- European Commission (2014) "For a European Industrial Renaissance", COM(2014) 14, January 22, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0014&from=ET
- European Commission (2017) "Investing in a Smart, Innovative and Sustainable Industry: A Renewed EU Industrial Policy Strategy", COM(2017) 479, September 13, https://eur-lex.europa.eu/resource.html?uri=cellar:c8b9aac5-9861-11e7-b92d-01aa75ed71a1.0001.02/DOC_1&format=PDF
- European Commission: Directorate-General for Research and Innovation and M. Mazzucato (2018) *Mission-oriented Research & Innovation in the European Union—A Problem-solving Approach to Fuel Innovation-led Growth.* Brussels: Publications Office, https://data.europa.eu/doi/10.2777/360325
- European Commission (2020) "A New Industrial Strategy for Europe", COM(2020) 102, March 10, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0102
- European Commission (2021a) "Communication from the Commission. Criteria for the Analysis of the Compatibility with the Internal Market of State Aid to Promote the Execution of Important Projects of Common European Interest", 2021/C 528/02, December 30, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52021XC1230(02)
- European Commission (2021b) "Communication from the Commission on a New Funding Strategy to Finance NextGenerationEU", COM(2021) 250, April 14, https://commission.europa.eu/document/download/a42a05ab-e656-4cf4-9d0b-b4d2825618ee_en?filename=com2021_250_en_act_part1_v3.pdf
- European Commission (2022) "A Chips Act for Europe", COM(2022) 45, February 8, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52022DC0045#:~:text=The%20EU%20Chips%20Act%20 proposes,to%20future%20supply%20chain%20disruptions
- Governo Italiano (2021) Italia Domani: Piano Nazionale di Ripresa e Resilienza, https://www.italiadomani.gov.it/content/sogei-ng/it/it/home.html
- Guerrieri, P., and P. C. Padoan (2024) Sovereign Europe. An Agenda for Europe in a Fragmented Global Economy. Brookfield, VT: Edward Elgar.
- Jacquemin, A. (1987) The New Industrial Organization: Market Forces and Strategic Behaviour. Cambridge, MA: The MIT Press.

- Junker, J. C. (2017) "State of the Union Address", Brussels, September 13, https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_17_3165
- Juhász, R., N. Lane, and D. Rodrik (2024) "The New Economics of Industrial Policy", *Annual Review of Economics* 16: 213–242, https://doi.org/10.1146/annurev-economics-081023-024638
- Letta, E. (2024) *Much More Than a Market*, https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf
- Lucchese, M., and M. Pianta (2021) "Il Piano Nazionale di Ripresa e Resilienza in una prospettiva di politica industriale", *Moneta e Credito* 74(294): 177–190.
- Ministero dell'Università e della Ricerca (2022) "NRRP, MUR: l'impatto della conoscenza grazie a un nuovo modo di fare ricerca e innovazione", MUR, June 26, https://www.mur.gov.it/it/news/martedi-28062022/pnrr-mur-limpatto-della-conoscenza-grazie-un-nuovo-modo-difare-ricerca-e
- Ministero per gli Affari Europei (2023) "Terza relazione sullo stato di attuazione del Piano Nazionale di Ripresa e Resilienza", June 20, *Italia Domani*, https://www.italiadomani.gov. it/content/sogei-ng/it/it/strumenti/documenti/archivio-documenti/terza-relazione-alparlamento-sullo-stato-di-attuazione-del-pian.html
- Ministero per gli Affari Europei (2024) "Quarta relazione sullo stato di attuazione del Piano Nazionale di Ripresa e Resilienza", https://www.affarieuropei.gov.it/media/7411/iv_relazione_al_parlamento_sezi.pdf
- Ministero per gli Affari Europei (2024) "Quinta relazione sullo stato di attuazione del Piano Nazionale di Ripresa e Resilienza", Nota sintetica. https://www.affarieuropei.gov.it/media/7594/quinta_relazione_nota_sintetica.pdf
- Mosconi, F. (2015) *The New European Industrial Policy. Global Competitiveness and the Manufacturing Renaissance.* New York: Routledge.
