Department of Management
Course of International Economics

The Impact of Economic Development Policies on the Italian Mezzogiorno: the case of "Zes Unica"

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Academic year 2025-2026

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Introduction

The establishment of the Single Special Economic Zone (SEZ) for Southern Italy represents a turning point in Italian cohesion policies, as it introduces a unified system of incentives and simplifications for an area historically characterised by fragmented interventions and heterogeneous implementation capacities. The reform stems from the need to strengthen the attractiveness of Southern Italy for productive investments and, at the same time, to address the administrative criticalities that have often limited its effectiveness, negatively affecting project implementation times and the predictability of public decisions.

ZES Unica was established by Decree-Law No. 124 of 19 September 2023, converted with amendments by Law No. 162 of 13 November 2023, which repeals and replaces the previous system based on eight regional SEZs. This regulatory intervention is in line with the experience launched in 2017 with Decree-Law No. 91 of 20 June 2017, converted by Law No. 123 of 3 August 2017, which introduced Special Economic Zones on a regional basis in Southern Italy, mainly in connection with port and logistics systems. Although that model represented a first attempt at targeted territorial policy, it highlighted structural limitations linked to the fragmentation of boundaries, the lack of uniformity of procedures and the variability of administrative capacity, with negative effects on the comparability of results and the overall attractiveness of the instrument.

The 2023 reform overcomes the critical issues of regional SEZs through institutional and operational intervention. On the one hand, it unifies the eight SEZs into a single zone covering the whole of Southern Italy and introduces centralised governance under the Presidency of the Council of Ministers (control room and mission structure), with the aim of ensuring greater uniformity and coordination. On the other hand, it strengthens simplification through a Single Digital Desk and single authorisation, reducing burdens and procedural uncertainty. This is accompanied by tax credits, the main incentive for the measure to support productive investment. Meanwhile, the institutional framework continues to evolve: Decree-Law No. 116 of 8 August 2025, converted into Law No. 147 of 3 October 2025, introduced Article 9-bis, establishing the Department for the South within the Presidency of the Council of Ministers. This new structure strengthens the

coordination and monitoring functions of territorial development policies, including those relating to ZES Unica, and represents a further step towards more integrated and strategic governance of policies aimed at the South.
In this context, this thesis aims to evaluate ZES Unica as a territorial policy tool, focusing on the following research question: is ZES Unica producing initial evidence consistent with the objective of strengthening the development of Southern Italy, and what conditions will determine its effectiveness in the medium term? The analysis is developed along three main dimensions. The economic dimension, relating to the measure's ability to activate investment and guide companies' location decisions; the employment dimension, understood as a potential contribution to strengthening the productive fabric and creating jobs; the institutional dimension, referring to the reduction of administrative friction and the improvement of the predictability of authorisation processes.

The structure of the thesis reflects this approach and is divided into three chapters, constructed in a progressive manner. The first chapter defines the reference framework, reconstructing the evolution of SEZs in Italy and the transition from the regional model to ZES Unica. This part clarifies the assumptions behind the reform and the main elements of discontinuity introduced by the new system, with a focus on the territorial perimeter, the governance structure and the operational tools.

The second chapter analyses the launch of ZES Unica and the first available evidence, focusing on indicators that can be directly observed in the initial phase: on the one hand, the operation of the authorisation channel, through the issuance of single authorisations, and on the other, the incentive component, with the trend in tax credits. Based on this data, the chapter also highlights the first signs of an impact on Southern Italy in terms of investment dynamics and the potential strengthening of the productive fabric, albeit in the context of a still preliminary analysis. The evidence is therefore interpreted as initial indicators of activation and possible economic and territorial impact, distinguishing them from fully consolidated assessments, which require a longer and more comprehensive time horizon.

Finally, The third chapter analyzes the future prospects of ZES Unica using an approach that combines econometric models and forecast estimates for the 2026-2028 period. By analyzing existing data and projections, the expected economic and employment impacts are evaluated, providing a clear view of future developments. Additionally, the possibility of extending the ZES Unica model to a national level is explored, drawing inspiration from the ZES experience in Poland. The analysis examines the feasibility of adapting the model to the Italian context, considering the regulatory challenges, governance, and opportunities for spreading the benefits across the entire country.

1. Institutional and Policy Framework of Special Economic Zones in Italy

1.1 Definition and Key Features of SEZs

Special Economic Zones (SEZs) are an economic and industrial policy tool adopted in numerous countries to stimulate productive development, attract foreign direct investment and promote territorial competitiveness.[1] SEZs are geographically defined areas within which a governmental authority introduces a regulatory, fiscal and administrative regime that differs from the rest of the national territory, with the aim of creating favourable conditions for the establishment and growth of firms.

The core idea is to concentrate a coherent package of incentives and administrative simplifications within a defined area, in order to trigger a multiplier effect on private investment and job creation.

For this reason, they are regarded as genuine *growth poles*, offering greater appeal to investors and better development opportunities.

The objectives pursued by SEZs can be summarised along four main lines:

1. Attraction of capital and productive investments, particularly from international operators;
2. Increase in export capacity and in the degree of openness of the local economy;
3. Promotion of employment growth and the development of technical and managerial skills;
4. Strengthening of infrastructural and technological assets, with spillover effects on the surrounding regional economy.

[1] Prisco, C. (2025), *Le Zone Economiche Speciali. Il caso della ZES Unica per il Mezzogiorno* (IPE Working Paper No. 25), IPE Business School, Napoli;
Governo Italiano, Presidenza del Consiglio dei Ministri (2024), *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome.

Historical evolution

The origin of SEZs can be traced back to the first experiences of free zones in the United States in the 1930s, created to facilitate the movement of goods through the reduction of customs duties. However, the real diffusion of the modern model took place in the post-war period with the creation, in 1959, of the Shannon Free Zone in Ireland, an area used to experiment with industrialisation policies and the attraction of foreign investment. This zone is recognised as the first contemporary case of a Special Economic Zone and as a benchmark for subsequent implementations in Europe and in developing countries.[2]

In the 1980s, the concept of SEZ underwent a substantial evolution with the establishment of the *Shenzhen Special Economic Zone* in China. In this area, regulatory flexibility, managerial autonomy and integrated territorial planning led, in just over twenty years, to average GDP growth rates above 8% per year and an exponential increase in exports, consolidating the model as an instrument of *"policy innovation"* capable of reconciling economic openness and control.[3]

From that moment on, the use of SEZs has grown exponentially worldwide. While in the early 1980s only a few dozen existed, by 2008 their number had already risen to around 3,500, and then exceeded 4,000 in 2017, spread across more than 130 countries. [4]The highest concentration is found in East Asia, Southeast Asia and Latin America, areas in which these instruments have played a decisive role in industrialisation processes and in integration into global value chains.

In Italy, the introduction of Special Economic Zones is more recent. Inspired by international principles and experiences, they have been adapted to the national economic and institutional context. Decree-Law N. 91 of 2017 promotes the growth of the southern regions through the adoption of preferential regimes and simplified procedures.[5]

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[2] UNCTAD (2019), *World Investment Report 2019: Special Economic Zones*, United Nations, Geneva.
[3] World Bank (2024), *World Development Indicators 2024*, Washington, DC.
[4] UNCTAD (2019), *World Investment Report 2019: Special Economic Zones*, United Nations, Geneva.
[5] Decreto–legge 20 giugno 2017, n. 91, *Disposizioni urgenti per la crescita economica nel Mezzogiorno*, conv. in legge 3/08/2017,n.123;
Governo italiano – Presidenza del Consiglio dei Ministri (2024), *Piano Strategico della ZES Unica per il Mezzogiorno*.

1.2 Rationale for SEZs Adoption in Southern Italy

The introduction of Special Economic Zones (SEZs) in Southern Italy (Mezzogiorno[6]) is intended to address in a structural way the territorial disparities that characterise the Italian economy. [7]The South has been identified as a priority area due to the persistence of economic and institutional factors that have slowed down its growth.

At the European level, the possibility of establishing an SEZ is reserved for regions whose per capita GDP is below 75% of the European Union average, a threshold that identifies the so-called *"less developed regions"* according to EU cohesion policy classifications.[8]

Mezzogiorno falls within this category, which has allowed Italy to benefit from the derogations provided for under the European framework on State aid, making it possible to apply specific fiscal, contributory and infrastructural incentives.

The infrastructural gap, which limits the accessibility of territories and the logistical competitiveness of Southern Italy, combines with a reduced capacity to attract private investment, a level of labour productivity significantly lower than the national average and a structurally high unemployment rate, especially among young people and women.[9]

According to ISTAT data (2023), per capita GDP in the Mezzogiorno stands at around 24,000 euros per year, equal to approximately 55–58% of the average value recorded in Central and Northern Italy, where it exceeds 40,000 euros. Labour productivity also remains significantly lower than in the northern regions.
From an employment perspective, youth unemployment remains at critical levels, around 24% compared with an average of just 8% in the northern regions.[10]

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[6] *Mezzogiorno* refers to the southern macroarea of Italy, conventionally used in economic and policy analysis to indicate regions characterized by persistent structural and developmental gaps.

[7] Istituto per le Politiche Economiche (IPE) (2025), Prisco, C., *Le Zone Economiche Speciali. Il caso della ZES Unica per il Mezzogiorno* (IPE Working Paper No. 25), Napoli: IPE Business School.

[8] Regolamento (UE) n. 1303/2013 del Parlamento europeo e del Consiglio, del 17 dicembre 2013, *recante disposizioni comuni sul Fondo europeo di sviluppo regionale, sul Fondo sociale europeo, sul Fondo di coesione e sui fondi SIE*, in particolare la classificazione delle «regioni meno sviluppate».

[9] Banca d'Italia (2024), *Relazione annuale sull'economia delle regioni italiane 2023–2024*, Rome: Banca d'Italia.

[10] ISTAT (2024), *Conti economici territoriali. Anni 2021–2023*, Rome: Istituto Nazionale di Statistica; ISTAT (2024), *Occupati e disoccupati. Media annua 2023*, Rome: Istituto Nazionale di Statistica.

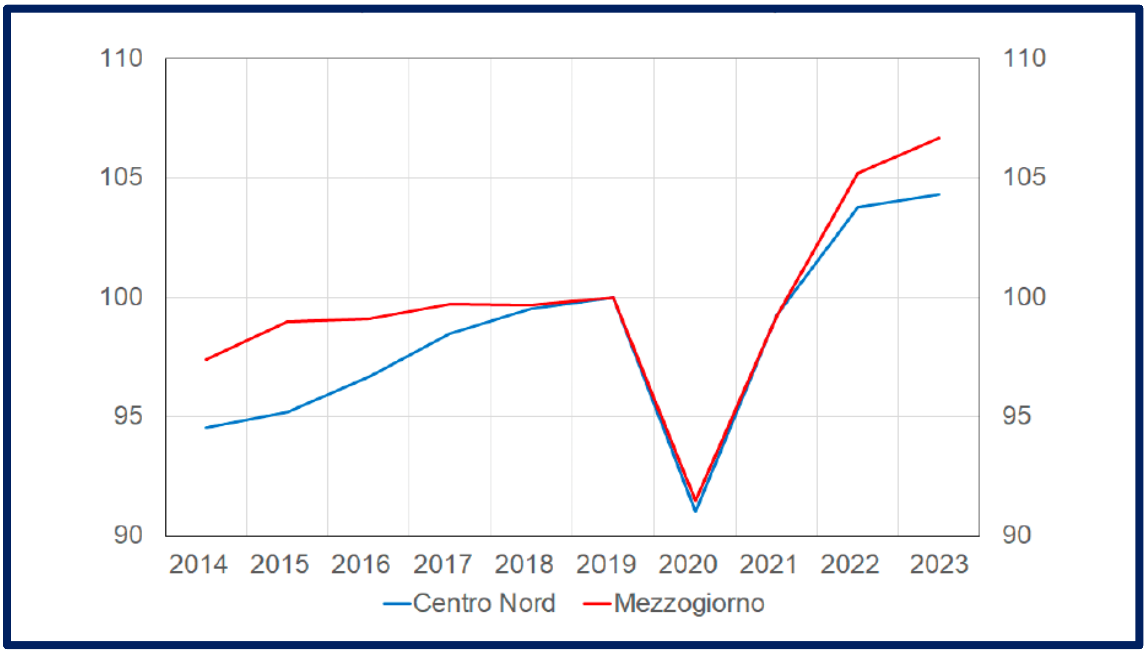

Figure 1.1: The figure shows the trend of GDP by macroarea in Italy (index, 2019=100) for Centre-North and Mezzogiorno over 2014–2023. Source: ISTAT.

To this must be added a fragmented and weakly internationalised productive fabric, made up mainly of micro-and small enterprises with a limited propensity to innovate and a reduced capacity to expand into foreign markets.

It is within this context that, in 2017, Decree-Law No. 91 established the first eight regional SEZs in the ports and hinterland logistics areas of Southern Italy, corresponding to the main logistical and industrial hubs. These areas, located in Campania, Calabria, Apulia, Basilicata, Molise, Sicily, Sardinia and Abruzzo, were intended to test a new model of territorial development based on public–private cooperation and on the capacity to leverage local specificities.[11]

The creation of SEZs in the Mezzogiorno is also part of a broader Euro-Mediterranean perspective on Italian development. The geographical position of the South, at the crossroads of the main maritime routes linking Europe with Africa and the Middle East, gives the area a strategic role in global logistical and production chains. The ports of Gioia Tauro, Taranto, Naples and Cagliari are key nodes of the trans-European transport

[11] Decreto–legge 20 giugno 2017, n. 91, *Disposizioni urgenti per la crescita economica nel Mezzogiorno*, convertito in legge 3 agosto 2017, n. 123, Gazzetta Ufficiale della Repubblica Italiana.

corridors and constitute essential interconnection points between trade flows from the Suez Canal and the markets of Northern Europe.[12]

The success of SEZs also depends to a large extent on their integration with the main national and European development policies, in particular with the National Recovery and Resilience Plan (PNRR), which allocates more than 40% of total resources to the Mezzogiorno. The measures envisaged by the PNRR, aimed at strengthening railway and port connections, digitalising administrative processes and supporting the energy transition, directly enhance the operational capacity of SEZs by improving their logistical accessibility and productive competitiveness.

Instrument such as the Digital One-Stop Shop is designed to overcome the historical administrative fragmentation that has hindered the effectiveness of development policies, fostering integrated and results-oriented governance.

The data reported in the SEZ Strategic Plan (2024) confirm the validity of this approach: already in the initial phase of the eight regional SEZs, more than 8 billion euros of investment have been activated, with an estimated economic multiplier of 2.6 and the creation of around 45,000 new direct and indirect jobs.[13]

1.3 From Fragmentation to "ZES Unica"

The experience of the eight regional SEZs, established by Decree-Law No. 91 of 2017, produced some positive results but over time revealed a number of critical issues linked to institutional and managerial fragmentation. Each zone operated with its own governance structure, autonomous procedures and non-uniform access criteria, generating inconsistencies in rules and decision-making timelines.[14]

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[12] Ambrosetti, V. D. M. (2025), *La strategia europea per una nuova stagione geopolitica, economica e socio-culturale del Mediterraneo. Libro Bianco – Quarta edizione*,Milan: The European House.

[13] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR (2024), *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, Rome; Governo Italiano – Presidenza del Consiglio dei Ministri (2024), *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome

[14] Governo Italiano – Presidenza del Consiglio dei Ministri (2024), *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome.

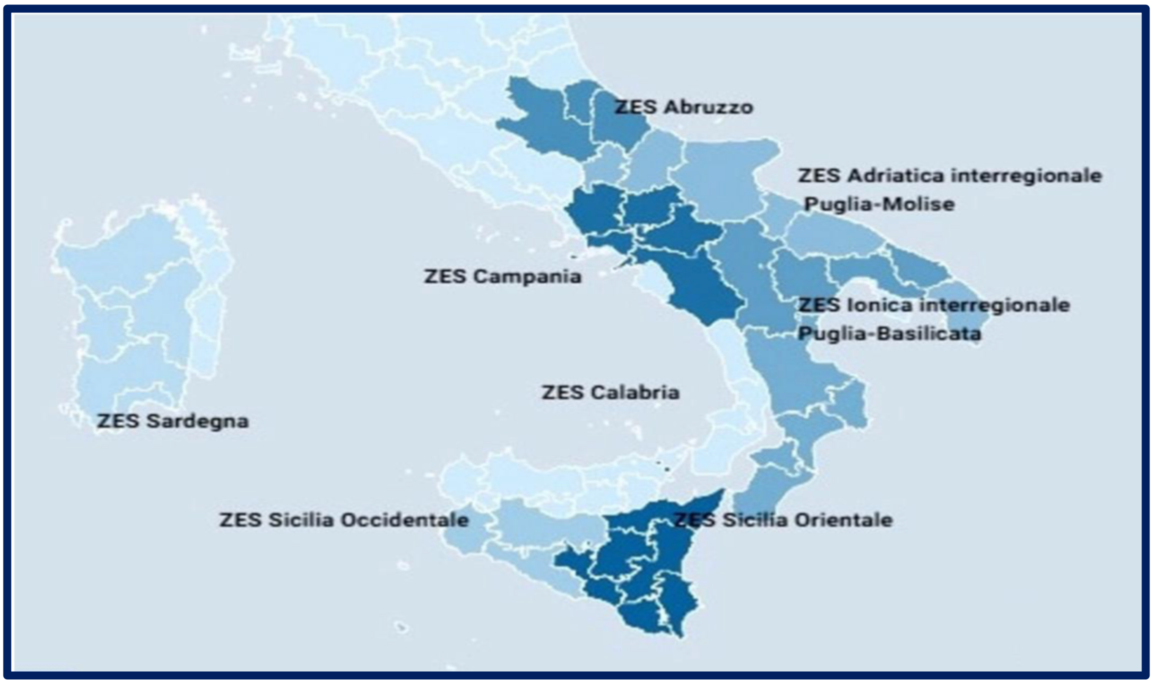

Figure 1.2: The eight regional Special Economic Zones (SEZs) in Southern Italy before ZES Unica reform (Source: Agenzia per la Coesione Territoriale).

The lack of coordination and the dispersion of competences reduced the overall effectiveness of the instrument, limiting its attractiveness for investors and preventing the development of economies of scale and efficiency levels comparable to those of the most advanced European experiences.

In response to these critical issues, the legislator introduced a reform through Decree-Law No. 124 of 19 September 2023, subsequently converted into Law No. 162/2023, which established ZES Unica[15] for Southern Italy, in force since 1 January 2024. This measure, further regulated by the Prime Ministerial Decree of 20 November 2023, organically redefined the governance, planning and operational modalities of the entire system, marking the definitive end of the fragmented management of regional special economic zones.[16]

[15] *ZES Unica* is the official Italian name of the Special Economic Zone established in Southern Italy by Decree-Law No. 124 of 19 September 2023**,** converted with amendments into Law No. 162 of 13 November 2023**.** In English, *ZES Unica* is translated as *Single Special Economic Zone*.

[16] Decreto–legge 19 settembre 2023, n. 124, *Disposizioni urgenti in materia di politiche di coesione, per il rilancio dell'economia nelle aree del Mezzogiorno del Paese, nonché in materia di immigrazione*, convertito in legge 13 novembre 2023, n. 162, Gazzetta Ufficiale della Repubblica Italiana, Serie Generale.
Decreto del Presidente del Consiglio dei Ministri 20 novembre 2023, *Istituzione della Struttura di Missione ZES presso la Presidenza del Consiglio dei Ministri*, Rome.

With the 2023 reform, the core element of the new organisational framework is the Digital One-Stop Shop for SEZs, a national online platform that enables firms to manage the entire authorisation process centrally, drastically reducing timeframes and bureaucratic steps.

Alongside this tool, the reform introduced both a ZES Unica tax credit, applicable uniformly throughout the southern territory and replacing the previous regional schemes with greater simplicity and regulatory clarity, and a national Steering Committee, chaired by the Presidency of the Council of Ministers and composed of representatives of the Government, the Regions and the main competent ministries. This body is responsible for defining strategic guidelines, monitoring results and coordinating funded interventions, thus avoiding overlaps and dispersion of resources.[17]

The Prime Ministerial Decree of 20 November 2023 also established a dedicated Mission Structure within the Presidency of the Council, with operational functions of support, control and implementation of the SEZ Strategic Plan. This framework ensures a leaner decision-making chain and a coherent multilevel governance system, in which the central level plays a role of guidance and oversight, while the regional level maintains functions of liaison with local administrations and with the productive fabric.[18]

1.4 ZES Unica Project

As of 1 January 2024, the Special Economic Zone for Southern Italy (ZES Unica) has been operational. It was established by Decree-Law No. 124 of 2023 and is regulated by Law No. 162 of the same year. [19]The reform, which replaces the eight regional SEZs created since 2017 by bringing together the entire southern territory into a single incentivised area, pursues the objective of simplifying the management of development policies and creating a more investment-friendly environment. It seeks to overcome the

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[17] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR (2024), *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, Rome.

[18] Governo italiano – Presidenza del Consiglio dei Ministri (2024), *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome.

[19] D.L. n. 124/2023, conv. in L. n. 162/2023.

Governo italiano – Presidenza del Consiglio dei ministri, *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome, 2024.

fragmentation and operational differences that had limited the effectiveness of the previous system, also due to the patchwork delimitation of the former SEZ perimeters.

ZES Unica introduces a centralised governance model coordinated by the Presidency of the Council of Ministers. At the operational level, a Steering Committee has been established with guidance and monitoring functions, together with a Mission Structure that acts as the single point of contact for firms and is responsible for issuing the Single Authorisation for the start-up or expansion of productive activities. With the Prime Ministerial Decree of 20 November 2023, the functions and staff of the Special Commissioners of the previous eight SEZs were transferred to the new structure, thereby standardising procedures and shortening administrative timeframes.[20]

The architecture of the reform rests on three main pillars:

1. simplification of procedures;
2. attraction of investments;
3. consistency with European and national programming.

Simplification is ensured through the establishment of the ZES Digital One-Stop Shop the attraction of investments is supported by ZES Unica tax credit, managed by the Italian Agenzia delle Entrate[21], and strategic alignment is guaranteed by the 2024–2026 three-year Strategic Plan.[22]

The creation of ZES Unica therefore marks a step forward in the industrial policy for Southern Italy. For the first time, Mezzogiorno is conceived as a unified economic system, able to operate under common rules and to enhance its role within the Euro-Mediterranean context. The first results confirm the impact of the new framework: in 2024 the number of Single Authorisations issued increased significantly compared with

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[20] D.P.C.M. 20 novembre 2023.

[21] *Agenzia delle Entrate* is referred to using its Italian name. *Agenzia delle Entrate* is the Italian Revenue Agency, responsible for tax administration, collection, and the management of tax incentives under the Italian legal framework.

[22] Ministero delle Imprese e del Made in Italy, *Rapporto sulle Autorizzazioni Uniche e sugli investimenti nelle aree ZES. Aggiornamento 2024*, Rome, 2024.

2023, accompanied by a rise in investments and renewed interest from domestic and foreign enterprises in the southern regions.