- Mosconi, F. (2022) "European Industrial Policy from 2000 to 2020", in J. C. Christophe Defraigne, J. Wouters, E. Traversa, and D. Zurstrassen (eds), EU Industrial Policy in the Multipolar Economy. Brookfield, VT: Edward Elgar, pp. 173-209
- Nisticò, R., and F. Prota (2023) "Sviluppo industriale per poli? Le zone economiche speciali in Italia e nel NRRP", *Stato e mercato* 2: 227–263, https://dx.doi.org/10.1425/108269
- Pianta, M., and M. Lucchese (2020) "Rethinking the European Green Deal: An Industrial Policy for a Just Transition in Europe", *Review of Radical Political Economics* 52(4): 633–641, https://doi.org/10.1177/0486613420938207
- Pianta, M., M. Lucchese, and L. Nascia (2020) "The Policy Space for a Novel Industrial Policy in Europe", *Industrial and Corporate Change* 29(3): 779–795, https://doi.org/10.1093/icc/dtz075
- Pianta, M. (2021) "La politica industriale al tempo del PNRR", il Mulino 2: 152–162, https://doi.org/10.1402/101106
- Presidenza del Consiglio dei Ministri (2022) "Seconda relazione istruttoria sul rispetto del vincolo di destinazione alle regioni del Mezzogiorno di almeno il 40 per cento delle risorse allocabili territorialmente", June 30, *Dipartimento per le Politiche di Coesione*, https://politichecoesione.governo.it/media/2954/seconda-relazione-destinazione-mezzogiorno-risorse-pnrr_dati-al-30_06_2022.pdf
- Prodi, R. (2003) "Industrial Policy in an Enlarged Europe, Speech Delivered at the Conference Industrial Policy in an Enlarged Europe by the President of the European Commission", Speech Given in Brussels, January 21.

- PWC (2024) Dalle Zone Economiche Speciali regionali e interregionali alla ZES unica, https://www.pwc.com/it/it/assets/docs/pwc-dalle-ZES-regionali-e-interregionali-alla-ZES-unica.pdf
- Quadrio Curzio, A., A. Silvani, M. Fortis, and F. Cerniglia (2023) (eds) Le piattaforme tecnicoscientifiche in Europa. Ricerca, economia, innovazione. Bologna: Il Mulino, Collana Fondazione Edison.
- Resta, F. (2023) "Università e impresa: dal PNRR nuove reti per la ricerca", in A. Quadrio Curzio A., A. Silvani, and F. Cerniglia (eds), *Le piattaforme tecnico-scientifiche in Europa. Ricerca, economia, innovazione*. Bologna: Il Mulino, Collana Fondazione Edison, pp. 64–75.
- Rodrik, D. (2004) "Industrial Policy for the Twenty-First Century", John F. Kennedy School of Government, Cambridge, MA, September, https://drodrik.scholar.harvard.edu/files/danirodrik/files/industrial-policy-twenty-first-century.pdf
- Viesti, G. (2023) Riuscirà il PNRR a rilanciare l'Italia?. Rome: Donzelli editore.
- Viesti, G. (2024) "La ZES unica: dal mito alla dura realtà", Menabò 208, https://eticaeconomia.it/la-zes-unica-dal-mito-alla-dura-realta/
- von der Leyen, U. (2019a) "Speech by President-elect von der Leyen in the European Parliament Plenary on the Occasion of the Presentation of her College of Commissioners and their Programme", Strasbourg, November 27.
- von der Leyen, U. (2019b) "A Union that Strives for More. My Agenda for Europe, by Candidate for President of the European Commission 2019–2024", Strasbourg, July 16.
- White House (2022) *Inflation Reduction Act Guidebook*. Washington, DC: White House, https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/