1.5 The Strategic Plan

The Strategic Plan of ZES Unica for Southern Italy, approved by the Steering Committee on 26 July 2024, is the main policy instrument guiding the development of the area. It is a three-year document that sets out the lines of intervention, economic objectives and territorial priorities, in line with the National Recovery and Resilience Plan (PNRR), EU cohesion policy and the green and digital transition principles laid down in the 2030 Agenda.[23]

The Strategic Plan therefore constitutes the operational core of ZES Unica and is designed to provide a comprehensive and strategic vision for the development of the Mezzogiorno. It does not merely list individual economic measures but synergically integrates infrastructure, industrial and environmental policies, thereby creating a coherent framework in which ZES Unica acts as the operational reference point for attracting investment and effectively coordinating public and private interventions.

The Mission Structure at the Presidency of the Council of Ministers is responsible for implementing the Plan and monitoring its outcomes. It is tasked with coordinating central and regional administrations and ensuring uniformity in procedures and in the allocation of resources. In this way, the Strategic Plan becomes the overarching framework for all activities of ZES Unica, steering programming in accordance with sustainable growth objectives.[24]

Within the Strategic Plan of ZES Unica, nine priority production value chains and three enabling technologies to be promoted have been identified as key sectors for the industrial transformation of the Mezzogiorno.

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[23] Governo italiano – Presidenza del Consiglio dei Ministri, *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome,2024.
Dipartimento per il Programma di Governo – Presidenza del Consiglio dei Ministri, *Approvato il Piano strategico per la ZES Unica*, 31 gennaio 2025.
[24] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR, *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, Rome, 2024.

Specific attention is devoted to measures for the energy transition and industrial reconversion, aimed at modernising production hubs and reducing the environmental impact of economic activities. The planned actions include incentives for energy efficiency, the development of renewable energy, the digitalisation of processes and the strengthening of supply chains linked to green sectors. Moreover, the Strategic Plan contains a dedicated section on addressing the disadvantages arising from insularity in Sicily and Sardinia, through infrastructure and logistics projects designed to improve connections with the Trans-European Transport Network (TEN-T).[25]

Among its overall objectives, the Plan aims to:

• strengthen the competitiveness of the productive system in Southern Italy, through the specialisation of integrated value chains and the diffusion of technological innovation;

• promote new qualified employment opportunities, in particular for young people and women;

• improve logistics connectivity and the accessibility of industrial areas;

• enhance the environmental sustainability and energy resilience of the territories.

The measures set out in the Strategic Plan are closely intertwined with the infrastructure investments for the ZES financed under the PNRR, amounting to 563 million euro, which are allocated to last-mile connections, the digitalisation of logistics and the strengthening of southern ports. As of June 2024, 46 infrastructure projects have been launched, 22 of which are dedicated to connections with the TEN-T railway network, 19 to digitalisation and 5 to improving port resilience.[26]

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[25] Banca d'Italia, *Relazione annuale sull'economia delle regioni italiane 2023–2024*, Rome, 2024.
[26] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR, *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, 2024.

1.6 Value chains and technologies to be promoted

The Strategic Plan of ZES Unica identifies the production value chains and technological trajectories on which to concentrate interventions for the industrial transformation of Southern Italy. The selection is the outcome of a process that combines quantitative analyses of the economic structure of the southern regions with qualitative assessments of their development potential, with the aim of directing investment towards areas characterised by already consolidated specialisations or by favourable conditions for their further strengthening.[27]

Type of intervention	No. of projects	PNRR funding amount (€)
Connections between port/industrial areas and the road and railway network (last mile)	26	334.207.000,00
Enhancement of logistics and green development of back-port/industrial areas	20	121.143.000,00
Strengthening of port resilience and safety	8	108.150.000,00
Overall total	**54**	**563.500.000,00**

Table 1.1: Breakdown of interventions – Interministerial Decree No. 492 of 2021. Source: Strategic Plan for ZES Unica.

The preparation of the Plan, entrusted to the ZES Mission Structure pursuant to Article 11 of Decree-Law 124/2023, involved central administrations, regions, local authorities, business associations and operators from the relevant sectors through the establishment of technical working groups. The Strategic Plan, approved by the Steering Committee on 26 July 2024 and adopted by Prime Ministerial Decree of 31 October 2024, groups economic activities into 17 integrated value chains, which are assessed using indicators of regional specialisation, competitiveness, territorial presence, degree of innovation and integration into global value chains. This analysis identifies nine priority value chains and three enabling technologies, which form the basis of the industrial action of ZES Unica.

[27] Governo Italiano – Presidenza del Consiglio dei Ministri, *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome, 2024.

	ISTAT description		Mapping in the Strategic Plan
1	Agri-food	1	Agribusiness&Agroindustry
2	Home and office furniture	2	Quality Made in Italy
3	Clothing, footwear and apparel accessories, including sportswear	2	Quality Made in Italy
4	Publishing	3	Publishing
5	Pharmaceuticals&products for personal, pet and household care	4	Chemical& Pharmaceutical
6	Health and social care	5	Healthcare
7	Road transport vehicles	6	Automotive
8	Road transport infrastructure and services	6	Automotive
9	Waterborne transport vehicles	7	Naval & Shipbuilding
10	Waterborne transport infrastructure and services	7	Naval & Shipbuilding
11	Rail or cable transport vehicles	8	Railway
12	Rail and cable transport infrastructure and services	8	Railway
13	Aerospace and defence	9	Aerospace
14	Air transport, aerospace and defence infrastructure and services	9	Aerospace
15	Electrical or electronic household appliances	10	Electronics & ICT
16	Industrial electrical equipment, machinery and fabricated products for general use across value chains	10	Electronics & ICT
17	Non-electrical tools and small hardware for domestic, industrial and professional use	11	Tools & Hardware
18	Precious goods	12	Jewellery & Watches
19	Energy	13	Utilities
20	Circular economy and waste management	13	Utilities
21	Water services	13	Utilities
22	Construction	14	Construction
24	Tourism and leisure	15	Tourism
25	Audio and audiovisual content	16	Audiovisual Industry
26	Telecommunications infrastructure and services	10	Electronics & ICT
27	Education and vocational training	17	Education & Training

Table 1.2: ISTAT description Mapping in the Strategic Plan. Source: ISTAT

The value chains are organised into two groups. On the one hand, there are five already structured value chains, characterised by a strong territorial embeddedness and a broad employment base (Agribusiness & Agroindustry, Tourism, Electronics and ICT, Automotive, Made in Italy). On the other hand, there are four high-growth-potential value chains linked to technologically advanced sectors (Chemicals and Pharmaceuticals, Naval & Shipbuilding, Aerospace, Railway). These are complemented by three enabling technologies, namely digital, biotechnological and cleantech technologies, regarded as essential to support cross-cutting innovation across all value chains.[28]

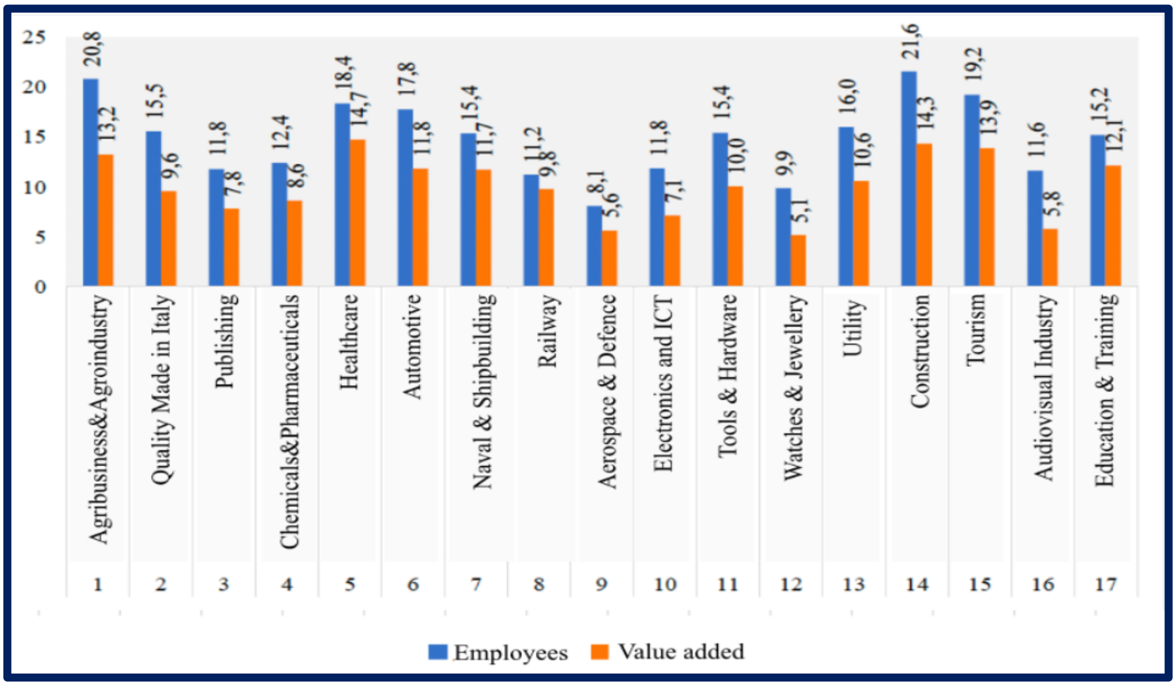

Table 1.3: Southern Italy's share in the 17 supply chains: value added and employees. Source: SVIMEZ calculations based on ISTAT data.

1.6.1 Structured value chains

Agribusiness & Agroindustry

The Agribusiness & Agroindustry value chain is one of the most solid in the Southern Italy and shows a structural specialisation in five out of eight regions. The Strategic Plan highlights that the sector employs over 300,000 workers and is organised along an

[28] Zeng, D. Z., *Special Economic Zones: Lessons from the Global Experience*, World Bank, Washington, DC, 2015.

extended value chain that integrates primary production, industrial processing, logistics and distribution, making it one of the main productive pillars of ZES Unica. A key element is its increasing international openness: the Plan documents a gradual rise in the export share, supported by foreign demand for typical and certified products. This trend is reflected in the allocation of European resources, since 40% of the national Common Agricultural Policy (CAP), equal to 6.333 billion euro, is destined to the regions included in ZES Unica. The combination of strong territorial embeddedness, wide employment base and export orientation makes the Agribusiness & Agroindustry value chain a crucial lever for strengthening the competitiveness of the Mezzogiorno, capable of generating positive spillovers on complementary activities such as packaging, cold-chain logistics and advanced processing.[29]

Tourism

Tourism is identified in the Plan as a value chain with a high degree of territorial specialisation, with five southern regions out of eight displaying specialisation levels above the national average. Although it is one of the main components of the service economy, the sector still shows considerable room for growth. In 2022, total tourist overnight stays in the Mezzogiorno were still 8% lower than in 2019, compared with a 5.1% decline in Central and Northern Italy, which signals a slower recovery but also a potential that is not yet fully expressed. The recent rebalancing of flows in favour of international visitors, combined with an endowment of cultural, landscape and environmental assets of national relevance, confirms the role of Tourism as a cross-cutting lever capable of activating related value chains, from Made in Italy to Agribusiness & Agroindustry, and of spreading the benefits of development widely across the territory.[30]

Electronics and ICT

The Electronics and ICT value chain is one of the most structured technological components of ZES Unica and shows consolidated specialisation in five southern regions.

[29] Banca d'Italia, *Relazione annuale sull'economia delle regioni italiane 2023–2024*, Rome, 2024.
[30] Ambrosetti, V. D. M., *La strategia europea per una nuova stagione geopolitica, economica e socioculturale del Mediterraneo. Libro Bianco – Quarta edizione*, The European House – Ambrosetti, 2025

Overall, the sector employs more than 273,000 workers and generates over 12 billion euro of value added, positioning itself as one of the main drivers of innovation in the Mezzogiorno. The Plan points to the presence of several excellence hubs: in Sicily, there is a nationally relevant district in microelectronics, with expertise in semiconductors and technologies for electric mobility; in Apulia, the establishment of 16 ICT multinationals has led to the creation of around 5,000 new jobs, strengthening the international dimension of the value chain; in Abruzzo, there is strong integration between IT services, mechatronics and advanced electronics. Electronics and ICT is therefore identified as an enabling value chain, as it provides the digital solutions required for the transformation of the other strategic value chains of ZES Unica, from Automotive to logistics, from Made in Italy to advanced services.[31]

Automotive

The Automotive sector is classified in the Plan as a *"decisive"* value chain for Mezzogiorno, due to a structural specialisation concentrated in four regions, Abruzzo, Basilicata, Campania and Molise. The analyses highlight a significant industrial concentration along the entire value chain, which includes metallurgy, automotive electronics, tyre production, special-purpose machinery and vehicle manufacturing. In the specialised regions, Automotive accounts for an employment share higher than the national average and offers wage levels and contractual conditions that are more stable than those observed in other productive sectors in Southern Italy. Abruzzo hosts one of the country's most important production hubs, where more than 28,000 workers in the ICT-electronics value chain are integrated with the production of automotive components. Basilicata is home to major plants of European relevance in the manufacture of finished vehicles, while Campania and Molise feature a dense network of firms operating in components, rubber and plastics, and electrical systems for transport. Integration into the European sustainable vehicle value chain and the ongoing reconversion processes towards electric powertrains and alternative fuels justify the central role assigned to this sector in ZES Unica strategy.[32]

[31] Banca d'Italia, *Relazione annuale sull'economia delle regioni italiane 2023–2024*, Rome, 2024
[32] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR, *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, 2024.

Made in Italy

Made in Italy is defined in the Plan as one of the most important engines of manufacturing in Mezzogiorno. In Southern Italy, this value chain generates more than 11 billion euro of value added, approximately 10% of he national total, and employs around 320,000 workers, equal to 16% of national employment in the sector. In the Fashion segment alone, national value added amounts to 64 billion euro with 1.2 million employees. Mezzogiorno contributes around 6 billion euro of value added and nearly 180,000 workers. Specialisation is particularly pronounced in Apulia, Campania and Basilicata, where there are production districts with a strong subcontracting vocation in relation to major brands located in Central and Northern Italy. This structure results in a productivity gap of approximately 39% below the national average, which the Plan identifies as a priority area for intervention through policies for technological upgrading, integration into global value chains and strengthening of firms' managerial capabilities.[33]

1.6.2 High-growth-potential value chains

Chemicals and Pharmaceuticals

The Chemicals and Pharmaceuticals sector is one of the most technologically advanced components of the productive system in the Southern Italy. The Plan estimates total value added at more than 6 billion euro, with a significant presence of skilled employees in the regions included in the ZES. Territorial embeddedness is confirmed by the existence of consolidated industrial hubs in Campania, Apulia and Abruzzo, where multinational plants, innovative SMEs and university centres specialised in life sciences and industrial chemistry are located. The value chain is firmly integrated into the main European pharmaceutical and medical device value chains, thanks to the concentration of activities in basic chemicals, advanced materials and drug manufacturing. The growing demand for innovative medicines, bioproducts and biomedical technologies is identified as a strategic driver for the expansion of this value chain, which in the Mezzogiorno already benefits

[33] Governo italiano – Presidenza del Consiglio dei Ministri, *Piano Strategico della ZES Unica per il Mezzogiorno)*, Rome,2024.
Ministero delle Imprese e del Made in Italy, *Rapporto sulle Autorizzazioni Uniche e sugli investimenti nelle aree ZES. Aggiornamento 2024*, Rome, 2024.

from the scientific capabilities and infrastructure required to support technological upgrading paths.[34]

Naval & Shipbuilding

The Naval & Shipbuilding value chain is one of the most deeply rooted in the Mezzogiorno. According to the Strategic Plan, the sector employs around 70,000 workers and generates almost 4 billion euro of value added in the ZES regions, making it one of the most structured industrial activities in Southern Italy. Productive concentration is particularly high in Campania and Apulia, which host historic shipyards, dry docks, firms specialised in refitting, and a strategic port network connected to the main Mediterranean corridors. The Plan situates this value chain within the broader transformation processes of the maritime sector: the increase in Mediterranean traffic, the regionalisation of supply chains and the transition towards low-emission fuels (LNG, methanol, e-fuels) are boosting demand for investment and skills in southern shipyards. The combination of consolidated port infrastructure, a qualified workforce and growing European attention to the decarbonisation of maritime transport makes Naval & Shipbuilding one of the value chains most closely aligned with the strategic objectives of ZES Unica.[35]

Aerospace

Aerospace is identified in the Plan as the highest-tech value chain within the entire ZES system. Mezzogiorno accounts for 8.1% of national employment and 5.6% of Italian value added in the sector, figures that attest to the existence of a specialised industrial core. The main hubs are located in Campania and Apulia, where plants dedicated to the production of aeronautical components, avionics systems, composite materials and solutions for defence and satellite observation are concentrated, with direct integration into European civil and military aviation programmes. The Plan underlines that the participation of southern firms in the main international platforms gives this value chain a strategic role that goes beyond its current economic size, thanks to its ability to generate

[34] Banca d'Italia, *Relazione annuale sull'economia delle regioni italiane 2023–2024*, Rome, 2024
[35] Governo Italiano – Presidenza del Consiglio dei Ministri, *Piano Strategico della ZES Unica per il Mezzogiorno*, 2024.

positive technological spillovers in related sectors such as mechatronics, advanced electronics and ICT.[36]

Railway

The Railway value chain plays a strategic role for ZES Unica, both in terms of its economic weight and its contribution to reducing the logistics gap affecting Mezzogiorno. At national level, the sector generates 38 billion euro of value added and employs around 500,000 workers. In Southern Italy, 11.2% of total employment is concentrated in this sector, corresponding to 60,242 workers, and 9.8% of value added, for a total of 3.7 billion euro. Territorial embeddedness in the South is particularly strong in Campania and Apulia, which together account for about 80 % of railway value added in the area, with over 38,000 employees. Mezzogiorno also shows a significant industrial peculiarity: 47% of railway-sector firms are manufacturing companies, compared with a national average of 36%, indicating a productive base more oriented towards the fabrication of rolling stock and components. The presence of specialised hubs in the main railway and port nodes, together with growing demand for sustainable mobility technologies and integration into the TEN-T corridors, confirms Railway as a high-potential value chain for ZES Unica.[37]

1.6.3 Enabling technologies

The Plan identifies three enabling technologies, digital, biotechnological and cleantech, regarded as fundamental for strengthening cross-cutting innovation across ZES Unica value chains. Digital technologies support automation, connectivity and data management, thereby enabling the transformation of production and logistics processes. Biotechnologies are a key driver for the evolution of the Agribusiness & Agroindustry and Chemicals and Pharmaceuticals value chains, thanks to the presence in the Southern Italy of scientific capabilities and specialised research centres. Cleantech solutions, finally, underpin decarbonisation and energy-efficiency objectives and are therefore essential for energy-intensive value chains such as Automotive, Naval & Shipbuilding,

[36] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR, *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, 2024.
[37] Banca d'Italia, *Relazione annuale sull'economia delle regioni italiane 2023–2024*, 2024.

and Railway. Taken together, these three trajectories constitute the technological infrastructure on which the modernisation of ZES Unica is based.[38]

1.7 Digital One-Stop Shop and Single Authorisation

The reform of ZES Unica introduces a profound change in the administrative model governing productive activities in Southern Italy, overcoming the previous decentralised system of the eight regional SEZs. Before 2024, in fact, each SEZ, with highly fragmented territorial perimeters, had its own one-stop shops, procedures and timelines, and firms were forced to interact with a multitude of local entities and central administrations. This configuration generated strong heterogeneity in procedures and often long and uncertain authorisation times, with processes for complex investments that could take several months to be completed.[39]

With the entry into force of ZES Unica on 1 January 2024, the one-stop shops of the previous SEZs were merged into a single centralised system, the SEZ Digital One-Stop Shop[40] (S.U.D. ZES), established within the Mission Structure. The new one-stop shop performs the functions of the traditional One-Stop Shop for Productive Activities (SUAP) and manages, entirely online, all procedures relating to:

• the construction, extension, location and relocation of production plants;

• building works connected with productive activities;

• the construction or renovation of facilities for sports, cultural or entertainment events.

This is a fully centralised system, which allows firms to submit a single digital application for the entire authorisation process. Unlike the previous framework, which required

[38] Governo italiano – Presidenza del Consiglio dei Ministri, *Piano Strategico della ZES Unica per il Mezzogiorno*, 2024.
Zeng, D. Z., *Special Economic Zones: Lessons from the Global Experience*, World Bank, Washington, DC, 2015.
[39] D.L. n. 124/2023, conv. in L. n. 162/2023.
[40] SEZ Digital One-Stop Shop is the English term for the Italian *Sportello Unico Digitale ZES (S.U.D. ZES)*.

multiple separate permits, the new governance model introduces the Single Authorisation, as provided for by Article 14, paragraph 1, of Law No. 162/2023.[41]

The single authorisation replaces all the permits required for the location, construction, operation, transformation, reconversion or extension of economic and industrial activities located within ZES Unica, with the exception of energy plants and works of strategic relevance governed by special legislation. The obligations laid down in the rules on Environmental Impact Assessment (EIA) remain fully in force.

The procedure is designed to ensure speed and transparency. Once the application has been submitted, the Digital One-Stop Shop immediately issues a receipt indicating the deadline beyond which tacit consent applies and the absence of a reply is equivalent to the approval of the application. Within three working days from the submission of the documentation, the Mission Structure convenes the simplified conference of services, which adopts the final decision on the granting of the authorisation.[42]

The effects of the new model are already evident. In 2024, 415 single authorisations were issued, linked to investments of around 2.4 billion euro, thus exceeding in only eleven months the total volume of investments generated by the eight previous SEZs, which amounted to 1.9 billion euro overall. Thanks to centralisation and digitalisation, the authorisation process has been significantly shortened: according to official data from the Steering Committee, the average approval time fell by more than 50% in the first months of operation.[43]

In addition to the benefits in terms of administrative efficiency, the Digital One-Stop Shop ensures that procedures are aligned with European regulations on State aid, environment and infrastructure, thereby providing greater legal certainty for economic operators. The

[41] D.L. n. 124/2023, art. 14, conv. in L. n. 162/2023.
Struttura di missione ZES – PCM, *Piano strategico della ZES Unica,* Rome, 2025.
[42] Governo italiano – PCM, Piano Strategico della ZES Unica per il Mezzogiorno, Rome, 2024.
[43] Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR, *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, Rome, 2024.
Commissione Europea, *Linee guida in materia di aiuti di Stato a finalità regionale 2022–2027 (Regional Aid Guidelines)*, 2024.

possibility for firms to monitor online, in real time, the progress of their applications further strengthens transparency, traceability and business confidence in the new system.

1.8 Tax credit for investments in ZES Unica

Among the instruments introduced by the reform, the tax credit for investments is the cornerstone of the new preferential tax regime of ZES Unica. It builds on the incentives already envisaged for the previous regional SEZs, but overcomes their limitations by aligning the framework more closely with the 2022–2027 EU regional aid programming. [44]Under the previous regime, the tax credit for the Mezzogiorno and for the SEZs was granted for investments carried out up to 31 December 2023, with a ceiling of 100 million euro per project and differentiated rates according to firm size and location. In the regions of Basilicata, Calabria, Campania, Apulia, Sicily and Sardinia, the benefit could reach 45% for small enterprises, 35% for medium-sized enterprises and 25% for large enterprises; in Molise and Abruzzo, aid intensities were lower (30%, 20% and 10% respectively). However, this regime was largely *"extension-based"*, dependent on annual refinancing and applied within SEZs managed through heterogeneous administrative models and operational capacities.

With ZES Unica, the legislator intervenes along three main lines: regulatory unification, selective increase in aid intensities and centralisation of procedures. Article 16 of Decree-Law No. 124 of 2023 establishes a specific tax credit for investments carried out from 1 January 2024 in the eight regions of ZES Unica. Eligible investments are those qualifying as an *initial investment* project within the meaning of Regulation (EU) No. 651/2014, in line with EU State aid rules. They include the purchase of new machinery, plants and equipment destined for existing or new production units, as well as the purchase, construction or extension of business premises and land, provided that the combined value of land and buildings does not exceed 50% of the total eligible investment. The legislator also introduces precise size thresholds: the project cost must be at least 200,000

[44] D.L. n. 124/2023, conv. in L. n. 162/2023.
Istituto per le Politiche Economiche (IPE), Prisco C., *Le Zone Economiche Speciali. Il caso della ZES Unica per il Mezzogiorno* (IPE Working Paper No. 25), Napoli, 2025

euro and may reach a maximum of 100 million euro per single investment, in continuity with the ceiling already raised to this level under the previous SEZ regime.[45]

The new scheme applies the parameters laid down in the 2022–2027 Regional Aid Map in a rigorous manner, thereby ensuring full consistency with the EU framework on State aid. For large enterprises, the tax credit may reach 40% of eligible expenditure in Campania, Apulia, Calabria and Sicily, and 30% in Basilicata, Molise and Sardinia. In those areas of Abruzzo classified as “C zones” (under the 2022–2027 Regional Aid Map), the maximum intensity is instead 15%. On top of these percentages, the increases provided for in EU legislation apply: rates rise by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises. Thus, for example, in Campania or Apulia a small firm may in principle benefit from a tax credit of up to 60% of the investment cost. Compared with the previous SEZ regime, where maximum intensities in the most disadvantaged southern regions were 45%, 35% and 25%, the new system is therefore more generous and more finely calibrated to the needs of SMEs, which form the backbone of the productive fabric of the Mezzogiorno.[46]

The tax credit is financed through specific budgetary appropriations: the 2024 Budget Law authorised allocations amounting to 1.8 billion euro. Once the application has been submitted, the Italian Agenzia delle Entrate calculates the tax credit on the basis of the available resources and, where necessary, applies a proportional allocation coefficient if the total amount requested exceeds the funds provided. Firms make use of the credit by offsetting it against tax liabilities via the F24 payment form.

On the subjective and sectoral side, the new framework further strengthens alignment with EU law. Companies operating in the steel, coal and lignite sectors, in certain transport segments and related infrastructures, in energy and broadband, as well as financial, credit and insurance intermediaries and firms in difficulty or in liquidation are excluded from the benefit.

[45] D.L. n. 124/2023, art. 16.
Commissione Europea, Regolamento (UE) n. 651/2014 della Commissione del 17 giugno 2014 che dichiara alcune categorie di aiuti compatibili con il mercato interno (GBER).
[46] Carta degli aiuti a finalità regionale 2022–2027 per l’Italia.
Governo italiano – PCM, *Piano Strategico della ZES Unica per il Mezzogiorno*, Rome, 2024.

The first available data confirm the attractiveness of the new instrument. According to official communications from the Italian Agenzia delle Entrate, by the end of 2024 a total of 6,885 beneficiaries had submitted applications for the investment tax credit in ZES Unica, for an overall volume of declared investments amounting to 2.551 billion euro.[47]

1.8.1. Tax credit for primary agricultural, fisheries and aquaculture

Alongside the general tax credit for productive investments in ZES Unica, the legislator has introduced a specific scheme targeting primary production of agricultural products, fisheries and aquaculture, sectors for which special State aid rules apply. This measure was established by Decree-Law No. 63 of 2024, which inserted Article 16-bis into Decree-Law No. 124/2023, with the aim of ensuring full compliance with the European regulations applicable to the agricultural, forestry and fisheries sectors and guaranteeing the proper implementation of the measure by the Ministry of Agriculture, Food Sovereignty and Forestry (MASAF).[48]

Unlike the general wording of Article 16, which broadly referred to EU State aid rules, the new Article 16-bis sets up an ad hoc regime designed to address the specific economic, structural and regulatory features of agricultural and fisheries enterprises. The legislative intervention was necessary not only to fine-tune the measure in line with the conditions laid down in EU law, but also to provide legal certainty and ensure homogeneous operational management of the incentive.[49]

The measure covers investments carried out from 1 January 2024 by firms active in the primary production of agricultural products, fisheries and aquaculture, located within the territory of ZES Unica. Eligible investments include purchases, also through leasing, of:

• new machinery, plants and equipment destined for existing or newly established production units;

[47] Agenzia delle Entrate, *Comunicazioni ufficiali sul credito d'imposta per investimenti nella ZES Unica*, 2024. Ministero per gli Affari Europei, il Sud, le Politiche di Coesione e il PNRR, *Relazione sullo stato di attuazione della ZES Unica e del Piano di sviluppo del Mezzogiorno*, Rome, 2024.

[48] D.L. n. 63/2024, che inserisce l'art. 16-bis nel D.L. n. 124/2023. D.L. n. 124/2023, conv. in L. n. 162/2023, art. 16-bis.

[49] Commissione Europea, *Regolamento (UE) n. 651/2014 (GBER)*, per i rinvii generali alla disciplina sugli aiuti.

• land, in compliance with the limits imposed by EU legislation;

• business premises, provided that the combined value of land and buildings does not exceed 50% of the total eligible investment;

• works for the acquisition, construction or extension of production facilities, provided that they qualify as an initial investment.[50]

Compared with the general tax credit under Article 16, the sector-specific rules introduce a significantly lower minimum threshold, setting the eligible investment cost at 50,000 euro (instead of the 200,000 euro required for other sectors). This reduction reflects the different average size of agricultural and fisheries investments and allows broader access to the measure for micro-and small enterprises, which predominate in the sectors concerned.[51]

For 2024, the dedicated tax credit is subject to a maximum expenditure limit of 40 million euro, financed through a corresponding reduction in the allocation for the general ZES Unica tax credit. The incentive is used by offsetting it against tax liabilities via the F24 payment form, in line with the mechanism provided for other ZES investments.

Operational procedures, eligibility criteria and control mechanisms will be defined in a specific Decree of the Minister of Agriculture, Food Sovereignty and Forestry, adopted in agreement with the Ministry of Economy and Finance. This decree must ensure alignment of the measure with EU constraints on aid to the agricultural, forestry and fisheries sectors, while at the same time guaranteeing procedural consistency and coordination with the ZES Mission Structure.[52]

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[50] D.L. n. 63/2024, art. 1
Struttura di missione ZES – PCM, *ZES Unica. Special Economic Zone of Southern Italy. Guide for Investors*, Rome, 2025.

[51] World Bank, *World Development Indicators 2024*, Washington, DC

[52] MASAF – Ministero dell'agricoltura, della sovranità alimentare e delle foreste, *Documenti e schemi di decreto attuativo sul credito d'imposta ZES per i settori agricolo, forestale e della pesca*, 2024.
Agenzia delle Entrate, *Provvedimenti attuativi sul credito d'imposta per investimenti nella ZES Unica*, 2024.

1.9 Customs Free Zones

Within ZES Unica, Customs Free Zones (CFZ)[53] represent one of the most advanced instruments for customs simplification and for supporting high-throughput logistics and manufacturing activities. Article 11, paragraph 3-bis, of Decree-Law No. 124/2023 provides for the possibility of establishing fenced Customs Free Zones that comply with the Union Customs Code (Regulation (EU) No. 952/2013) and the related delegated and implementing acts, with the aim of strengthening the competitiveness of southern ports and attracting productive investment into strategic areas of the ZES.

The establishment of CFZs takes place on the proposal of the ZES Mission Structure, possibly at the initiative of Port System Authorities or the relevant Regions, and is formalised by a decision of the Director of the Customs and Monopolies Agency (ADM)[54]. The physical configuration of the CFZ must ensure that the area is fully enclosed, with access only through controlled gates and a system for registering vehicles and persons entering and leaving the zone. Suitable video surveillance systems are also required in order to prevent the unauthorised removal of goods, as well as appropriate premises, made available free of charge, for the institutional activities of ADM and the Guardia di Finanza[55]. The entire perimeter is subject to customs supervision, while ADM defines through circulars the operational requirements needed to ensure effective customs control of the area.[56]

The customs regime applicable in CFZs introduces a significant degree of simplification compared with the ordinary customs territory. Within a CFZ:

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[53] Customs Free Zones (CFZ) are areas with suspended customs duties. This is the English translation of the Italian term Zone Franche Doganali (ZFD)

[54] Agenzia delle Dogane e dei Monopoli (ADM) is Italy's customs authority responsible for customs controls and excise duties.

[55] Guardia di Finanza (Italian Financial Police) is Italy's law enforcement agency responsible for financial crimes, tax and customs enforcement, and anti-smuggling investigations.

[56] D.L. n. 124/2023, art. 11, comma 3-bis, conv. in L. n. 162/2023. Parlamento europeo e Consiglio dell'Unione europea, *Regolamento (UE) n. 952/2013 che istituisce il codice doganale dell'Unione(CDU)*.
Agenzia delle Dogane e dei Monopoli, *Circolari e linee guida sulle Zone Franche Doganali*, Rome, 2024.

• non-Union goods may be brought in and stored in suspension of customs duties and VAT and may undergo usual forms of handling without the need for specific authorisations (Article 220 UCC);

• entry into a CFZ does not require customs formalities, except in cases where placing goods under that regime allows the discharge of another customs procedure or the granting of refunds or remissions, as provided for in Article 245 UCC;

• goods introduced into the zone may subsequently be placed under other suspensive regimes, including inward processing, temporary admission and end-use (Article 247 UCC), or may be released for free circulation or re-exported. In the event of their release to the rest of the customs territory of the Union, such goods are regarded as non-Union goods unless proven otherwise.[57]

The combination of duty suspension, freedom to carry out processing and transformation operations and the concentration of controls within a delimited area generates significant operational advantages for firms:

– reduction in warehousing costs and in financial resources tied up in stocks;

– improved management of logistics flows;

– possibility to defer the payment of duties until the product is released for consumption;

– potential reinvestment of the resources thus freed up in innovation, plant expansion or internationalisation.[58]

The full effectiveness of CFZs depends on their location within the most dynamic logistics hubs of the Mezzogiorno. The Strategic Plan identifies three priority indicators for the selection of eligible areas, namely proximity to commercial ports, integration into existing or potential flows and adequate infrastructure, in particular with respect to the

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[57] Parlamento europeo e Consiglio UE, *Regolamento (UE) n. 952/2013 (CDU)*, artt. 220, 245, 247. Commissione Europea, *Regolamento delegato (UE) 2015/2446* e *Regolamento di esecuzione (UE) 2015/2447* sul CDU.
[58] Zeng, D. Z., *Special Economic Zones: Lessons from the Global Experience*, World Bank, Washington, DC, 2015. Istituto per le Politiche Economiche (IPE), Prisco C., *Le Zone Economiche Speciali. Il caso della ZES Unica per il Mezzogiorno* (IPE Working Paper No. 25), Napoli, 2025.

TEN-T network. In such contexts, CFZs can trigger cumulative development processes based on higher volumes of freight traffic, an expansion of advanced logistics services, the establishment of productive activities dedicated to the processing and transformation of goods and the upgrading of supporting infrastructure. This contributes to strengthening the position of southern ports as Euro-Mediterranean logistics hubs and makes CFZs one of the strategic assets for the competitiveness of ZES Unica.

Simultaneously, operators not located within a CFZ may still benefit from the suspensive customs regimes provided for by the Union Customs Code (temporary storage, customs warehousing, inward processing, temporary admission, end-use), which constitute complementary instruments for the management of supply chains. The ZES Mission Structure is responsible for facilitating and speeding up the process of recognising CFZs, ensuring coordination between customs rules, tax incentives and the single authorisations established under ZES Unica.[59]

[59] Parlamento europeo e Consiglio UE, *Regolamento (UE) n. 952/2013 (CDU)*, disposizioni su custodia temporanea, deposito doganale, perfezionamento attivo, ammissione temporanea e uso finale. Struttura di missione ZES – PCM, *ZES Unica. Special Economic Zone of Southern Italy. Guide for Investors*, Rome, 2025.

2. Early evidence of ZES Unica

2.1 Comparing the Eight SEZs and ZES Unica

In terms of business policies, and in particular instruments aimed at attracting investment in areas most in need of expansion and modernisation of the industrial base, the PNRR has shown limitations in pursuing territorial rebalancing objectives. Horizontal measures applicable throughout the country, such as tax credits for Transition 4.0 and Transition 5.0, have in fact mainly benefited more structured production contexts, allocating around 20% of resources to the South, with the risk of consolidating regional disparities in terms of innovation, digitalisation and production reconversion. [60]

This is the context for ZES Unica for Southern Italy, designed as a measure aimed at strengthening the region's ability to attract investment and making public action more effective through simplifications and dedicated incentives. Almost two years after its launch, the first available evidence paints a complex picture: alongside signs of dynamism, there are still aspects to be monitored in terms of implementation and governance. In order to move from a qualitative assessment to a data-based evaluation, a comparative analysis of the results achieved in the initial phase of operation is presented below, comparing them with the experience of the eight previous SEZs, before the establishment of ZES Unica, using as main indicators the number of Single Authorisations issued by the Mission structure at the Presidency of the Council of Ministers until November 2025 and the amount of tax credit requested from Agenzia delle Entrate in 2024 and 2025.
The aim is to verify whether, and to what extent, the unification of the Special Economic Zones is associated with greater industrial investment and a different territorial distribution of subsidised investments. [61]

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[60] Accetturo, A., Ciani, E., Mocetti, S., & Petrella, A. (2025, luglio). *Le prospettive di sviluppo dell'economia meridionale* (Questioni di Economia e Finanza, n. 951). Banca d'Italia.
[61] SVIMEZ. (2025, 27 novembre). *Rapporto Svimez 2025. Freedom to move, right to stay* (Svimez Comunica, comunicato stampa)

2.1.1 Performance of the Eight SEZs

In Italy, SEZs were introduced in 2017 and became fully operational in 2021, with the aim of reviving investment in the country's less developed and transition regions. Decree-Law No. 91 of 20 June 2017 defines the SEZs as geographically delimited and clearly identified areas within national borders, which may include non-contiguous portions provided they are linked by an economic-functional connection, and which include at least one port area connected to the trans-European transport network (TEN-T). In these areas, which in Italy coincide with the areas adjacent to ports and cover a total of approximately 23,000 hectares, existing and future businesses can access tax breaks and simplified administrative procedures.[62]

Although established in 2017, the SEZs only became fully operational in 2021, with the introduction of Special Commissioners and the One-Stop Shop. The difference between ZES Unica and the previous SEZs is already evident from the main data available. In the two-year period 2022-2023, the eight SEZs: Abruzzo, Calabria, Campania, Ionica interregional Apulia-Basilicata, Adriatica interregional Apulia-Molise, Eastern and Western Sicily, and Sardinia supported total investments of approximately €2 billion, with potential direct employment effects exceeding 6,000 units, albeit with marked heterogeneity between territories. In this context, the Campania SEZ ranked first in terms of both the number of Single Authorisations issued (105) and the volume of investments (€1.1 billion), followed by the Adriatic SEZ, with 35 Single Authorisations and €333 million invested. [63]

[62] Italia. (2017, 20 giugno). *Decreto-legge 20 giugno 2017, n. 91: Disposizioni urgenti per la crescita economica nel Mezzogiorno* (GU n. 141 del 20-06-2017).
[63] The European House Ambrosetti (TEHA Group). (2025). *Gli strumenti e le proposte per il rilancio del Sud nel contesto euro-mediterraneo* [Report].

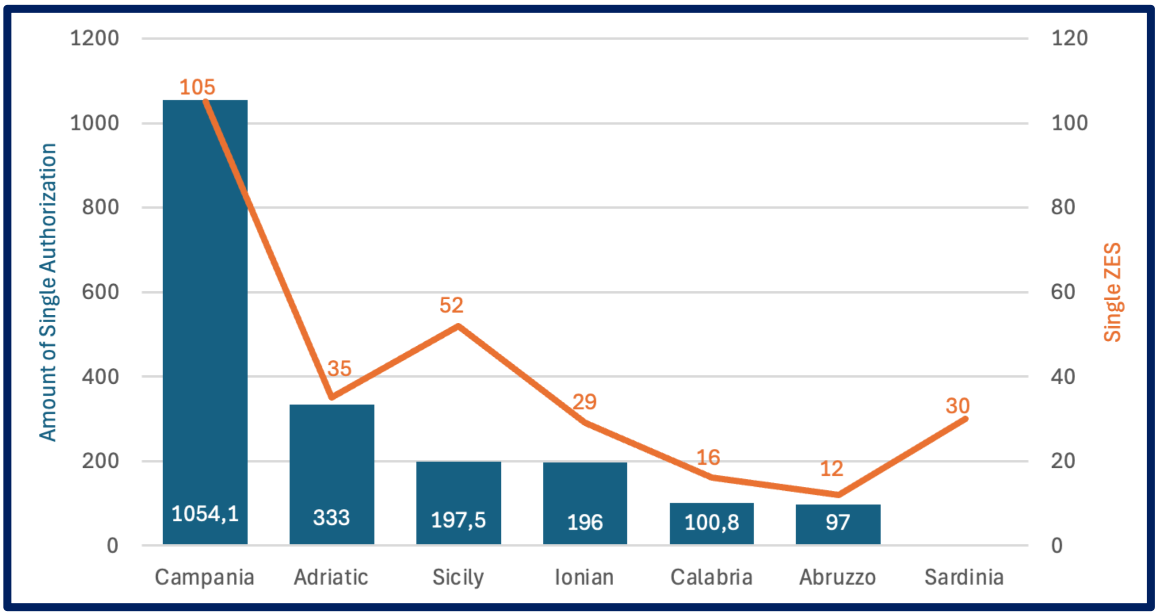

Figure 2.1: Left panel: total value of Single Authorisations (SA) issued (EUR million), 2022 and 2023. Right panel: number of SAs issued, 2022 and 2023. Source: TEHA Group (2025) Note: (*) Figures include the SEZs of Eastern and Western Sicily. N.B. Information on the value of SAs issued in Sardinia is not available.

Since ZES Unica became operational, as established by Article 9 of Decree-Law No. 124 of 19 September 2023 (converted with amendments by Law No. 162 of 13 November 2023), which establishes ZES Unica with effect from 1 January 2024, ZES Unica Mission Structure has issued 865 Single Authorisations (data updated on 3 November 2025), an increase of 210% compared to the SAs issued by the eight SEZs in a year and a half of operation (279). The average monthly number of SAs rose from 14.7 under the previous regulations to 42.2, an increase of +187.1%. This trend was reflected in significant growth in both authorised investments and employment in the territories.

In its first year alone, ZES Unica issued 620 Single Authorisations, 522 of which were issued between 6 August 2024 and 6 May 2025 (84.2% of the total). Over the last year, the average number of monthly SAs issued rose from 3.5 between March and August 2024 to 58.0 between August 2024 and May 2025. [64]

[64] The European House Ambrosetti (TEHA Group). (2025). *Gli strumenti e le proposte per il rilancio del Sud nel contesto euro-mediterraneo* [Report].

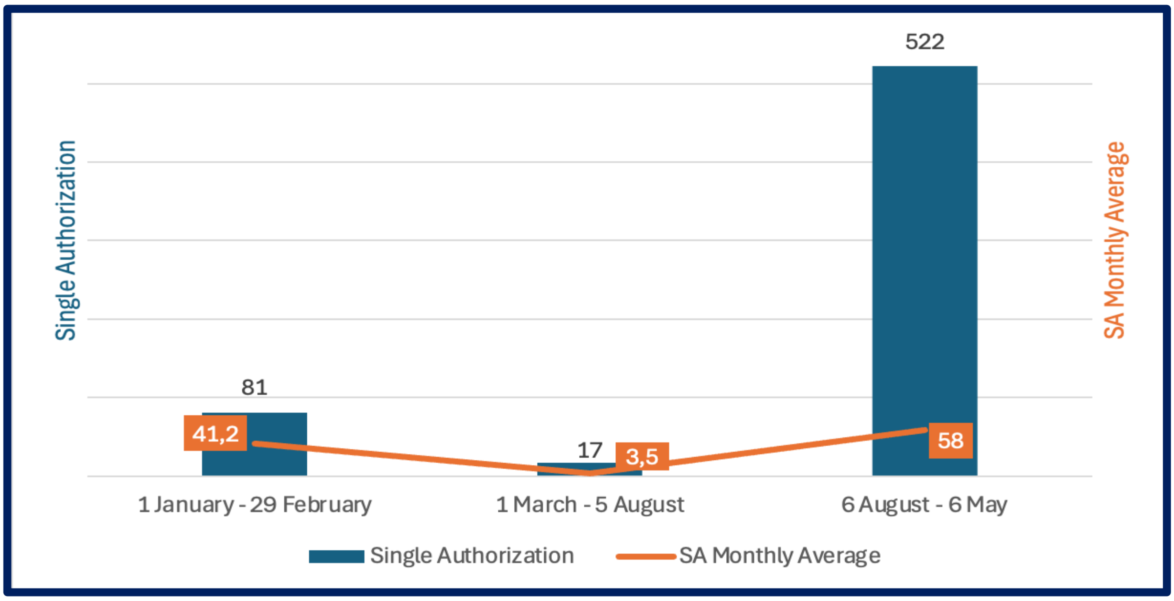

Figure 2.2: Single authorisations issued (number and monthly average), 2024-2025. Source: TEHA Group analysis of ZES Unica del Mezzogiorno data, 2025.

2.1.2 Single Authorisations (2024–2025)

Table 2.1 below shows the official data released by the SEZ Mission Structure, which allows for a regional analysis of the implementation of ZES Unica in Southern Italy.

For each region, the number of Single Authorisations issued, the amount of investments activated (in millions of euro) and the corresponding employment impact are reported with reference to 30 June 2025, together with an update as at 3 November 2025 relating solely to the number of authorisations. A joint examination of these indicators makes it possible to assess the intensity of authorisation activity and its translation into investment and employment, highlighting differences, concentrations and territorial gaps between regions.

Regions	Data as of 30/06/2025			Data updated as of 03/11/2025
	Number of Single Authorization	Investments (million €)	Employment effects	Number of Single Authorization
Abruzzo	25	263,1	739	28
Basilicata	21	99,2	306	25
Calabria	32	168,9	530	42
Campania	308	1620,2	6226	355
Molise	10	46,8	135	17
Apuglia	164	984,3	3501	233
Sardinia	27	145,1	341	32
Sicily	100	395,2	980	133
Mezzogiorno	687	3722,8	12758	865

Table 2.1: The table reports, for each Southern Italian region, the number of Single Authorisations, the associated investment volumes (EUR millions), and the employment impacts as of 30/06/2025, with an update as of 03/11/2025 for the number of Single Authorisations only. Source: ZES Mission Structure.

Regional distribution of Single Authorisations

The first performance results of ZES Unica show marked territorial variability. In particular, Campania remains the most active region, accounting for 41.0% of the Single Authorisations issued, followed by Apulia with 26.9% and Sicily with 15.4%. Similar dynamics can also be observed in terms of employment impact, where Campania accounts for 48.8% of the total, and in terms of total investment, with a share of 43.5% of the more than €3.7 billion activated. The implementation of the new measure has also highlighted some salient features of the subsidy activity: the new governance has led to an acceleration of procedures, with a reduction in the average authorisation time from over 98 to around 54 days to obtain the necessary permits to start an investment. By 30 June 2025, 687 SAs had been issued for a total of €3.7 billion in investments. Data updated to 3 November 2025 show a further increase in authorisations, which rose to 865, with a particular concentration of acceleration in the second half of the year in Apulia (+69 SAs), Campania (+47) and Sicily (+33), regions that seem to have taken greater advantage of the opportunities offered by the new simplified structure. On the other hand, the numbers remain low in Sardinia (32 SA), Abruzzo (28) and Basilicata (25), while there has been significant growth in Calabria, which has gone from 32 to 42 SA in the last six months. Despite regional differences, each region has been able to develop effective strategies to capitalise on the opportunities offered by ZES Unica, generating concrete impacts on their economic and employment contexts. [65]

Sectoral distribution of Single Authorization

To complete the analysis, in addition to the territorial dimension, a sectoral reading is now provided, which is useful for understanding the production chains on which the authorisation activity is having the greatest impact. Using official data released by the SEZ Mission Structure, the following figure examines the percentage distribution of Single Authorisations by supply chain in the first half of 2025 (Figure 2.3), with the aim of identifying the sectors that are attracting the most investment.

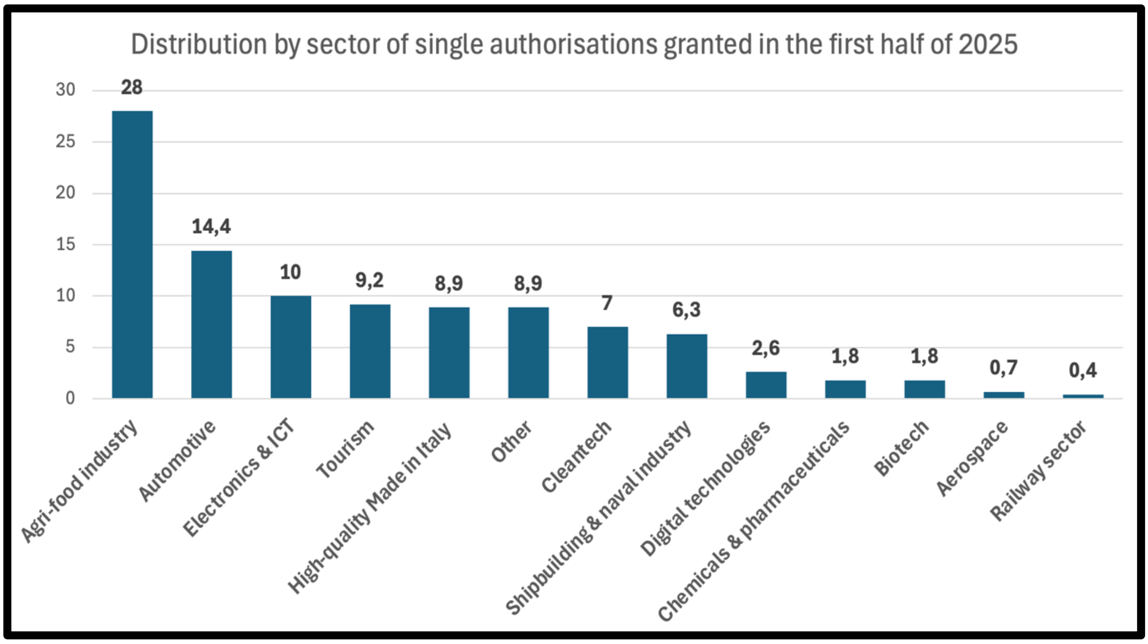

Figure 2.3: The chart focuses on the sectoral distribution of Single Authorisations granted in the first half of 2025, showing how authorisations are allocated across different value chains. Source: Rapporto Svimez 2025: L'economia e la società del Mezzogiorno.

[65] SVIMEZ. (2025). *Rapporto Svimez 2025: L'economia e la società del Mezzogiorno*. Associazione SVIMEZ.

The data processed according to the classification of the SEZ Strategic Plan, approved on 15 January 2025, show a distribution of Single Authorisations in the first half of 2025 that is heavily concentrated, with over a quarter of interventions in the agro-industry, followed by the automotive sector with 39 authorisations, accounting for approximately 14.4% of the total. Of particular interest is the data relating to authorisations in highly innovative sectors and technologies: 27 authorisations for Electronics & ICT and 19 for cleantech technologies. The remaining categories are marginal, with values below 3% (Digital Technologies, Chemicals and Pharmaceuticals, Biotech, Aerospace and Railways). [66]

2.2 Tax Credit (2024–2025)

After reconstructing the evolution of the authorisation activity of ZES Unica, in terms of the number and distribution of Single Authorisations issued, the analysis now shifts to the second operational pillar of the instrument, the tax credit. In particular, data relating to applications submitted by companies to Agenzia delle Entrate in 2024 and 2025 are examined, with the aim of assessing the intensity of demand for the subsidy, its territorial distribution and its consistency with the investment dynamics observed to date.

In the period between 12 June and 12 July 2024, the number of applications submitted to Agenzia delle Entrate to access the subsidy was particularly high, around 16,000, for a total amount of credits requested of over €9.45 billion, compared to a financial allocation of €1.8 billion. [67]
As a result, Agenzia delle Entrate, through the allocation measure, initially set a subsidy rate of 17.66%, a value significantly lower than the potentially achievable aid intensity. To rebalance this level, Decree-Law No. 113/2024 was introduced, which allocated additional resources and introduced the obligation for companies to submit a supplementary communication relating to investments actually made by 15 November 2024. On the basis of these communications, aimed at verifying the actual need for subsidies, Agenzia delle Entrate's measure of 12 December 2024 was able to quantify

[66] SVIMEZ. (2025). *Rapporto Svimez 2025: L'economia e la società del Mezzogiorno*. Associazione SVIMEZ.
[67] Agenzia delle Entrate. (s.d.). *Credito d'imposta per investimenti nella ZES unica (2025), Come e quando*.

that, at the end of 2024, against investments made by 15 November 2024 for approximately €5 billion, the total tax credit requested amounted to €2.55 billion, relating to 6,885 applications. [68]

In accordance with Article 1, paragraph 4, of the decree-law, the following table shows, for each region of ZES Unica (Abruzzo, Basilicata, Calabria, Campania, Molise, Apulia, Sardinia and Sicily) and separately for micro, small, medium and large enterprises (according to the definitions in the Regional Aid Charter[69] 2022-2027), the following information:

- the number of communications sent to Agenzia delle Entrate;
- the type of investments made, including buildings, plant, machinery and equipment, by 15 November 2024;
- the total amount of tax credit requested. [70]

[68] Agenzia delle Entrate. (2024, 12 dicembre). *Provvedimento del Direttore dell'Agenzia delle Entrate* (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative).
[69] The Regional Aid Charter (2022–2027) (Italian: *Carta degli aiuti a finalità regionale 2022–2027*) is the EU-approved national map that identifies the areas eligible for regional State aid and sets the maximum aid intensities that can be granted to firms for investment projects during the 2022–2027 period.
[70] Agenzia delle Entrate. (2024, 12 dicembre). *Provvedimento del Direttore dell'Agenzia delle Entrate* (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative).

Region	Firm size	Number of notifications submitted	Type of investments implemented				Tax credit requested
			Plants	Machinery	Equipment	Buildings	
Abruzzo	Micro	64	4.824.069 €	13.813.077 €	6.275.811 €	8.627.056 €	11.101.314 €
	Small	149	13.737.958 €	32.238.665 €	12.176.324 €	9.502.548 €	22.422.935 €
	Medium	71	11.330.564 €	32.378.339 €	8.709.971 €	6.606.356 €	14.590.502 €
	Large	12	8.208.972 €	5.914.726 €	2.340.122 €	2.471.920 €	2.840.361 €
Basilicata	Micro	50	1.281.873 €	7.558.649 €	4.931.969 €	3.253.272 €	8.249.995 €
	Small	114	7.401.036 €	31.407.770 €	12.825.934 €	9.693.745 €	30.400.669 €
	Medium	57	13.256.396 €	27.522.296 €	10.576.038 €	7.180.663 €	22.723.404 €
	Large	27	12.588.527 €	9.256.212 €	22.295.347 €	2.072.102 €	13.863.658 €
Calabria	Micro	205	10.837.893 €	27.552.042 €	16.592.963 €	9.397.437 €	37.538.260 €
	Small	340	32.861.707 €	74.738.515 €	49.084.514 €	35.856.301 €	111.749.244 €
	Medium	91	19.168.151 €	31.832.721 €	23.983.796 €	16.533.241 €	44.720.019 €
	Large	34	17.448.368 €	90.845.426 €	12.239.318 €	6.794.352 €	46.930.985 €
Campania	Micro	399	70.808.808 €	98.262.883 €	80.846.032 €	43.825.336 €	155.605.533 €
	Small	1261	153.745.288 €	314.539.660 €	208.497.554 €	123.935.539 €	458.309.850 €
	Medium	503	127.755.421 €	188.759.598 €	126.627.641 €	79.880.361 €	258.673.204 €
	Large	204	99.583.630 €	102.761.018 €	73.969.389 €	54.738.828 €	132.421.130 €
Molise	Micro	27	2.208.923 €	3.250.204 €	1.706.770 €	1.947.484 €	4.459.284 €
	Small	71	5.539.651 €	19.948.738 €	9.354.520 €	5.107.287 €	19.356.311 €
	Medium	37	3.359.717 €	11.885.996 €	8.605.762 €	2.382.185 €	10.236.963 €
	Large	9	5.264.084 €	299.012 €	5.132.841 €	2.365.217 €	3.918.346 €
Apuglia	Micro	269	16.131.360 €	35.612.260 €	27.206.750 €	14.382.771 €	53.381.994 €
	Small	556	55.057.045 €	135.229.053 €	83.086.172 €	41.823.334 €	187.638.512 €
	Medium	242	72.284.299 €	87.056.192 €	56.222.257 €	25.249.933 €	121.245.732 €
	Large	145	62.818.009 €	69.246.987 €	53.926.806 €	19.553.784 €	85.398.499 €
Sardinia	Micro	132	7.704.410 €	18.882.619 €	11.475.832 €	9.227.261 €	23.470.464 €
	Small	231	19.799.734 €	38.339.881 €	27.804.694 €	16.879.025 €	50.783.635 €
	Medium	91	18.881.272 €	29.634.316 €	29.675.315 €	15.607.953 €	37.635.208 €
	Large	56	41.420.682 €	21.594.614 €	23.849.869 €	12.905.493 €	29.698.896 €
Sicily	Micro	436	31.497.217 €	61.780.662 €	52.075.515 €	21.487.510 €	98.118.926 €
	Small	763	92.493.339 €	144.026.473 €	99.351.570 €	67.215.723 €	236.701.075 €
	Medium	268	49.440.167 €	119.490.394 €	62.849.530 €	33.680.382 €	131.173.061 €
	Large	115	105.990.218 €	91.346.619 €	39.441.038 €	16.253.843 €	101.176.278 €
Total		6885	1.194.728.788 €	1.977.005.554 €	1.263.737.964 €	726.435.522 €	2.551.290.705 €

Table 2.2: Source: Agenzia delle Entrate. (12/12/2024). Provvedimento del Direttore dell'Agenzia delle Entrate (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative).

Based on the supplementary communications relating to investments made by 15 November 2024, validly submitted between 18 November and 2 December 2024, the credit requested for the main component of the subsidy amounted to €2,336,465,840, compared to available resources of €3,270 million, which constitute the spending limit and are therefore higher than the requirements that emerged. The total amount of tax credit requested on the basis of the supplementary communications validly submitted during the above period was €214,824,865, compared to €933,534,160 in available resources (3,270,000,000 - 2,336,465,840).
As a result, in the absence of demand exceeding the available funds, the percentage of credit actually available was recognised in full, equal to 100% (3,270,000,000 / 2,336,465,840 and 933,534,160 / 214,824,865) of the amount requested for both components. [71]

In line with the findings for 2024, the analysis now considers the year 2025 in order to assess the evolution of tax credit demand in the second year of full operation of ZES Unica. This in-depth analysis makes it possible to verify whether the dynamics observed in the start-up phase, characterised by a high intensity of requests and subsequent rebalancing measures, have resulted in greater alignment between applications submitted, investments actually made and available resources.

In 2025, the campaign for access to SEZ tax credits confirms a very high level of demand. According to provisional data sent by the MEF[72] to the Chamber of Deputies, 17,951 communications have been sent, referring to total investments of €22.459 billion and tax credits requested for €11.396 billion, against available resources of €2.2 billion. This results in a potential mismatch between the needs expressed by companies and the financial resources available, making it necessary to define the actual amount that can be recognised ex post. For this reason, a confirmation step is required: companies must certify their expenses and submit a supplementary communication (from 18 November to

[71] Agenzia delle Entrate. (2024, 12 dicembre). *Provvedimento del Direttore dell'Agenzia delle Entrate* (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative).
[72] *MEF* refers to the *Ministero dell'Economia e delle Finanze* (Italian Ministry of Economy and Finance), the central government body responsible for public finance, fiscal policy, and budgetary planning within the Italian institutional framework.

2 December 2025) relating to investments made by 15 November 2025, so that Agenzia delle Entrate can quantify the valid tax relief base and determine the effective rate of use. Furthermore, in this initial phase, it appears that the component of investments already made and invoiced is still limited (348.9 million), while the majority of requests are associated with planned or not yet completed investments, in line with the forward-looking nature of the instrument.[73]

Pursuant to Article 1, paragraph 489, of the law, the following table presents a comprehensive set of information for each region of the Special Economic Zone for Southern Italy (ZES Unica) and separately for micro, small, medium and large enterprises, as defined by the Regional Aid Charter 2022-2027. In particular, it shows the number of communications sent to Agenzia delle Entrate, the type of investments in buildings, plant, machinery and equipment made by 15 November 2025, and the total amount of tax credit requested. [74]

Analysis of this data makes it possible to identify any changes in the composition of the demand for subsidies compared to 2024, both in terms of the size of the enterprises involved and the nature of the subsidised investments. At the same time, the territorial breakdown makes it possible to assess whether and to what extent the use of the instrument has been distributed more evenly among the regions of Southern Italy, providing useful information for an overall assessment of the effectiveness and adaptability of ZES Unica over time.

[73] Fotina, C. (2025, 9 ottobre). *Zes, per il credito d'imposta richieste per 11,4 miliardi*. *Il Sole 24 Ore*.
[74] Agenzia delle Entrate. (2025, 12 dicembre). *Provvedimento del Direttore dell'Agenzia delle Entrate* (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative) (Prot. n. AGEDC001_570046_2025).

Region	Firm size	Number of notifications submitted	Type of investments implemented				Tax credit requested
			Plants	Machinery	Equipment	Buildings	
Abruzzo	Micro	84	5.269.133 €	13.369.842 €	7.190.501 €	5.485.000 €	10.685.435 €
	Small	227	26.009.704 €	60.705.618 €	20.015.299 €	23.705.716 €	43.377.779 €
	Medium	79	25.800.670 €	28.278.761 €	14.886.882 €	9.786.992 €	19.254.362 €
	Large	26	14.243.295 €	19.725.877 €	3.061.589 €	3.330.725 €	5.860.547 €
Basilicata	Micro	107	3.052.892 €	15.820.302 €	9.591.003 €	6.056.575 €	16.962.540 €
	Small	179	16.789.586 €	51.775.543 €	13.551.726 €	13.416.224 €	46.791.860 €
	Medium	79	13.939.306 €	39.331.124 €	19.966.985 €	9.336.021 €	31.632.835 €
	Large	38	22.771.750 €	20.792.562 €	7.762.593 €	2.137.963 €	16.039.462 €
Calabria	Micro	296	13.444.682 €	36.145.603 €	28.874.264 €	15.240.229 €	53.384.231 €
	Small	550	44.909.272 €	118.441.682 €	55.660.185 €	42.420.834 €	151.050.708 €
	Medium	137	29.408.807 €	48.150.093 €	25.444.355 €	20.666.513 €	60.056.102 €
	Large	47	23.065.791 €	9.623.857 €	14.490.680 €	10.991.434 €	23.214.683 €
Campania	Micro	752	46.013.241 €	79.404.431 €	103.364.693 €	31.736.808 €	153.900.384 €
	Small	2039	206.282.600 €	398.791.033 €	287.979.573 €	178.225.937 €	633.534.588 €
	Medium	685	213.875.106 €	254.000.292 €	196.429.511 €	136.789.704 €	393.049.185 €
	Large	282	157.122.935 €	242.506.361 €	111.147.973 €	54.858.846 €	223.066.088 €
Molise	Small	38	1.536.322 €	4.312.049 €	9.540.791 €	1.873.007 €	8.469.390 €
	Medium	100	6.862.473 €	20.982.078 €	11.690.649 €	7.095.078 €	22.604.748 €
	Large	41	9.842.490 €	17.630.439 €	7.580.916 €	4.495.537 €	15.570.611 €
	Micro	17	7.183.845 €	17.366.422 €	3.477.442 €	105.240 €	8.439.886 €
Apuglia	Small	434	20.649.961 €	66.316.966 €	47.229.670 €	18.458.464 €	89.395.187 €
	Medium	820	85.019.171 €	149.646.959 €	115.038.393 €	51.003.941 €	235.666.997 €
	Large	340	80.079.948 €	135.935.366 €	95.254.181 €	32.738.446 €	175.051.447 €
	Micro	180	125.976.980 €	127.124.016 €	76.773.280 €	46.073.834 €	157.531.309 €
Sardinia	Small	181	10.964.544 €	18.719.040 €	23.548.232 €	11.499.542 €	31.718.582 €
	Medium	367	45.452.318 €	65.792.921 €	50.817.262 €	38.012.279 €	98.523.998 €
	Large	111	37.469.634 €	26.436.289 €	18.676.051 €	12.162.512 €	38.020.189 €
	Small	88	53.288.446 €	35.125.627 €	28.930.719 €	28.921.708 €	43.895.458 €
Sicily	Small	677	29.620.522 €	82.422.085 €	88.083.692 €	30.936.848 €	134.115.395 €
	Medium	1148	117.735.426 €	215.284.477 €	147.841.090 €	102.510.984 €	342.641.639 €
	Large	370	107.238.680 €	132.337.452 €	89.730.452 €	63.929.895 €	192.819.884 €
	Small	158	113.627.716 €	183.531.002 €	64.759.922 €	55.544.265 €	167.195.002 €
Total		**10439**	**1.714.547.246 €**	**2.735.826.169 €**	**1.798.390.554 €**	**1.069.547.101 €**	**3.643.520.511 €**

Table 2.3: Source: Agenzia delle Entrate. (12/12/2025). Provvedimento del Direttore dell'Agenzia delle Entrate (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative)

Also in this case, the total number of notifications submitted does not match the sum of the values reported per region (10,677), as notifications indicating multiple production facilities located in different regions are counted multiple times, once for each territory concerned.

Based on the valid notifications submitted between 18 November and 2 December 2025, the total amount of tax credit requested is €3,643,520,511, compared to available resources of €2.2 billion. As a result, with the allocation measure, the share of credit actually available to each beneficiary has been determined at 60.3811% of the amount requested, as the allocated resources only partially cover the total requirement (2,200,000,000/3,643,520,511). [75]

The following graph provides a geographical overview of the demand for subsidies, showing, for each region of ZES Unica, the amount of tax credit requested during the period considered and the employment impact associated with the measures authorised between April 2024 and June 2025. The graph shows a highly concentrated distribution: Campania and Apulia emerge as the main centres of absorption, both in terms of resources requested and estimated effects, while in the remaining regions the values are significantly lower. Overall, the graph suggests that the high intensity of demand observed in 2025 does not translate into a homogeneous distribution across the territory, but tends to reflect structural differences in the capacity to activate investments and intercept the instrument, an element that helps to interpret the critical issues that have emerged in the management of resources and allocation mechanisms. [76]

[75] Agenzia delle Entrate. (2025, 12 dicembre). *Provvedimento del Direttore dell'Agenzia delle Entrate* (credito d'imposta per investimenti nella ZES Unica, comunicazioni e modalità attuative) (Prot. n. AGEDC001_570046_2025).

[76] Corte dei conti, Collegio del controllo concomitante presso la Sezione centrale di controllo sulla gestione delle amministrazioni dello Stato. (2025, 27 maggio). *Deliberazione n. 23/2025/CCC* [Deliberazione].

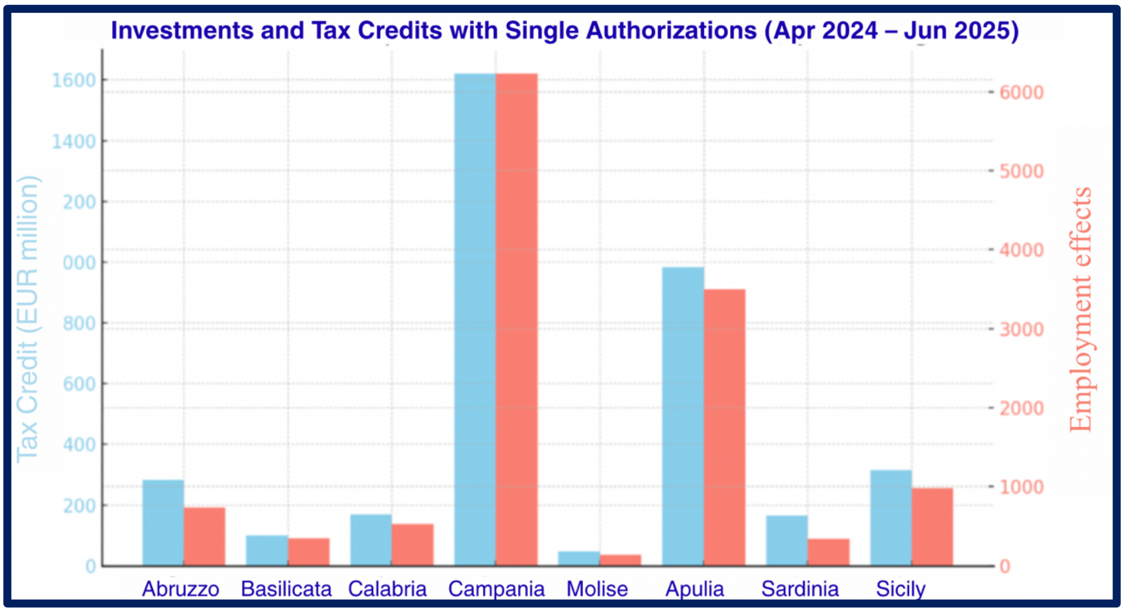

Figure 2.4: The chart focuses on the regional distribution of investment-related tax credits (EUR million) and the associated expected employment impacts (number of additional jobs) linked to Single Authorisations over April 2024 to June 2025. Source: Corte dei conti, Deliberazione n. 23/2025/CCC.

Tax credit dynamics over time

A comparison of the two tax credit access campaigns highlights a significant evolution in terms of demand, but also structural critical issues in resource management. In 2025, the total amount requested reached €3.64 billion, an increase of approximately 43% compared to 2024. However, this growth was not accompanied by adequate refinancing of the measure: available resources fell from €3.27 billion to €2.2 billion, resulting in an allocation that lowered the effective rate recognised to 60.38%, compared to 100% in the previous year.

This dynamic was further recalibrated by the 2026 Budget Law[77], which provided for an additional contribution for 2025 in the form of a tax credit equal to 14.6189% of the amount requested in the supplementary communications submitted between 18 November and 2 December 2025, provided that the companies have not already obtained,

[77] Budget Law (Italian : Legge di Bilancio) is the annual act through which Parliament approves the State's budget, setting the main public finance measures for the year and updating the multi-year budget framework (typically a three-year horizon).

for the same investments, the alternative tax credit provided for in Article 38 of Decree-Law No. 19/2024, Transition Plan 5.0. Access to this contribution requires a specific electronic communication to Agenzia delle Entrate between 15 April and 15 May 2026, and in any case operates within the maximum limit represented by the total amount requested in the supplementary communication (considering jointly what has already been recognised and the new supplement). [78]

The regional distribution of the credit requested confirms a marked territorial concentration: Campania alone absorbed about 40% of the resources, followed by Apulia and Sicily. This distribution is not surprising, given the greater industrial density of some areas and the presence of established support structures. However, it also signals a risk: less well-equipped regions risk being left on the margins of the development process, accentuating asymmetries rather than bridging them. The scarcity of applications from Basilicata, Abruzzo and Sardinia calls for reflection on the design of the policy and the actual capacity of local administrations to activate and accompany beneficiaries.

In terms of size, the beneficiary base remains highly segmented: small businesses account for over 40% of the credit requested, followed by medium-sized and micro-enterprises. The low incidence of large enterprises (around 8%) suggests that the instrument is perceived as more relevant for businesses with limited resources and greater project flexibility. However, it is precisely these enterprises that are most vulnerable to pro-rata cuts, creating a paradox: the measure best suited to small and medium – sized enterprises (SMEs) is also the one that, in a context of rationing, risks harming them the most. This trade-off should be taken into account in future refinancing or policy redesign phases.

2.3 Economic and Employment Outcomes

A comparison between 2024 and 2025 provides a sufficiently structured picture of how the measure works in terms of demand intensity, geographical distribution of applications and size profile of beneficiaries. However, these elements mainly describe who is

[78] Italia. (2025, 30 dicembre). *Legge 30 dicembre 2025, n. 199: Bilancio di previsione dello Stato per l'anno finanziario 2026 e bilancio pluriennale per il triennio 2026-2028* (GU Serie Generale n. 301 del 30-12-2025, Suppl. Ordinario n. 42). *Gazzetta Ufficiale della Repubblica Italiana*.

applying for the subsidy and where it is concentrated, while the macroeconomic effects that the investments activated may generate on the production system of Southern Italy still need to be qualified. A study carried out by The European House Ambrosetti (TEHA) Group[79] provides an estimate of the economic and employment impacts associated with the total investments activated by ZES Unica, broken down into three components: direct, indirect and induced effects.

Overall, ZES Unica has supported the activation of approximately €8.5 billion in investments, of which €3.4 billion is attributable to initiatives authorised through Single Authorisations and €5.1 billion is associated with the use of tax credits. This direct value is accompanied by additional economic and employment effects generated 'downstream' of the investments, which can be divided into two components. On the one hand, there is the indirect impact, linked to the demand for goods and services along the supply chains, i.e. to the supplies and subcontracting activated and the employment supported by the companies involved. On the other hand, there is the induced impact, linked to the increase in consumption resulting from the income paid to workers in companies directly involved in the interventions and those active in related supply chains, and the related employment activated. [80]

On the economic front, an estimate based on a model founded on sectoral interdependencies indicates that the 8.5 billion in direct investments would be associated with an additional 11.6 billion in indirect effects and 1.9 billion in induced effects, for a total impact of approximately 22.0 billion euros. This results in a multiplier of 2.6 according to, i.e. for every euro invested in ZES Unica of Southern Italy, an additional 1.6 euros would be generated in the economy. Taking into account the investments made in the eight previous SEZs (amounting to 1.9 billion euros), the total amount of direct investments would rise to 10.4 billion, with a total economic impact estimated at approximately 26.9 billion euros. [81]

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[79] TEHA Group (The European House Ambrosetti) is an Italian think tank and consulting firm that produces policy-oriented research on competitiveness, investment, and regional development.

[80] Presidenza del Consiglio dei Ministri, Struttura di missione ZES Unica. (2024). *Piano strategico della Zona Economica Speciale per il Mezzogiorno (ZES Unica)*

[81] The European House Ambrosetti (TEHA Group). (2025). *Gli strumenti e le proposte per il rilancio del Sud nel contesto euro-mediterraneo* [Report]

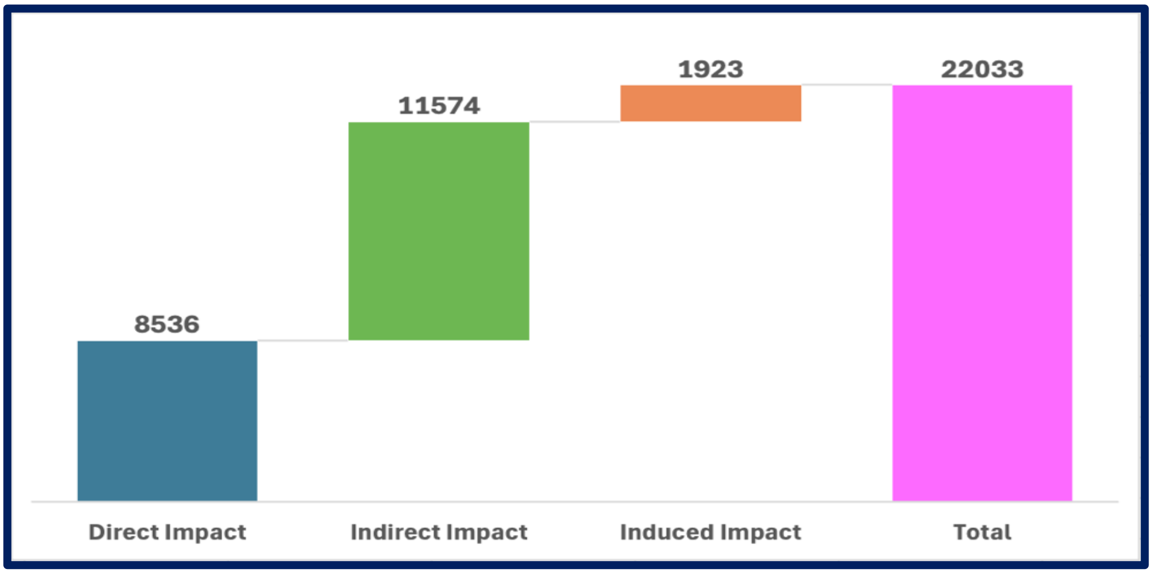

Figure 2.5: The chart illustrates the breakdown of the economic impact of ZES Unica of Southern Italy into its three components, direct, indirect and induced, expressed in millions of euros and referring to the period 2024–2025.
Source: TEHA Group analysis based on data from ZES Unica of Southern Italy (2025).

The estimate of the overall effects is based on the sectoral interdependence methodology developed by Nobel Prize laureate Wassily Leontief, used to assess how an activity in a given sector is transmitted to the entire economic system. In practice, this approach uses input-output tables developed by Istat, which describe the quantitative relationships between those who produce goods and services and those who use them, allowing both economic and employment multipliers to be calculated.

In terms of contribution to GDP, investments in ZES Unica would generate €3.6 billion in direct added value, to which would be added €4.2 billion in indirect effects and €1.1 billion in induced effects, for an estimated total contribution of €8.9 billion. The relative multiplier is 2.5, indicating that for every euro of GDP produced directly by investments in the SEZ area, an additional 1.5 euros would be generated in the economy.
The effects are also significant in terms of employment. In addition to the 11,930 direct employees, there would be 18,940 indirect employees and 3,293 induced employees, for a total of 34,163 employees supported overall. The employment multiplier is estimated at

2.9, meaning that for every job created directly by investments, an additional 1.9 jobs would be supported in the rest of the economy. [82]

2.4 Mezzogiorno Macroeconomic Context

The evidence emerging from the economic impact analysis of ZES Unica, developed by TEHA Group through modelling based on sectoral interdependencies, fits into a macroeconomic framework which, according to the Confindustria Study Centre, signals a change in the growth dynamics of Southern Italy.

After more than two decades of lagging behind the Centre-North, since 2020 the southern regions have shown a relatively more favourable performance: between 2020 and 2023, the GDP of Southern Italy grew by a cumulative +7.1%, compared to +5.1% in the North and +2.8% in the Centre. This reversal is further confirmed in 2023, when seven southern regions recorded GDP growth above the national average (+0.7%), with Sicily and Abruzzo in the lead (both +2.1%), a particularly significant sign for an area that for many years has slowed down the country's overall growth. Consistently, the contribution of the South to Italian growth is far from marginal: without the South, national GDP growth in the period 2020–2023 would have been lower by about half a percentage point cumulatively, falling from +4.8% to +4.3%. [83]

In this perspective, the following chart (Figure 2.6) provides a long-term view of GDP growth at constant prices in the main Italian macro-areas, measured as the cumulative percentage change over different historical periods. The comparison shows that the last period considered (2020–2023) differs from previous phases, in which the South was

[82] The European House Ambrosetti (TEHA Group). (2025). *Gli strumenti e le proposte per il rilancio del Sud nel contesto euro-mediterraneo* [Report]

[83] Centro Studi Confindustria. (2025). *Investimenti per muovere l'Italia. Autunno 2025* (Rapporto coordinato da Alessandro Fontana e Ciro Rapacciuolo; informazioni aggiornate al 30 settembre 2025). Rome: Confindustria Servizi S.p.A.

Istituto Nazionale di Statistica (ISTAT). (2025, 28 luglio). *Stima preliminare del Pil e dell'occupazione territoriale, Anno 2024*.

systematically weaker, and allows us to interpret recent performance as a reversal of historical trends.

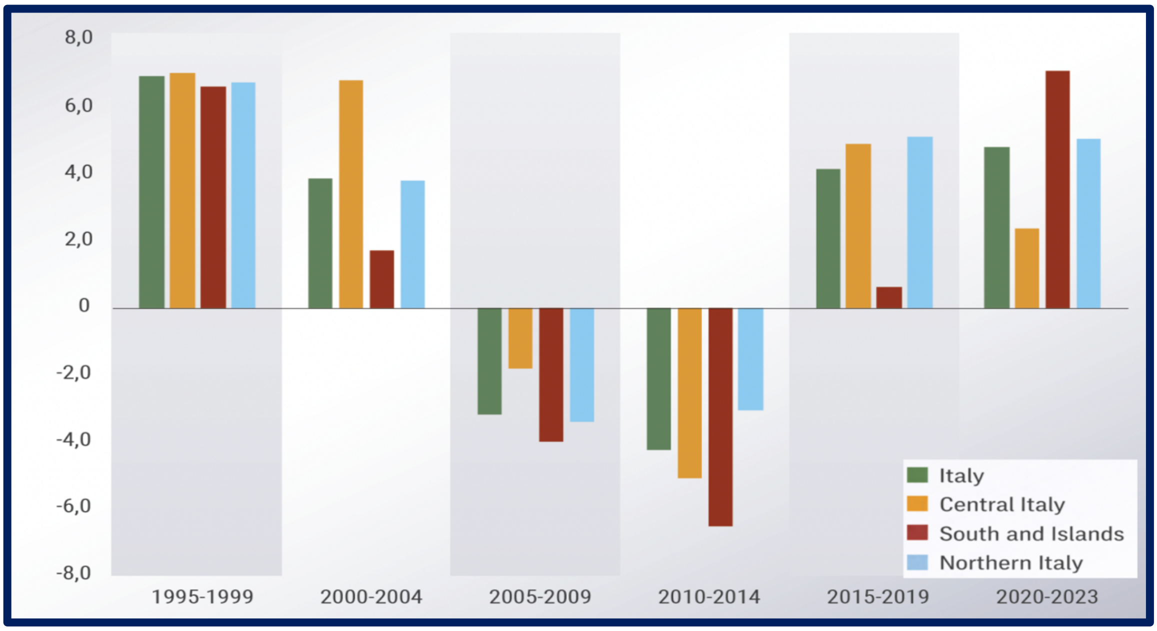

Figure 2.6: The chart focuses on the cumulative change in real GDP (constant prices) across Italy and macro-areas (North, Centre, South and Islands) over successive sub-periods from 1995–1999 to 2020–2023.
Source: Centro Studi Confindustria (2025), Investimenti per muovere l'Italia (elaborations on ISTAT data).

This reversal of the trend is also reflected in investment and labour market dynamics. In the four-year period 2019–2022, investment in the South grew by a cumulative +25.0%, exceeding the national average (+21.2%) and marking a clear change of pace compared to the period 2016–2019, when the increase was limited to +4.9%, compared to +12.5% recorded for the country as a whole. At the same time, estimates by the Confindustria Study Centre on 'additional' investments linked to tax incentives (2016-2024) indicate that instruments such as super and hyper-amortisation, tax credits and tax relief for Industry 4.0 and R&D, and more recently the ZES tax credit, have supported the acceleration of investments in plant, machinery and research activities, with cumulative effects increasing over time.[84]

[84] Centro Studi Confindustria. (2025). *Investimenti per muovere l'Italia. Autunno 2025* (Rapporto coordinato da Alessandro Fontana e Ciro Rapacciuolo; informazioni aggiornate al 30 settembre 2025). Rome: Confindustria Servizi S.p.A.

Figure 2.7 reconstructs the trend in investment in plant and machinery (and R&D) and the estimated component of *'additional'* investment attributable to tax incentives in the period 2016–2024. The growing gap between the observed profile and the counterfactual scenario in the absence of incentives suggests an increasingly significant contribution by the relief measures in supporting the acceleration of investment, especially in the post-2020 phase.

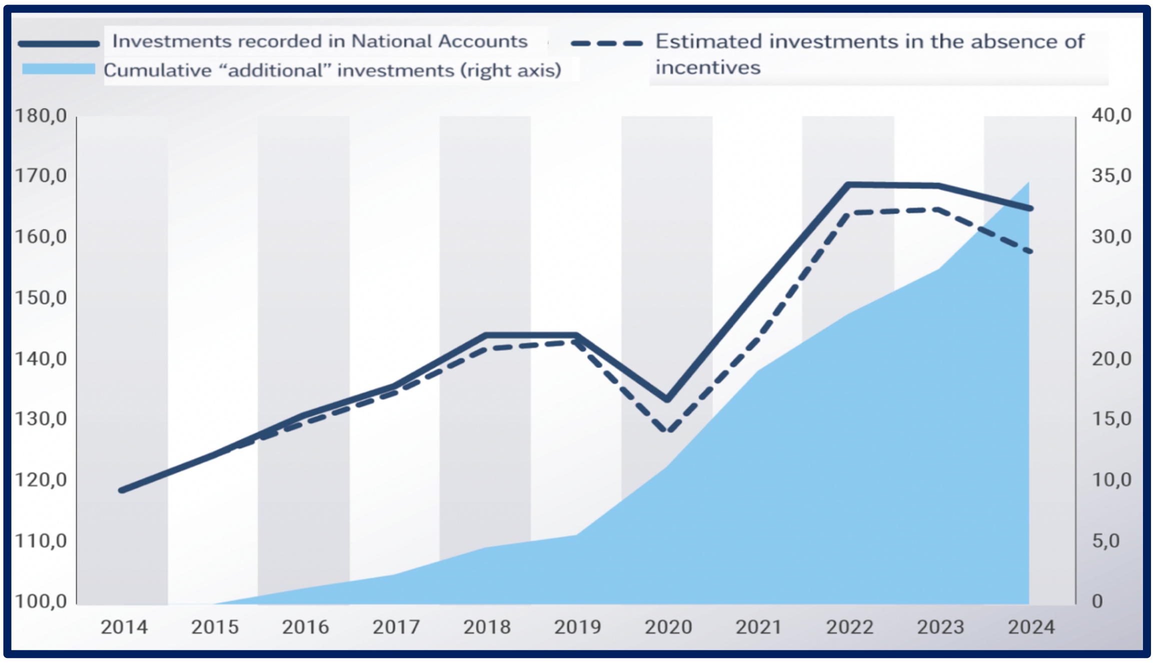

Figure 2.7: The chart estimates the "additional" investments associated with fiscal incentives over 2016–2024 in Italy, on investments in machinery, equipment and R&D (quarterly data, EUR billions), comparing observed investments with a counterfactual scenario without incentives and showing the cumulative additional investment. Source: Centro Studi Confindustria (2025), Investimenti per muovere l'Italia.

In terms of employment, between the pre-pandemic period and 2024, over 40% of the total increase in employment in Italy was concentrated in the South, equal to 355,000 out of 823,000, a figure that suggests a trend that cannot be attributed exclusively to the cycle, but is consistent with signs of a more structural transformation of the labour market, including greater participation by segments that have traditionally been less active. [85]

[85] Istituto Nazionale di Statistica (ISTAT). (2025, 28 luglio). *Stima preliminare del Pil e dell'occupazione territoriale, Anno2024*.
Presidenza del Consiglio dei Ministri, Struttura di missione ZES Unica. (2024). *Piano strategico della Zona Economica Speciale per il Mezzogiorno (ZES Unica*

On the foreign front, exports from the South increased by about 30% between 2019 and 2024 and, starting in 2022, showed higher growth than in the Centre-North. This trend is consistent with a strengthening of the productive base and the contribution of private investment, supported by both tax incentives and public resources. In this context, Confindustria identifies a number of enabling factors: on the one hand, the SEZ tax credit for capital goods, which has encouraged new investment despite the structural limitation represented by the annual financing horizon; on the other hand, the PNRR, which allocates €60.7 billion to the South, with 108,000 projects out of a total of 298,000 (36%), despite implementation challenges related to administrative capacity and completion times. These levers are complemented by ZES Unica, operational since August 2024, which has introduced significant procedural simplifications and already has around 800 Single Authorisations, as well as complementary instruments such as the Southern Social Security Contribution Relief, whose continuity is considered important for consolidating the effects on the labour market. [86]

In fact, the chart below (Figure 2.8) shows the evolution of employment in the various macro-areas from 2019 to 2024 (index 2019=100). The comparison between the South, Centre, North and total Italy allows us to immediately grasp the relative intensity of the post-pandemic employment recovery and its territorial distribution.

[86] Centro Studi Confindustria. (2025). *Investimenti per muovere l'Italia. Autunno 2025* (Rapporto coordinato da Alessandro Fontana e Ciro Rapacciuolo; informazioni aggiornate al 30 settembre 2025). Rome: Confindustria Servizi S.p.A.

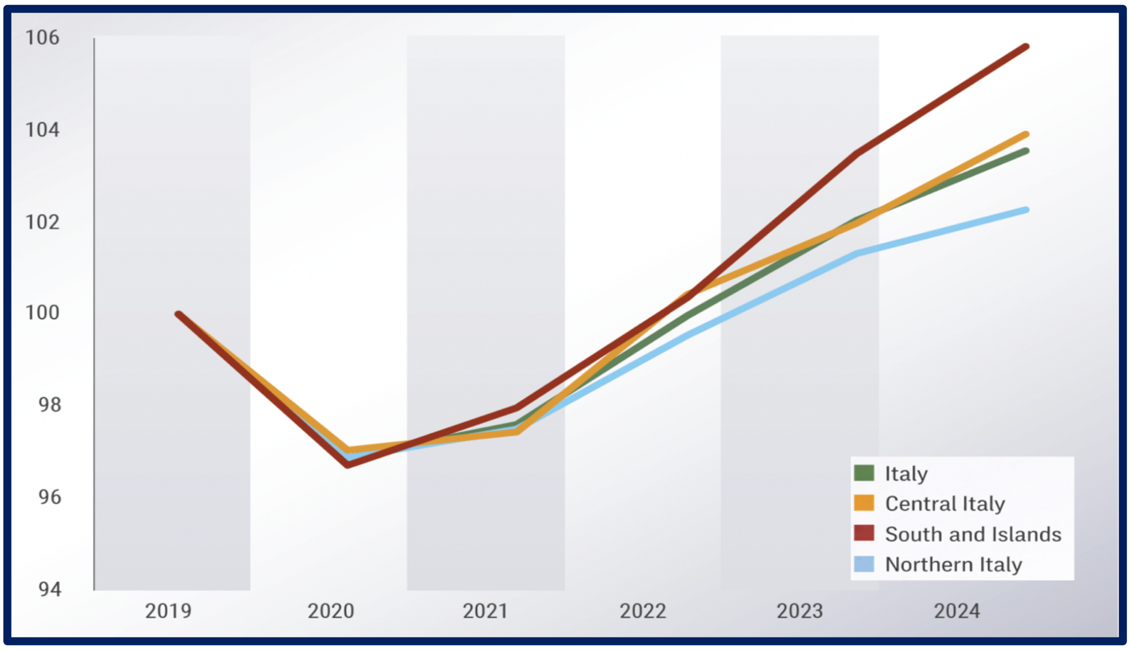

Figure 2.8: The chart analyses employment trends (thousands of employed persons, 2019 = 100 index) in Italy and across the macro-areas North, Centre, and Mezzogiorno over the 2019–2024 period.
Source: Centro Studi Confindustria. (2025). Investimenti per muovere l'Italia.

Overall, the evidence presented converges in outlining a phase of discontinuity for Southern Italy in the post-2020 period, in which the growth dynamic no longer appears marginal compared to the national one. The estimates of the economic impact of ZES Unica developed by TEHA Group are consistent with the macro-picture described by the Confindustria Study Centre: the acceleration of southern GDP, the increase in investment and the recovery in employment suggest the emergence of a more robust growth path than in the past.

The analysis highlights that this trajectory remains heavily dependent on the quality and stability of policy instruments. In particular, the ability of ZES Unica to consolidate positive effects in the medium term will depend on the alignment of authorisation simplifications, resource planning and continuity of incentives, as well as on strengthening the administrative capacity necessary to transform the demand for subsidies into actual investments and, therefore, into added value and employment.

3. Estimating Future Impacts of ZES Unica

3.1 Forecast Scenarios 2026-2028

Given the significant use of the ZES Unica tool and the results achieved in its first years, the following analysis focuses on the future prospects of this zone. Specifically, it will explore the projected economic and employment impacts for the 2026-2028 period, based on current data and projections provided by the annual tax credit ceilings set by the 2026 Budget Law. Additionally, an econometric analysis will be included to strengthen the overall assessment by estimating, in percentage terms, how value added and employment respond to changes in investments, while controlling for sector, year, and territory effects.

This section first provides an ex ante estimate of the economic and employment impacts of ZES Unica in the three-year period 2026-2028. The main objective of this methodology is to construct a quantitative simulation that is consistent, transparent and replicable. This simulation makes it possible to translate policy constraints, specifically the annual tax credit ceilings, into an order of magnitude of the effects that could potentially be activated on the production system and the labour market.

The starting point for the estimate is the annual tax credit ceilings established by the 2026 Budget Law for the period under review. These ceilings have been defined as follows:

- €2.3 billion in 2026
- €1 billion in 2027
- €0.75 billion in 2028[87]

Overall, the total tax credit for the three-year period amounts to €4.05 billion. These values represent the maximum amount of tax resources that companies will be able to use each year and constitute the main input for the simulation. This figure is a certain value and serves as the basis for calculating additional investments and the overall economic impact.

[87] Camera dei deputati (2021). *Dossier AS0477 - Le Zone Economiche Speciali (ZES) in Italia*. Documento a cura dell'Ufficio Studi, Commissione Finanze.

From a methodological point of view, the analysis is part of the ex ante evaluation of territorial development policies, using the Leontief Input-Output approach, a well-established method also used in the study conducted by the TEHA Group.[88] This approach allows for the analysis of the direct, indirect and induced effects of investments. The Leontief method is based on the idea that an increase in public or incentivised investment (such as tax credits) stimulates final demand, which is transmitted to the rest of the economy through a series of channels. The sequence of calculations is based on the principle that tax credits generate an increase in demand for goods and services, which in turn stimulates economic growth in subsequent phases.

The calculation methodology begins with the annual tax credit, which is transformed into associated investments using the parameter α, which measures the intensity of aid:

$$I_t^{\{TC\}} = \frac{\{TC_t\}}{\{\alpha\}}$$

Where:

- TC_t is the annual tax credit ceiling in year t.
- α is the aid intensity, defined as the tax credit as a share of eligible investment ($\alpha = TC/I$). Therefore, for a given TC_t, a higher α implies a lower volume of associated investment.

A scenario was developed based on three perspectives: a baseline, conservative, and optimistic scenario. In the baseline case, α has been set at 0.30, a value that reflects a moderate relationship between tax credit and actual investments. This parameter is treated as a scenario variable, as it depends on the composition of the projects and the average rate actually applied. To avoid attributing the entire amount of investment to the tax credit, a second parameter has been introduced: δ (additionality). This parameter measures the share of investment that would not have actually been made without the

[88] The European House Ambrosetti (TEHA Group). (2025). *Gli strumenti e le proposte per il rilancio del Sud nel contesto euro-mediterraneo* [Report]

incentive, i.e., the part of investment that would not have been made without the tax credit.

Additional investments are therefore calculated as:

$$I_t^{\{ADD\}} = \delta \cdot I_t^{\{TC\}}$$

In the baseline case, δ was set at 0.50, indicating that half of the investments associated with the tax credit are considered additional, i.e. generated thanks to the measure.

Once the amount of additional investment has been determined, the overall economic impact is estimated by applying the multipliers provided by the TEHA Group. The economic multiplier, equal to 2.6, captures the total effect of additional investment on aggregate economic output, including direct, indirect, and induced effects within the production system. The annual economic impact is therefore calculated as:

$$Y_t = 2.6 \cdot I_t^{ADD}$$

Where Y_t represents the total economic impact generated in year t, and I_t^{ADD} denotes the additional investment attributable to the policy.

The employment impact is estimated using the employment coefficient derived from the TEHA study. Based on TEHA's results, €8.5 billion of direct investment support 34,163 total jobs, implying approximately 4,019 jobs per €1 billion of investment.[89] This coefficient is therefore operationalised as 4.019 jobs per million euros and total employment supported by additional investments is computed as:

$$Employment_t = 4.019 \cdot I_t^{ADD}$$

Both parameters are kept constant across scenarios and years. Consequently, differences in estimated economic and employment effects do not stem from changes in the

[89] The European House Ambrosetti (TEHA Group). (2025). *Gli strumenti e le proposte per il rilancio del Sud nel contesto euro-mediterraneo* [Report

multipliers, but from variations in the volume of additional investment generated under alternative policy assumptions.

The following Table 3.1 presents the projections for the economic and employment impact of ZES Unica for the period 2026-2028 across three different prespectives, calculated using the methodology described earlier. The values provide a forward-looking view of the area's evolution, highlighting the main trends expected in the involved sectors.

BASELINE SCENARIO (α=0,30; δ=0,50)					
Year	Tax Credit Cap (EUR, million)	Associated Investments	Additional Investments	Total Economic Impact (TEHA)	Total Employment (TEHA)
2026	2300	7667	3833	9967	15407
2027	1000	3333	1667	4333	6699
2028	750	2500	1250	3250	5024
Total 26–28	4050	13500	6750	17550	27129

CONSERVATIVE SCENARIO (α=0,40; δ=0,30)					
Year	Tax Credit Cap (EUR, million)	Associated Investments	Additional Investments	Total Economic Impact (TEHA)	Total Employment (TEHA)
2026	2300	5750	1725	4485	6933
2027	1000	2500	750	1950	3014
2028	750	1875	563	1463	2261
Total 26–28	4050	10125	3038	7898	12208

OPTIMISTIC SCENARIO (α=0,25; δ=0,70)					
Year	Tax Credit Cap (EUR, million)	Associated Investments	Additional Investments	Total Economic Impact (TEHA)	Total Employment (TEHA)
2026	2300	9200	6440	16744	25884
2027	1000	4000	2800	7280	11254
2028	750	3000	2100	5460	8440
Total 26–28	4050	16200	11340	29484	45578

Table 3.1: This table shows the projected economic and employment impacts for three scenarios (Baseline, Conservative, and Optimistic) from 2026 to 2028. Source: Created by the author

To make the analysis robust and manage the uncertainty associated with the parameters α (aid intensity) and δ (additionality), the methodology is developed according to three alternative scenarios. Each scenario reflects different combinations of these parameters, representing different levels of effectiveness of fiscal policies and associated investments.

Base Scenario: In this scenario, the central values of $\alpha = 0.30$ and $\delta = 0.50$ are assumed, representing an average impact of tax incentive policies. This scenario reflects a realistic assessment of expected dynamics, based on historical data for the two-year period 2024-2025 and moderate investment projections.

Conservative Scenario: In this case, a higher value of $\alpha = 0.40$ is assumed, indicating a lower intensity of aid (and therefore a lower effect of tax incentives), and a reduced value of $\delta = 0.30$, suggesting that a significant portion of investments may only be partially additional. This scenario offers a more cautious view, assuming that policies may not stimulate investment as efficiently as expected.

Optimistic scenario: Here, a lower value is assumed for $\alpha = 0.25$ (indicating greater efficiency in converting the tax credit into real investments) and a higher value for $\delta = 0.70$, reflecting a large additional effect of investments, with a larger proportion of these having been effectively realised thanks to the incentive. This scenario is the most positive, suggesting a high impact of tax incentive policies.

The proposed scenarios provide an estimate of the potential impact of the ZES Unica on investments and employment under alternative assumptions, and help assess how sensitive the results are to uncertainty in the key parameters α (aid intensity) and δ (additionality). By comparing the baseline, conservative, and optimistic cases, the analysis makes transparent how different behavioural and policy conditions translate into different orders of magnitude of expected outcomes.

At the same time, these projections should be interpreted with caution. They are based on assumptions that, while grounded in available evidence, may not fully reflect future developments. Macroeconomic shocks, geopolitical tensions, and unexpected regulatory changes could affect both investment decisions and the actual uptake of the tax credit.

Even though the model is structured and replicable, it necessarily abstracts from part of the complexity of local dynamics, sector-specific constraints, and heterogeneous firm responses to fiscal incentives. As a result, realised outcomes may differ from simulated estimates.

Overall, the scenario framework is best understood as a way to map a plausible range of impacts and to identify which assumptions matter most, rather than as a precise forecast. Its value lies in clarifying how effectiveness ultimately depends on additionality and implementation conditions, while acknowledging that external factors and behavioural responses cannot be fully anticipated.

3.2 Econometric Model

To complement the TEHA-based scenarios and strengthen the assessment, an econometric analysis has been integrated into the estimation methodology to calculate the specific impacts on key economic indicators, particularly value added (GDP) and employment, by estimating the elasticity of these variables with respect to investments. The econometric coefficients were obtained from two log-log panel regressions conducted using ISTAT data[90], where value added and employment were specified as dependent variables and investments as the main explanatory variable. The models include fixed effects for sector, year, and territory, with clustered standard errors at the sector level. The dataset covers investments, value added, and employment disaggregated by region within the ZES Unica areas over the period 2015–2024. The full econometric specification and estimation results are reported in Appendix.

The econometric estimates can be interpreted as elasticities, since the regressions are specified in log-log form. This allows a direct comparison of how investment changes

[90] Istituto Nazionale di Statistica (ISTAT), 2025. *ISTAT DBnomics. Dataset 284_302.*
Istituto Nazionale di Statistica (ISTAT), 2025. *Rilevazione sulle forze di lavoro – Definizione di occupati e metodologia statistica.*
Istituto Nazionale di Statistica (ISTAT), 2025. *Stima preliminare del Pil e dell'occupazione territoriale, Anno 2024 (press release).*

translate into percentage changes in the two outcomes. Specifically, the estimated coefficients imply that:

- the elasticity of *value added* with respect to investments is 0.167,
- the elasticity of *employment* with respect to investments is 0.049.

In practical terms, this means that a 1% increase in investments is associated with a +0.167% increase in value added, while the same 1% increase in investments is associated with only a +0.049% increase in employment, holding constant sector, territory, and year fixed effects. Therefore, the value-added response to investment is substantially stronger: the percentage impact on value added is about 3.4 times larger than the percentage impact on employment (0.167 / 0.049 ≈ 3.38).

This difference is economically meaningful in the context of the ZES Unica, because it suggests that investment incentives linked to the policy are expected to generate a relatively larger effect on output (GDP/value added) than on job creation, at least in the short-to-medium run captured by the historical ISTAT panel. Formally, for an incremental investment shock attributable to the ZES Unica, the expected percentage impacts can be expressed as:

$\%\Delta VA \approx 0.167 \cdot \%\Delta Inv$ and $\%\Delta Occ \approx 0.049 \cdot \%\Delta Inv$

To make the magnitude transparent, a 10% increase in investments linked to the policy would correspond, on average, to approximately:

- +1.67% in value added (0.167 × 10),
- +0.49% in employment (0.049 × 10).

The following Figure 3.1 reports the estimated elasticities of value added (ln_va) and employment (ln_occ) with respect to investments from fixed-effects panel regressions controlling for sector, year, and territory. Points denote coefficient estimates, while horizontal bars display 95% confidence intervals. The estimated elasticity of value added is positive and precisely estimated, with a 95% confidence interval that lies clearly above zero. The employment elasticity is also positive, but smaller and estimated with lower precision, as its 95% confidence interval lies close to zero. Overall, the results indicate that investment increases are more strongly and reliably associated with value added growth than with employment growth within the ZES areas.

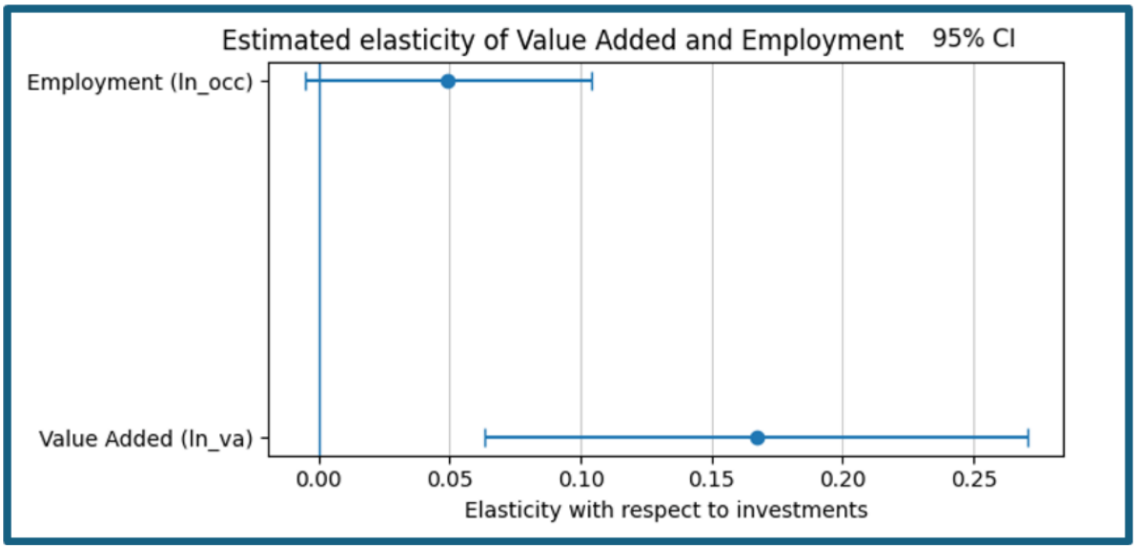

Figure 3.1: Estimated elasticities of value added and employment with respect to investments (fixed-effects panel regressions, 95% confidence intervals). Source: Author's elaboration.

Building on the estimated elasticities used to quantify the economic and employment impacts of additional investments, the following figure illustrates the within-sector relationship between investments and value added over time.

The figure shows a within-scatter plot between the log of investments (ln_inv) and the log of value added (ln_va) after removing sector and year fixed effects. This double-demeaning procedure isolates deviations from sector-specific levels and common time shocks, allowing the relationship to be visualised net of structural differences across sectors and aggregate trends. The positive slope of the fitted line suggests that higher investment levels are associated with higher value added in the within variation captured by the data. This graphical pattern is in line with the fixed-effects regression results, which estimate a positive and statistically significant elasticity of value added with respect to investments. It should be noted that, while the plot removes sector and year effects for visualisation purposes, the econometric model further controls for territory fixed effects; therefore, the figure is intended as descriptive support rather than a one-to-one replication of the full specification..

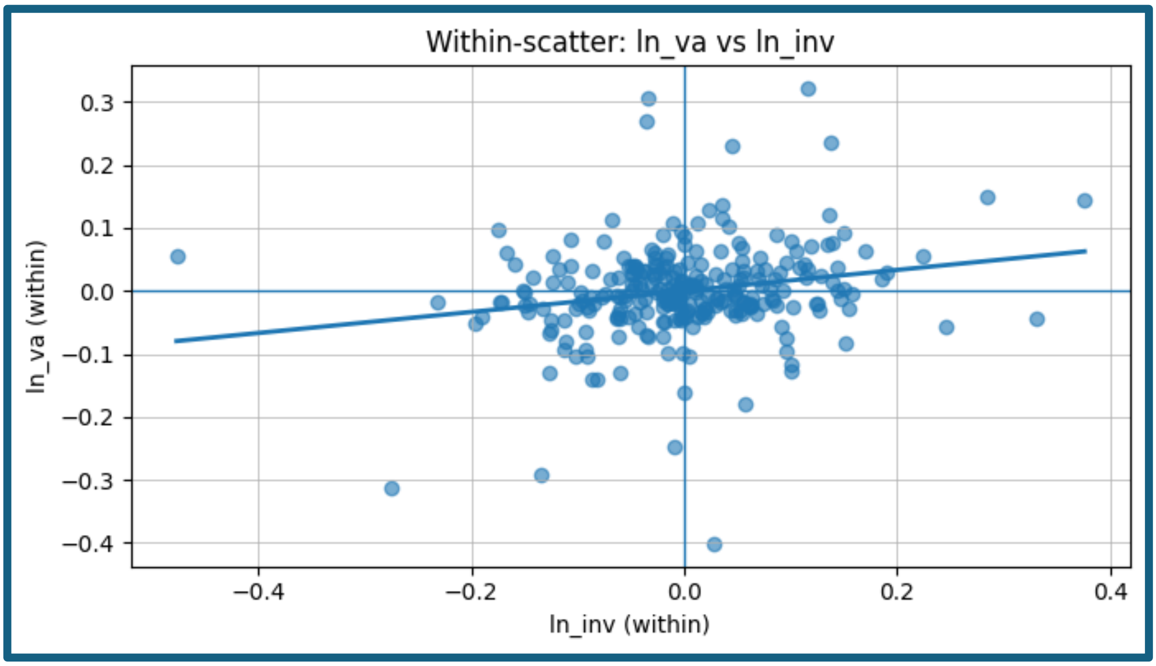

Figure 3.2: Within-scatter plot of ln_inv and ln_va after removing sector and year fixed effects, highlighting the positive association in the within variation. Source: Author's elaboration based on ISTAT data.

3.3 Methodological Rationale and Triangulation

The assessment of the effects of the ZES Unica is methodologically strengthened by the joint use of two distinct yet complementary approaches. On the one hand, the forecast scenarios developed by applying the multipliers from the TEHA study within an Input-Output (Leontief) framework make it possible to translate an ex ante policy constraint, namely the annual tax credit ceilings, into an order-of-magnitude quantification of the potential impacts in levels on both the productive system and the labour market. Over the 2026–2028 period, with a cumulative ceiling of €4.05 billion, estimated additional investments range from approximately €3.0 billion in the conservative scenario to €11.3 billion in the optimistic scenario, implying a total economic impact between roughly €7.9 billion and €29.5 billion and employment supported between about 12 thousand and 46 thousand units (cumulative over the three-year period). Since the TEHA multipliers are held constant by construction, the main source of variation across scenarios does not stem from the multiplier mechanism itself, but rather from the policy's ability to generate truly additional investment, as captured by the parameters α (aid intensity) and δ (additionality).

On the other hand, the econometric analysis based on ISTAT data for 2015–2024 provides empirical evidence on the structure of the relationship between investments and economic outcomes in the ZES Unica areas, controlling for sectoral, territorial, and time heterogeneity through fixed effects and adopting clustered standard errors at the sector level. In this case, the aim is not to produce an ex ante forecast in levels, but to estimate outcome sensitivity in percentage terms, that is, to quantify how value added and employment respond to changes in investments within the observed sample. The result is relevant from an interpretative standpoint, as it suggests a stronger and more immediate transmission of investment into output and productivity, whereas the employment effect appears more gradual and more dependent on the sectoral composition of investment and on project implementation timelines. Consistently, the employment estimate is less precise than the value added estimate.

Taken together, the two pieces of evidence reinforce the overall evaluation through a triangulation logic. The TEHA-based scenarios provide an ex ante quantification of the order of magnitude of the total impacts potentially activated along the economic supply chain, while the econometric analysis, grounded in observed data and stringent controls, confirms the sign consistency of the investment–outcome relationship and adds information that a purely multiplier-based approach cannot capture, namely the relative intensity with which investment variations translate into value added versus employment. As a result, the two methods should be regarded as complementary tools: the former estimates "how much" impact can be activated given available resources and additionality assumptions, while the latter clarifies "how" an investment increase tends to manifest across the key economic variables.
The findings converge in indicating that the ZES Unica can generate positive macroeconomic effects that are plausible in order of magnitude, with an impact profile primarily oriented toward output and productive capacity growth, and with employment benefits that are present but relatively more limited in percentage terms and more sensitive to composition and implementation timing.

4. Policy Design for a National SEZ

4.1 Toward a National SEZ

Moving from the forecasts of the economic and employment impacts of ZES Unica for the period 2026-2028, an important aspect related to its future prospects emerges. in recent months, also in light of the first positive signs linked to the operation of ZES Unica, public statements by Prime Minister Giorgia Meloni and Undersecretary to the Prime Minister with responsibility for Southern Italy policies Luigi Sbarra have suggested an interpretation of the measure that extends its scope beyond the strictly territorial dimension. The model tested in Southern Italy with ZES Unica, based on a combination of tax incentives and procedural simplification, is gradually being interpreted as a possible reference point for strengthening the country's overall attractiveness to domestic and foreign productive investment. [91]

This interpretation finds its first empirical confirmation in the data on the use of the instrument. In its first year of full operation, several hundred Single Authorisations were issued, with over 800 procedures completed. Although not strictly speaking an indicator of economic performance, this data signals a significant administrative capacity for absorption and reinforces the idea that the SEZ Single authorisation procedure operates not only as a regulatory framework but also as an effective delivery mechanism.

With a view to possible extension at national level, the main contribution of the model would no longer lie exclusively in the intensity of the incentive, but in its ability to influence the administrative uncertainty that affects the realisation of investments. The standardisation of procedures, the concentration of responsibilities and the strengthening of inter-institutional coordination aim to reduce authorisation times and make public action more predictable, with direct effects on economic and financial planning and the bankability of projects.

[91] Santonastaso, N. (2025, December 28). *"Sud, un Piano strategico per coordinare le misure a sostegno della crescita"* [Interview with Luigi Sbarra]. *Il Mattino*.

However, the prospect of extending certain mechanisms of ZES Unica on a national scale is confronted with a constraint of consistency, namely the need to preserve the territorial rebalancing function that guided its original design and continues to guide its priorities. The three-year refinancing of the tax credit for the period 2026-2028 provided for in the 2026 Budget Law, which consolidates the measure as a lever dedicated to the South, should also be read in this light. Here too, the positions of the Undersecretary to the Presidency of the Council of Ministers, Luigi Sbarra, insist on maintaining a strong link between SEZs and the South, while at the same time promoting administrative simplification as an enabling condition for making investment projects more credible, feasible and bankable, even from a systemic perspective.

As also highlighted by the analyses of the Organisation for Economic Co-operation and Development (OECD), the attractiveness of investments depends to a large extent on the ability of public institutions to coordinate decisions and procedures in a coherent manner. In highly complex regulatory contexts, administrative fragmentation not only leads to slowness but, above all, to unpredictability, because it makes timelines, responsibilities and authorisation sequences uncertain. It is in this sense that institutional analyses of Southern Italy reveal a crucial point: constraints on growth stem not only from financial limitations, but also from weak implementation capacity. The reorganisation of governance introduced by ZES Unica therefore takes on a specific meaning, because it addresses this bottleneck, reducing decision-making dispersion and strengthening the predictability of public action. [92]

This critical issue is particularly evident when we observe how, over time, the architecture of policy planning and implementation has encouraged the proliferation of parallel channels and procedures, increasing administrative complexity rather than reducing it.

The management of European funds through approximately 540 programmes, often oriented towards similar objectives but governed by different procedures, has increased administrative burdens, multiplied decision-making steps and reduced standardisation, with dispersive effects on the overall effectiveness of public action.

[92] OECD Cogito. (2025). *Can special economic zones spur regional attractiveness?*

These structural criticalities are also reflected in the implementation results. In the PNRR, the ratio of payments to funding in public works is 43.2% in the Centre-North compared to 22.9% in the South, indicating greater difficulty in transforming allocated resources into actual investments. Similarly, in the social infrastructure of the PNRR, the preliminary phases prior to the start of execution, including design, have long average durations, equal to 11.9 months for works with an ex- t of between €150,000 and €1 million and 17.2 months for works between €1 million and €5.4 million, directly affecting the timeliness and financial sustainability of the projects.[93]

In this context, ZES Unica can be seen as an institutional response to implementation constraints, as it addresses decision-making bottlenecks rather than expanding incentives, acting on coordination costs and administrative processing times and reducing the gap between potentially available resources and the actual capacity to implement investments. This logic is consistent with the *second-best institutions* approach, according to which, in the presence of structural constraints and institutional interdependencies, the objective of reforms is not to build ideal structures, but to introduce solutions that are functional to the observed context. In the case, the centralisation of governance and the unification of procedures do not represent an optimal model in the abstract, but an appropriate response to the main constraint that has emerged, namely the weakness of delivery capacity.

4.2 Single Authorisation: Time and Risk Reduction

In the design of ZES Unica, the Single Authorisation makes explicit a crucial variable for investment decisions that is often overlooked in public policy: administrative time. When authorisation procedures are fragmented and characterised by uncertain outcomes, time is not merely a waiting cost, but an economic input that affects the overall cost of the project, the risk profile and the probability of bringing the investment to fruition. Waiting time can influence investment decisions to a similar extent, and in some cases to a greater extent, than the intensity of tax incentives.

[93]Banca d'Italia**.** (2025). *Le prospettive di sviluppo dell'economia meridionale* (Questioni di Economia e Finanza). Banca d'Italia.

The indicators developed by the World Bank make this relationship observable. In the Doing Business framework, the topic Dealing with Construction Permits measures in a standardised way the number of procedures required and the total time needed to complete the authorisation process. Databank data show values ranging from approximately 40–80 days to over 350 days, depending on the economy, with the number of administrative steps reaching several dozen. These differences indicate that the time and procedural dimensions of permitting are a structural factor of heterogeneity between administrative systems. [94]

A particularly relevant aspect, because it can be directly interpreted in terms of risk, is that the differences between countries and territories do not only concern the average duration of procedures, but also their complexity and predictability. Subnational evidence helps to make this point tangible: in the World Bank's Doing Business in the European Union 2020: Italy report, the time taken to issue building permits varies significantly between cities, from around 105 days in Milan to over 325 days in Reggio Calabria, with intermediate values of 189 days in Rome and almost 300 in Naples. For the same project, this dispersion translates into greater volatility in time-to-market, higher indirect costs related to fixed capital and, above all, an increase in perceived risk. [95]
Within the scope of ZES Unica, the Single Authorisation replaces a sequence of sectoral authorisations with a single procedure, introducing a discontinuity with respect to the ordinary system. The available operational evidence indicates that, for SEZ projects, this is associated with shorter completion times, in the order of a few months, while in ordinary regimes the timeframes can extend to a year. The economically decisive aspect is not only the reduction in average time, but also the greater predictability of the authorisation process, which mitigates procedural uncertainty in the pre-operational phase. In line with the World Bank's Business Ready (B-READY) framework, the standardisation and transparency of administrative processes improve the quality of the business environment because they reduce the risk premium required by investors and financiers, with direct effects on bankability. It follows that the scalability of the model

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[94] World Bank. (2020). *The do's and don'ts of special economic zones*. World Bank Group.
[95] World Economic Forum. (2020). *Global Competitiveness Report – Special Edition*. World Economic Forum.

depends above all on the transferability of simplification and governance mechanisms, while the fiscal lever requires a separate design in terms of regulatory compatibility.

4.3 National Scalability and EU Constraints

Any extension of the model beyond the perimeter currently covered by ZES Unica therefore requires a clear distinction between two conceptually different components: administrative simplification and tax incentives. Only the former is inherently scalable on a national basis without external compatibility constraints, while the latter is, by definition, conditioned by the European framework on state aid and public finance limits.

Administrative simplification, understood as the unification of procedures, reduction of steps and certainty of timelines through instruments such as the one-stop shop and substitute authorisation, does not constitute selective aid within the meaning of Article 107(1) TFEU[96]. It does not involve transfers of public resources or confer differentiated economic advantages on specific undertakings or sectors, but affects the general functioning of the administration, improving its coordination capacity and the predictability of public action. As a horizontal intervention in the institutional context, simplification falls within the scope of process reforms and, precisely because of this nature, does not generally trigger the notification and control obligations provided for in the State aid rules.

The case of tax incentives is different. The tax credit of ZES Unica falls within the scope of regional aid authorised by way of derogation under Article 107(3)(a) and (c) TFEU and is subject to the maximum intensities and eligibility criteria set out in the Guidelines on regional State aid 2022-2027. Even when such measures are eligible for the exemption schemes provided for in Regulation (EU) No 651/2014[97], they remain subject to quantitative thresholds, territorial limits and stringent compatibility conditions. It follows

[96] European Union, 2008. *Article 107, Treaty on the Functioning of the European Union*, Official Journal C 115, 09/05/2008,

[97] European Union, 2014. *Commission Regulation (EU) No. 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. Official Journal* L 187, 26 June 2014, pp. 1–7

that the tax lever cannot be automatically transferred to the national level with the same intensity and logic applied to the South, especially outside the eligible areas.

This distinction allows ZES Unica to be interpreted as a two-level design: a potentially extendable innovation in governance and a selective fiscal lever that is necessarily limited in scope. In this context, EU state aid rules are not only a constraint but also a rule of quality in policy design, because they require proportionality, targeting and an incentive effect, reducing the risk of distortions of competition and subsidy competition. In addition to these external constraints, there is an internal constraint of credibility, linked to the ability to allocate, track and monitor incentives in a uniform manner, avoiding duplication and accounting opacity, as pointed out by the Court of Auditors. This has a clear implication: the administrative simplification and streamlining component is scalable as a horizontal reform of delivery capacity, while the fiscal component can only be extended through a selective and controllable design, consistent with the EU perimeter and robust governance safeguards. [98]

4.4 International Benchmark: Poland's Investment Zone

The experience of the Polish Investment Zone (PSI) is relevant because it shows how it is possible to overcome the logic of special economic zones as closed territorial perimeters without transforming the instrument into an indiscriminate liberalization of incentives. With the Act of 10 May 2018 [99]on Supporting New Investments, Poland reconfigured the previous SEZ system into a national investment support regime, extending eligibility to the entire territory but preserving a rigorous regulatory framework, both administratively and in terms of compatibility with European state aid law.

Overcoming the geographical constraint does not imply automatic access to the benefit. The central element of the model is the issuance of a decision on support by the competent authority, which grants the investor the right to a tax exemption or reduction for a certain

[98] Corte dei conti. (2023). *Relazioni sul coordinamento della finanza pubblica e sulla corretta allocazione degli incentivi*. Corte dei conti.
[99]Government of Poland. (2018). *Act of 10 May 2018 on the Polish Investment Zone*. Warsaw.

period of time, generally between 10 and 15 years. The predetermination of the duration of the benefit is a key element of the institutional design, as it allows the incentive to be aligned with industrial cycles and incorporated into economic and financial plans, reducing the uncertainty typical of measures that are renewed on an annual basis.

The selectivity of the support is guaranteed by observable criteria linked to the size of the investment, the employment generated, the technological content and consistency with national development priorities. This system directs resources towards projects with greater potential for additionality and reduces the risk of support for marginal investments. In the case of large-scale projects, the scheme also applies the principle of the correct amount of aid, which provides for a progressive reduction in the intensity of the subsidy as the value of the investment increases, strengthening the proportionality of the intervention and limiting overcompensation, in line with European state aid rules.

The operational capacity of the model is confirmed by official data from the Polish Investment and Trade Agency, according to which between 2018 and 2023, over 2,500 support decisions were issued, associated with declared investments of over PLN 90 billion. The value of the PSI therefore lies not in its geographical scope, but in the possibility of combining the temporal stability of the incentive, selectivity of access and administrative governability within a uniform national framework. [100]

Another strength of the Polish model is its governance structure. While maintaining an operational role for the local authorities that are the successors to the former SEZs, the PSI is based on standardised procedures and a nationally defined decision-making chain, which reduces discretionary application and makes access to the benefit more predictable.

This architecture reflects a well-established logic in the literature on special economic zones, according to which the most robust results emerge when such instruments operate as platforms for administrative coordination and procedural simplification, rather than as mere containers of tax incentives.

[100] Polish Investment and Trade Agency (PAIH). (2019–2024). *Polish Investment Zone – Key features and implementation*. PAIH.

A comparison with the Italian case highlights a difference in design that directly affects the risk profile of the investment. In ZES Unica, the tax credit is an important lever for attracting investment, but its operation is structurally conditioned by annual time windows and overall spending caps, defined by the Budget Law and subject to periodic refinancing.
In the Polish Investment Zone regime, on the other hand, the decision on support grants a right to the benefit over a predetermined time horizon and in the absence of annual spending caps that could alter access or the amount available ex post. This difference allows the incentive to be treated as a relatively certain component of expected cash flows, with direct effects on risk assessment and access to credit.[101]

The comparison therefore allows us to isolate the role of institutional design while keeping the policy objective the same. Evidence from international literature, particularly from the World Bank, converges in showing that the performance of special economic zones depends primarily on the quality of governance, the capacity for inter-administrative coordination and the predictability of rules, rather than on the mere nominal intensity of incentives. From this perspective, an *'Italian SEZ'* appears conceptually feasible and consistent with European precedents, but its effectiveness would depend crucially on the ability to stabilise access conditions ex ante and make simplification mechanisms structural, preventing the national extension from amplifying the critical issues typical of contingent incentives and compromising their overall credibility.

4.5 Governance and Regulatory SLAs

From an institutional perspective, the public administration can be interpreted as a true intangible economic infrastructure, insofar as it determines the quality of the regulatory environment, the predictability of decisions and the credibility of rules over time. In line with the findings of the Organisation for Economic Co-operation and Development (OECD)[102] on public governance, trust, quality of decision-making processes and implementation capacity are prerequisites for effective policies and competitive

[101] TGC Corporate Lawyers. (2023). *Polish Investment Zone: From conditions to tax benefits*.
[102] OECD. (2024). *ESG investing: Practices, progress and challenges*. OECD Publishing.

economic systems in highly complex contexts. Administrative time therefore takes on the status of a measurable and legally relevant economic variable through regulatory SLAs[103], which transform timing from a discretionary element to an observable and guaranteed parameter.

These SLAs mark the transition from a procedural public administration to a performance-based public administration, in which the conclusion of the procedure within certain and peremptory deadlines, equal to 120 days and reduced to 90 for strategic projects, the strengthening of a qualified tacit consent pursuant to Article 20 of Law 241/1990[104], and the automatic activation of substitute power in the event of inaction, in accordance with Article 120[105] of the Constitution, constitute a genuine obligation to achieve results, making time a *'contractualised'* dimension of public action and protecting the legitimate expectations of investors. The economic significance of this system therefore lies not merely in the acceleration of processes, but in the stabilisation of expectations: when timescales are defined and controllable, companies can plan investments, model cash flows and assess the feasibility of projects ex ante with less uncertainty.

From this perspective, regulatory SLAs represent an external reliability mechanism that directly affects the institutional risk associated with the pre-operational phases of investments. From an economic point of view, this reduction in administrative risk is reflected in three key areas for foreign direct investment: the reduction of regulatory country risk, the improvement of project bankability through greater predictability of authorisation times, and the emergence of a form of non-fiscal competitiveness based on administrative quality rather than on the intensity of incentives.

This is where the link with ZES Unica comes in: the Single Authorisation can be seen as an initial operational translation of regulatory SLAs, because it incorporates simplification into a unified and verifiable process, reducing the procedural variability that weighs on the pre-operational phase of investments. It follows that the innovation of

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[103] SLAs (Service Level Agreements) are predefined commitments that set clear and measurable timelines for administrative processes, ensuring transparency, predictability, and efficiency in decision-making.

[104]Brocardi.it, 1990. *Art. 20 Legge sul procedimento amministrativo – Silenzio assenso*.

[105] Brocardi.it, 2010. *Art. 120 Codice del processo amministrativo*.

the model is mainly institutional, insofar as it experiments with an administrative capacity based on defined timescales and responsibilities. From a European perspective, this configuration is consistent with open strategic autonomy, as it acts to improve institutional quality without constituting state aid, and strengthens the role of Italy as a reliable platform for strategic investments and integration into European value chains.

4.6 SEZ Efficiency and FDI Attractiveness

Any extension of the model to an *'Italian SEZ'* should be assessed primarily in relation to its ability to affect the country's overall attractiveness for foreign direct investment. In the European context, Italy lags behind in its ability to attract international productive capital, despite the size of its market and the weight of its manufacturing system. According to UNCTAD data, FDI stock as a percentage of GDP in Italy is stable at around 30%, significantly lower than comparable economies such as France and Spain, which exceed 50%, and far from the levels of countries such as Germany or the Netherlands. This gap suggests that the problem of Italy's attractiveness is not only attributable to cyclical factors, but to structural characteristics of the institutional context. [106]

In this context, the distinctive contribution of the SEZ will be its ability to reduce one of the main barriers to foreign investment in Italy: procedural and temporal uncertainty. The predictability of administrative action, the clarity of responsibilities and the reduction of authorisation times have a direct impact on the pre-operational phase of investments, which is one of the most fragile points of the Italian system. It is on this level that the SEZ takes on systemic importance, acting as an instrument of institutional efficiency rather than a traditional facilitation measure.

This approach is consistent with UNCTAD analyses, which identify policy uncertainty as one of the main factors slowing down and reallocating international investment flows. In a context characterised by high competition between countries to attract productive capital, the ability to offer a clear and predictable procedural framework is an independent competitive lever, because it makes the country more readable and comparable in

[106] UNCTAD. (2025). *World Investment Report 2025*. United Nations.

investment location decisions. By acting on the quality of authorisation processes, the SEZ therefore intervenes on a crucial determinant of investment decisions, distinct from the intensity of tax incentives.[107]

The evidence cited by Confindustria reinforces this interpretation. According to data from the Foreign Companies Observatory, there are approximately 18,400 foreign-controlled companies operating in Italy, which contribute significantly to the creation of added value, skilled employment and expenditure on research and development. This indicates that foreign investment is not a marginal component of the production system, but a structural lever for growth and innovation. Improving the conditions for attracting and stabilising these investments therefore means having a direct impact on the country's industrial development trajectory.

In this sense, the administrative efficiency experienced in the SEZ can also be interpreted in ESG terms, particularly from a governance perspective. The quality of the 'G' does not depend on the mere existence of rules, but on their effective application, the transparency of procedures and the ability to ensure continuity in decision-making. An institutional and legal framework that makes timelines predictable and concentrates the authorisation process reduces the risk of arbitrariness and strengthens investor confidence, with effects that are reflected in the overall assessment of country risk.

The concentration of acts reduces inconsistencies and conflicts between administrations, preventing environmental protection or social issues from translating into regulatory instability. From this perspective, sustainability is not only a policy objective, but a condition of certainty and consistency in decision-making that affects the feasibility of projects and their acceptability in the long term.

A further systemic effect concerns the strengthening of legal certainty. The reduction in authorisation steps and the clear identification of decision-making responsibilities help to

[107]UNCTAD. (2024). *World Investment Report 2024: Investment facilitation and sustainable development*. United Nations.

limit the risk of litigation, increasing the legal stability of authorised investments. This element has a precise economic value, because it directly affects the bankability of projects and the ability of investors to assess the feasibility of interventions ex ante.

There are also initiatives promoted by Confindustria and the Conference of Regions, which have identified procedural simplification and institutional coordination as a priority for strengthening the attractiveness of Italian territories to foreign investment. The reference to experimental projects for the simplification and digitalisation of authorisation procedures confirms that competitiveness does not depend solely on tax incentives, but increasingly on the state's ability to offer standardised procedures, certain timelines and clear responsibilities.[108]

Overall, the conclusion is straightforward. An *'Italian SEZ'*, if conceived as a stable and efficiency-oriented administrative platform, can help reduce one of the main factors of competitive disadvantage for the country in attracting foreign direct investment. The goal is not simply to increase capital flows, but to improve the state's ability to make projects feasible by reducing uncertainty, increasing bankability and strengthening Italy's reputation as a reliable destination for long-term productive investments.

[108] Centro Studi Confindustria. (2025). *Investimenti per muovere l'Italia.*

Conclusion

This thesis has examined the initial effects of ZES Unica, highlighting the progress made and the potential for the future. While the initial results are promising, the real challenge lies in consolidating these successes and ensuring that the benefits are distributed fairly, especially in the more disadvantaged regions. The forecasts for the 2026-2028 period offer significant growth opportunities, but their success will depend on the ability to address governance challenges and fiscal stability.

Expanding the ZES Unica model to a national level could be a valuable resource for the entire country, but it will require careful adaptation to local specificities to avoid excessive centralization that might undermine the effectiveness of the measure. The model has already demonstrated its ability to stimulate investments, mainly through administrative simplification and reduced authorization times. However, the concentration of resources in more developed regions like Campania and Apuglia risks accentuating inequalities within Southern Italy. It is crucial, therefore, that incentive policies also target more disadvantaged areas, such as Sardinia, Basilicata, and Abruzzo, to ensure a balanced distribution of benefits. Projections for 2026-2028 suggest a continued positive trend in activating investments and creating jobs. However, the effectiveness of the model will depend on the stability of fiscal policies and the continuity of funding. The uncertainties related to the variability of tax credits and the limited duration of funding could jeopardize the sustainability of the results achieved. Therefore, it is essential to plan with a long-term perspective to consolidate current successes and ensure the continuity of ZES Unica over time.
A significant step in this direction is represented by the expansion of ZES Unica to the regions of Marche and Umbria, as provided for by the 2026 Budget Law. This signals the intention to progressively expand the model, but it is necessary to approach this with respect for territorial specificities, without compromising the goals of regional rebalancing.
Looking at the national expansion of the model, one fundamental aspect emerges: while the Polish experience offers useful insights, adapting it to the Italian context requires a delicate balance between administrative simplification and respect for local peculiarities. The effective management of ZES, indeed, should not sacrifice the flexibility needed to

address different territorial needs. In this context, expansion could represent an opportunity to improve the country's overall competitiveness by strengthening its attractiveness to foreign direct investment (FDI).
A key factor in the success of ZES Unica is the introduction of Service Level Agreements (SLAs), which set clear and defined timelines for approving administrative procedures. This system not only reduces bureaucratic uncertainty but also makes the authorization process more transparent and predictable, thereby increasing investor confidence. Clear rules and strict control over implementation timelines will ensure greater administrative efficiency, making ZES Unica a model of reliability and transparency, essential for attracting strategic and international investments.
In this context, Italy currently finds itself at a disadvantage compared to its main European competitors in terms of attracting FDI. According to UNCTAD data, the flow of FDI in Italy represents about 30% of GDP, significantly lower than France and Spain, which exceed 50% of GDP in FDI. In 2022, Italy recorded around $19 billion in FDI, while Spain attracted about $38 billion, and France $38.6 billion. ZES Unica could help bridge this gap by creating a more favorable investment environment and strengthening Italy's competitiveness in global value chains.
Ultimately, the ability to consolidate the SLAs system and improve administrative governance will be crucial in making ZES Unica a model of excellence, capable of supporting economic growth and promoting a more balanced and competitive future for the entire country. With national expansion, Italy could become a strategic hub for foreign direct investments, improving its position in the European landscape.

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Appendix

```
        coef_va     se_va      p_va  coef_occ    se_occ     p_occ
ln_inv  0.167047  0.052767  0.001547  0.049394   0.02794  0.077084

N VA: 272 | R2 VA: 0.9971714494692184
N OCC: 272 | R2 OCC: 0.9996325472187907
```

```
import pandas as pd
```

```
from google.colab import files
uploaded = files.upload()
```

Scegli file nessun file selezionato Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

```
Saving investimenti.xlsx to investimenti.xlsx
```

```
inv_raw = pd.read_excel("investimenti.xlsx",skiprows=8,header=None)
inv_raw.head(6)
```

```
/usr/local/lib/python3.12/dist-packages/openpyxl/styles/stylesheet.py:237: UserWarning: Workbook contains no default style, apply openpyxl's default
  warn("Workbook contains no default style, apply openpyxl's default")
```

	0	1	2	3	4	5	6	7	8	9	10	11
0	Tempo		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	Attività non finanziarie	Branca di attività economica (ATECO 2007)										
2	Totale capitale fisso per tipo di attività	Totale attività economiche	275476.2	284103.1	294828.8	306672.5	319499.8	327062.5	303972.5	382698.4	435095	485486
3	Totale capitale fisso per tipo di attività	Agricoltura, silvicoltura e pesca	6749	6799.3	7278.4	8432.9	9513.9	9803.8	8710.7	10496.9	11008.8	10595.9
4	Totale capitale fisso per tipo di attività	Produzioni vegetali e animali, caccia e serviz...	6552.1	6596.8	7049.3	8194.1	9259.6	9540.1	8504.2	10246.5	10696.8	10266.3
5	Totale capitale fisso per tipo di attività	Pesca e acquicoltura	196.9	202.5	229.1	238.8	254.3	263.7	206.5	250.3	312	329.7

```
inv_raw = inv_raw.rename(columns={
    1: "branca",
    2: 2014,
    3: 2015,
    4: 2016,
    5: 2017,
    6: 2018,
    7: 2019,
    8: 2020,
    9: 2021,
    10: 2022,
    11: 2023
})
inv = inv_raw.drop(columns=[0])
inv = inv.drop(index=[0, 1]).reset_index(drop=True)
inv.head()
```

	branca	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
0	Totale attività economiche	275476.2	284103.1	294828.8	306672.5	319499.8	327062.5	303972.5	382698.4	435095	485486
1	Agricoltura, silvicoltura e pesca	6749	6799.3	7278.4	8432.9	9513.9	9803.8	8710.7	10496.9	11008.8	10595.9
2	Produzioni vegetali e animali, caccia e serviz...	6552.1	6596.8	7049.3	8194.1	9259.6	9540.1	8504.2	10246.5	10696.8	10266.3
3	Pesca e acquicoltura	196.9	202.5	229.1	238.8	254.3	263.7	206.5	250.3	312	329.7
4	Attività estrattiva, attività manifatturiere, ...	77073.8	79433.4	86304.4	89031.2	95968.3	95796.7	86494.3	102913.5	116603.7	121102.2

```
inv_long = inv.melt(
    id_vars=["branca"],
    var_name="anno",
    value_name="investimenti"
)
inv_long.head(5)
```

	branca	anno	investimenti
0	Totale attività economiche	2014	275476.2
1	Agricoltura, silvicoltura e pesca	2014	6749
2	Produzioni vegetali e animali, caccia e serviz...	2014	6552.1
3	Pesca e acquicoltura	2014	196.9
4	Attività estrattiva, attività manifatturiere, ...	2014	77073.8

```
uploaded = files.upload()
```

Scegli file nessun file selezionato Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

```
Saving valore_aggiunto.xlsx to valore_aggiunto.xlsx
```

```
va_raw = pd.read_excel("valore_aggiunto.xlsx",skiprows=9,header=None)
va_raw.head(5)
```

```
/usr/local/lib/python3.12/dist-packages/openpyxl/styles/stylesheet.py:237: UserWarning: Workbook contains no default style, apply openpyxl's default
  warn("Workbook contains no default style, apply openpyxl's default")
```

	0	1	2	3	4	5	6	7	8	9	10
0	Tempo	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1	Branca di attività economica (ATECO 2007)										
2	Totale attività economiche	1479703.7	1515428.7	1552004	1582453.4	1604269.8	1496321.9	1644016.4	1793606.6	1924797.7	1965960.4
3	Agricoltura, silvicoltura e pesca	33124.6	31525.4	33030.8	33022.6	32810	32198.1	33780.4	37771	39847.2	43932.5
4	Produzioni vegetali e animali, caccia e serviz...	32106.3	30521.1	32111.9	32092.7	31999.2	31537.4	33031.2	37150.2	39216.5	..

```python
va_raw = va_raw.rename(columns={0: "branca"})
for i, year in enumerate(range(2015, 2025), start=1):
    va_raw = va_raw.rename(columns={i: year})

va = va_raw.drop(index=[0, 1]).reset_index(drop=True)
va.head(5)
```

	branca	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
0	Totale attività economiche	1479703.7	1515428.7	1552004	1582453.4	1604269.8	1496321.9	1644016.4	1793606.6	1924797.7	1965960.4
1	Agricoltura, silvicoltura e pesca	33124.6	31525.4	33030.8	33022.6	32810	32198.1	33780.4	37771	39847.2	43932.5
2	Produzioni vegetali e animali, caccia e serviz...	32106.3	30521.1	32111.9	32092.7	31999.2	31537.4	33031.2	37150.2	39216.5	..
3	Pesca e acquicoltura	1018.2	1004.4	918.9	929.9	810.8	660.6	749.2	620.8	630.7	..
4	Attività estrattiva, attività manifatturiere, ...	337471.2	352268.6	362725.7	373087.2	379075.9	350104.7	415619.5	465134.2	507105.3	491211.6

```python
va_long = va.melt(
    id_vars=["branca"],
    var_name="anno",
    value_name="valore_aggiunto"
)
va_long.head(5)
```

	branca	anno	valore_aggiunto
0	Totale attività economiche	2015	1479703.7
1	Agricoltura, silvicoltura e pesca	2015	33124.6
2	Produzioni vegetali e animali, caccia e serviz...	2015	32106.3
3	Pesca e acquicoltura	2015	1018.2
4	Attività estrattiva, attività manifatturiere, ...	2015	337471.2

```python
va_long["anno"] = va_long["anno"].astype(int)
va_long["valore_aggiunto"] = pd.to_numeric(va_long["valore_aggiunto"], errors="coerce")
```

```python
va_long.isna().mean()
```

	0
branca	0.000000
anno	0.000000
valore_aggiunto	0.078571

dtype: float64

```python
va_long = va_long[(va_long["anno"] >= 2015) & (va_long["anno"] <= 2023)]
```

```python
inv_long = inv_long[(inv_long["anno"] >= 2015) & (inv_long["anno"] <= 2023)]
```

```python
inv_long["branca"] = inv_long["branca"].astype(str).str.strip()
va_long["branca"]  = va_long["branca"].astype(str).str.strip()

inv_long["branca"] = inv_long["branca"].str.replace(r"\s+", " ", regex=True)
va_long["branca"]  = va_long["branca"].str.replace(r"\s+", " ", regex=True)
```

```python
df = inv_long.merge(
    va_long,
    on=["branca", "anno"],
    how="inner"
)
```

```python
uploaded = files.upload()
```

Scegli file nessun file selezionato Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

```
Saving occupati_2.xlsx to occupati_2.xlsx
```

```python
occ_raw = pd.read_excel("occupati_2.xlsx",skiprows=9,header=None)
occ_raw.head(5)
```

```
/usr/local/lib/python3.12/dist-packages/openpyxl/styles/stylesheet.py:237: UserWarning: Workbook contains no default style, apply openpyxl's default
  warn("Workbook contains no default style, apply openpyxl's default")
```

	0	1	2	3	4	5	6	7	8	9	10
0	Tempo	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1	Branca di attività economica (ATECO 2007)										
2	Totale attività economiche	24303.2	24650.9	24940.8	25194	25349	24830.1	25069.4	25550.4	26077.7	26507.8
3	Agricoltura, silvicoltura e pesca	921.5	952	940.9	964.4	959.3	939.6	937.8	940.2	942.9	947.9
4	Produzioni vegetali e animali, caccia e serviz...	862.7	892.6	881.5	904.7	899.8	882.1	881.1	882.9	885.2	..

```python
occ_raw = occ_raw.rename(columns={0: "branca"})
for i, year in enumerate(range(2015, 2025), start=1):
    occ_raw = occ_raw.rename(columns={i: year})

occ = occ_raw.drop(index=[0, 1]).reset_index(drop=True)
occ.head(5)
```

	branca	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
0	Totale attività economiche	24303.2	24650.9	24940.8	25194	25349	24830.1	25069.4	25550.4	26077.7	26507.8
1	Agricoltura, silvicoltura e pesca	921.5	952	940.9	964.4	959.3	939.6	937.8	940.2	942.9	947.9
2	Produzioni vegetali e animali, caccia e serviz...	862.7	892.6	881.5	904.7	899.8	882.1	881.1	882.9	885.2	..
3	Silvicoltura e utilizzo di aree forestali	32.3	32.5	32.4	33.6	33.2	32.6	31.8	31.8	32	..
4	Pesca e acquicoltura	26.5	26.9	27	26.1	26.3	24.9	24.9	25.5	25.7	..

```python
occ_long = occ.melt(
    id_vars=["branca"],
    var_name="anno",
    value_name="occupati"
)
```

```python
occ_long["anno"] = occ_long["anno"].astype(int)
occ_long["occupati"] = pd.to_numeric(occ_long["occupati"], errors="coerce")

occ_long = occ_long[(occ_long["anno"] >= 2015) & (occ_long["anno"] <= 2023)]
```

```python
occ_long["branca"] = occ_long["branca"].astype(str).str.strip()
occ_long["branca"] = occ_long["branca"].str.replace(r"\s+", " ", regex=True)
```

```python
df2 = df.merge(
    occ_long,
    on=["branca", "anno"],
    how="inner"
)
```

```python
df2.head()
```

	branca	anno	investimenti	valore_aggiunto	occupati
0	Totale attività economiche	2015	284103.1	1479703.7	24303.2
1	Agricoltura, silvicoltura e pesca	2015	6799.3	33124.6	921.5
2	Pesca e acquicoltura	2015	202.5	1018.2	26.5
3	Attività estrattiva, attività manifatturiere, ...	2015	79433.4	337471.2	5611.7
4	Attività estrattiva, attività manifatturiere, ...	2015	73774.9	274001.5	4083.7

```python
df2["investimenti"] = pd.to_numeric(df2["investimenti"], errors="coerce")
df2["valore_aggiunto"] = pd.to_numeric(df2["valore_aggiunto"], errors="coerce")
df2["occupati"] = pd.to_numeric(df2["occupati"], errors="coerce")
```

```python
import numpy as np

df2["ln_inv"] = np.log(df2["investimenti"])
df2["ln_va"]  = np.log(df2["valore_aggiunto"])
df2["ln_occ"] = np.log(df2["occupati"])
```

```
/usr/local/lib/python3.12/dist-packages/pandas/core/arraylike.py:399: RuntimeWarning: divide by zero encountered in log
  result = getattr(ufunc, method)(*inputs, **kwargs)
```

```python
df2_clean = df2[df2["investimenti"] > 0].copy()
df2_clean.shape
```

```
(324, 8)
```

```python
import numpy as np

df2_clean["ln_inv"] = np.log(df2_clean["investimenti"])
df2_clean["ln_va"]  = np.log(df2_clean["valore_aggiunto"])
df2_clean["ln_occ"] = np.log(df2_clean["occupati"])

np.isfinite(df2_clean[["ln_inv","ln_va","ln_occ"]]).all()
```

	0
ln_inv	True
ln_va	True
ln_occ	True

dtype: bool

```python
uploaded = files.upload()
```

Scegli file nessun file selezionato Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

```
Saving investimenti_region.xlsx to investimenti_region.xlsx
```

```python
new_inv = pd.read_excel("investimenti_region.xlsx")

new_inv.head(5)
```

	branca	territorio	2014	2015	2016	2017	2018	2019	2020	2021	2022
0	Totale attività economiche	Italia	285309.7	290872.0	302062.3	311907.0	322139.1	327226.6	303972.5	369458.3	396657.0
1	Totale attività economiche	Centro-nord	221751.7	223139.1	235634.4	246085.3	254089.4	257409.1	239608.6	289183.8	309734.4
2	Totale attività economiche	Nord	163529.6	165718.9	176839.9	184974.9	191463.7	194483.6	180137.8	216508.6	230651.4
3	Totale attività economiche	Nord-ovest	94755.6	95678.4	103779.8	107110.3	109187.6	112384.9	103901.7	125341.9	135626.9
4	Totale attività economiche	Piemonte	25427.0	26637.0	28716.2	29789.4	30095.3	29616.2	27705.9	36308.6	39176.5

```python
new_inv_long = new_inv.melt(
    id_vars=["branca", "territorio"],
    var_name="anno",
    value_name="investimenti"
)
new_inv_long.head(5)
```

	branca	territorio	anno	investimenti
0	Totale attività economiche	Italia	2014	285309.7
1	Totale attività economiche	Centro-nord	2014	221751.7
2	Totale attività economiche	Nord	2014	163529.6
3	Totale attività economiche	Nord-ovest	2014	94755.6
4	Totale attività economiche	Piemonte	2014	25427.0

```python
df2_clean["branca"] = df2_clean["branca"].str.strip()
new_inv_long["branca"] = new_inv_long["branca"].str.strip()

df2_clean["anno"] = df2_clean["anno"].astype(str)  # Assicurati che "anno" sia stringa
new_inv_long["anno"] = new_inv_long["anno"].astype(str)
```

```python
# Verifica i valori unici di "branca" e "anno" dopo la pulizia
print("df2_clean 'branca' unici:", df2_clean["branca"].unique()[:10])
print("new_inv_long 'branca' unici:", new_inv_long["branca"].unique()[:10])

print("df2_clean 'anno' unici:", df2_clean["anno"].unique())
print("new_inv_long 'anno' unici:", new_inv_long["anno"].unique())
```

```
df2_clean 'branca' unici: ['Totale attività economiche' 'Agricoltura, silvicoltura e pesca'
 'Pesca e acquicoltura'
 'Attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di tr
 'Attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di tr
 'Industria estrattiva' 'Industria manifatturiera'
 'Industrie alimentari, delle bevande e del tabacco'
 'Industrie tessili, confezione di articoli di abbigliamento e di articoli in pelle e simili'
 'Industria del legno, della carta, editoria']
new_inv_long 'branca' unici: ['Totale attività economiche' 'Agricoltura, silvicoltura e pesca'
 'Produzioni vegetali e animali, caccia e servizi connessi, silvicoltura'
 'Pesca e acquicoltura'
 'Attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di tr
 'Attività estrattiva, attività manifatturiere, fornitura di energia elettrica, gas, vapore e aria condizionata, fornitura di acqua, reti fognarie, attività di tr
 'Industria estrattiva' 'Industria manifatturiera'
 'Industrie alimentari, delle bevande e del tabacco'
 'Industrie tessili, confezione di articoli di abbigliamento e di articoli in pelle e simili']
df2_clean 'anno' unici: ['2015' '2016' '2017' '2018' '2019' '2020' '2021' '2022' '2023']
new_inv_long 'anno' unici: ['2014' '2015' '2016' '2017' '2018' '2019' '2020' '2021' '2022']
```

```python
df2_clean = df2_clean.dropna(subset=["branca", "anno"])
```

```python
df2_with_territory = df2_clean.merge(
    new_inv_long,
    on=["branca", "anno"],  # Merge su "branca" e "anno"
    how="left"
)
```

```python
df2_with_territory = df2_with_territory.drop(columns=["investimenti_x"])

# Rinomina la colonna degli investimenti territoriali
df2_with_territory = df2_with_territory.rename(columns={"investimenti_y": "investimenti"})

# Controlla il risultato
df2_with_territory.head(5)
```

	branca	anno	valore_aggiunto	occupati	ln_inv	ln_va	ln_occ	territorio	investimenti
0	Totale attività economiche	2015	1479703.7	24303.2	12.557092	14.207352	10.098363	Italia	290872.0
1	Totale attività economiche	2015	1479703.7	24303.2	12.557092	14.207352	10.098363	Centro-nord	223139.1
2	Totale attività economiche	2015	1479703.7	24303.2	12.557092	14.207352	10.098363	Nord	165718.9
3	Totale attività economiche	2015	1479703.7	24303.2	12.557092	14.207352	10.098363	Nord-ovest	95678.4
4	Totale attività economiche	2015	1479703.7	24303.2	12.557092	14.207352	10.098363	Piemonte	26637.0

```
df2_with_territory[["branca", "anno", "territorio", "investimenti"]].head(10)
```

	branca	anno	territorio	investimenti
0	Totale attività economiche	2015	Italia	290872.0
1	Totale attività economiche	2015	Centro-nord	223139.1
2	Totale attività economiche	2015	Nord	165718.9
3	Totale attività economiche	2015	Nord-ovest	95678.4
4	Totale attività economiche	2015	Piemonte	26637.0
5	Totale attività economiche	2015	Valle d'Aosta / Vallée d'Aoste	924.4
6	Totale attività economiche	2015	Liguria	7684.1
7	Totale attività economiche	2015	Lombardia	60431.3
8	Totale attività economiche	2015	Nord-est	70039.8
9	Totale attività economiche	2015	Trentino Alto Adige / Südtirol	8722.4

```
df2_with_territory_clean = df2_with_territory.drop_duplicates(subset=["branca", "anno"])
```

```
df2_with_territory_clean[['ln_inv', 'ln_va', 'ln_occ']].isna().sum()
```

	0
ln_inv	0
ln_va	0
ln_occ	0

dtype: int64

```
df2_with_territory_clean = df2_with_territory_clean.dropna(subset=["territorio"])
```

```
df2_with_territory_clean["territorio"].isna().sum()
```

```
np.int64(0)
```

```
df2_with_territory_clean["branca"] = df2_with_territory_clean["branca"].str.strip()
df2_with_territory_clean["territorio"] = df2_with_territory_clean["territorio"].str.strip()
```

```
df2_with_territory_clean = df2_with_territory_clean[df2_with_territory_clean["branca"] != "Totale attività economiche"]

# Verifica che la riga sia stata rimossa
df2_with_territory_clean.head(10)
```

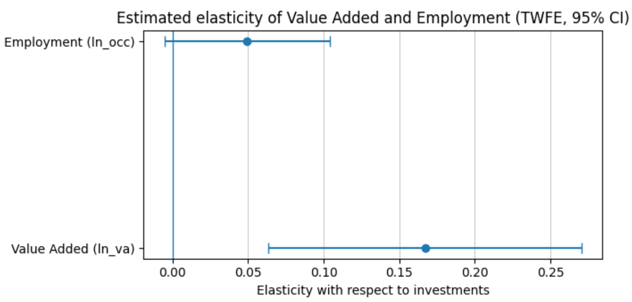
	branca	anno	valore_aggiunto	occupati	ln_inv	ln_va	ln_occ	territorio	investimenti
64	Agricoltura, silvicoltura e pesca	2015	33124.6	921.5	8.824575	10.408031	6.826003	Italia	7032.9
96	Pesca e acquicoltura	2015	1018.2	26.5	5.310740	6.925792	3.277145	Italia	200.5
128	Attività estrattiva, attività manifatturiere, ...	2015	337471.2	5611.7	11.282674	12.729235	8.632609	Italia	80757.5
160	Attività estrattiva, attività manifatturiere, ...	2015	274001.5	4083.7	11.208774	12.520889	8.314759	Italia	75119.2
192	Industria estrattiva	2015	4218.6	21.9	7.804741	8.347259	3.086487	Italia	2467.2
224	Industria manifatturiera	2015	237222.4	3771.0	10.956503	12.376753	8.235095	Italia	58379.3
256	Industrie alimentari, delle bevande e del tabacco	2015	25832.4	446.2	8.820271	10.159385	6.100767	Italia	6929.5
288	Industrie tessili, confezione di articoli di a...	2015	24428.6	491.5	8.223869	10.103510	6.197462	Italia	3655.9
320	Industria del legno, della carta, editoria	2015	13745.1	267.2	8.154328	9.528438	5.587997	Italia	3592.2
352	Fabbricazione di articoli in gomma e materie p...	2015	21103.4	342.2	8.458568	9.957189	5.835395	Italia	4844.1

```
df = df2_with_territory_clean.copy()

# assicurati che anno sia categoria "pulita"
df["anno"] = df["anno"].astype(str)

# (opzionale ma utile) anche gli altri FE come stringa
df["branca"] = df["branca"].astype(str)
df["territorio"] = df["territorio"].astype(str)

# tieni solo righe complete per le variabili del modello
df = df.dropna(subset=["ln_inv", "ln_va", "ln_occ", "branca", "anno", "territorio"]).copy()
```

```python
import statsmodels.formula.api as smf
import pandas as pd

df = df2_with_territory_clean.copy()

# 1) Valore aggiunto come outcome
twfe_va = smf.ols(
    "ln_va ~ ln_inv + C(branca) + C(anno) + C(territorio)",
    data=df
).fit(
    cov_type="cluster",
    cov_kwds={"groups": df["branca"]}
)

# 2) Occupazione come outcome
twfe_occ = smf.ols(
    "ln_occ ~ ln_inv + C(branca) + C(anno) + C(territorio)",
    data=df
).fit(
    cov_type="cluster",
    cov_kwds={"groups": df["branca"]}
)

out = pd.DataFrame({
    "coef_va": twfe_va.params,
    "se_va": twfe_va.bse,
    "p_va": twfe_va.pvalues,
    "coef_occ": twfe_occ.params,
    "se_occ": twfe_occ.bse,
    "p_occ": twfe_occ.pvalues
}).loc[["ln_inv"]]

print(out)
print("\nN VA:", int(twfe_va.nobs), "| R2 VA:", twfe_va.rsquared)
print("N OCC:", int(twfe_occ.nobs), "| R2 OCC:", twfe_occ.rsquared)
```

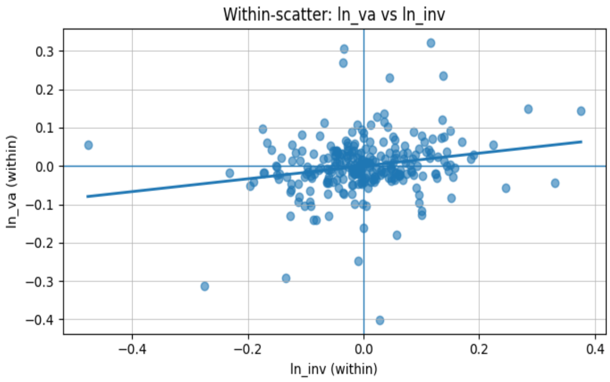
```
         coef_va     se_va      p_va  coef_occ    se_occ     p_occ
ln_inv  0.167047  0.052767  0.001547  0.049394  0.02794  0.077084

N VA: 272 | R2 VA: 0.9971714494692184
N OCC: 272 | R2 OCC: 0.9996325472187907
```

```python
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd

# coefficienti di ln_inv dalle due regressioni
coef = np.array([
    twfe_va.params["ln_inv"],
    twfe_occ.params["ln_inv"]
])

se = np.array([
    twfe_va.bse["ln_inv"],
    twfe_occ.bse["ln_inv"]
])

# CI 95%
ci_low = coef - 1.96 * se
ci_high = coef + 1.96 * se

labels = ["Value Added (ln_va)", "Employment (ln_occ)"]
y = np.arange(len(labels))

plt.figure(figsize=(7, 3.5))
plt.errorbar(
    coef, y,
    xerr=[coef - ci_low, ci_high - coef],
    fmt="o", capsize=4
)

plt.axvline(0, linewidth=1)
plt.yticks(y, labels)
plt.xlabel("Elasticity with respect to investments")
plt.title("Estimated elasticity of Value Added and Employment (TWFE, 95% CI)")
plt.grid(True, axis="x", linewidth=0.5)
plt.tight_layout()
plt.show()

# stampa tabella numerica
out = pd.DataFrame({
    "coef": coef,
    "se": se,
    "CI_low": ci_low,
    "CI_high": ci_high,
    "pvalue": [
        twfe_va.pvalues["ln_inv"],
        twfe_occ.pvalues["ln_inv"]
    ]
}, index=labels)

print(out)
```




```
                         coef        se    CI_low   CI_high    pvalue
Value Added (ln_va)  0.167047  0.052767  0.063624  0.270469  0.001547
Employment (ln_occ)  0.049394  0.027940 -0.005368  0.104156  0.077084
```

```python
import numpy as np
import matplotlib.pyplot as plt

# double-demeaning: rimuove FE di branca e anno
ln_inv_w = (
    df["ln_inv"]
    - df.groupby("branca")["ln_inv"].transform("mean")
    - df.groupby("anno")["ln_inv"].transform("mean")
    + df["ln_inv"].mean()
)

ln_va_w = (
    df["ln_va"]
    - df.groupby("branca")["ln_va"].transform("mean")
    - df.groupby("anno")["ln_va"].transform("mean")
    + df["ln_va"].mean()
)

# retta OLS sul within (solo per visualizzazione)
X = np.vstack([np.ones(len(ln_inv_w)), ln_inv_w]).T
beta = np.linalg.lstsq(X, ln_va_w, rcond=None)[0]

x_line = np.linspace(ln_inv_w.min(), ln_inv_w.max(), 200)
y_line = beta[0] + beta[1] * x_line

# plot
plt.figure(figsize=(7, 4))
plt.scatter(ln_inv_w, ln_va_w, alpha=0.6)
plt.plot(x_line, y_line, linewidth=2)
plt.axhline(0, linewidth=1)
plt.axvline(0, linewidth=1)
plt.xlabel("ln_inv (within)")
plt.ylabel("ln_va (within)")
plt.title("Within-scatter: ln_va vs ln_inv")
plt.grid(True, linewidth=0.5)
plt.tight_layout()
plt.show()

print("Slope within (solo visual):", beta[1])
```




```
Slope within (solo visual): 0.16704675319001744
```