COMPETE GREECE

ΣΥΜΒΟΥΛΙΟ ΑΝΤΑΓΩΝΙΣΤΙΚΟΤΗΤΑΣ ΤΗΣ ΕΛΛΑΔΑΣ

ANNUAL REPORT ON THE COMPETITIVENESS OF GREECE

COMPASS

ΠΥΞΙΔΑ

2024

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The current global landscape is marked by significant geopolitical shifts, emerging challenges, and increasing uncertainty. Recent developments in Israel and Ukraine and their impact on European security, combined with the climate crisis are leading to severe humanitarian crises, hundreds of casualties, and widespread infrastructure destruction. At the same time, democratic processes and human rights are being tested, with many countries seeking ways to maintain social cohesion and political stability. In this context, the need for international cooperation and dialogue is more urgent than ever to address global challenges and build sustainable solutions for humanity's future. Europe, having recognized its weak strategic position and lack of economic competitiveness, is striving to redefine its identity, regain lost ground, and stand on equal footing with the United States and China. Amid this multi layered volatility, Greece is fighting its own battle - facing economic, labor, energy, geopolitical, and migration challenges - as it seeks to recover from the decade-long crisis and approach the economic level of the Eurozone.

Since 2019, the Council on Competitiveness of Greece has remained committed to its mission of proposing actionable policies that popell the Greek economy closer to sustainable and competitive growth, while addressing chronic strructural challenges.

In this spirit, I am pleased that COMPASS 2024, while focusing on sustainable development and social prosperity, deepens its approach on the pillars of competitiveness through an input-output correlation that allows in depth ananlysis of the measurable and comparable results regarding the investments made in our country and their impact.

This year's approach focuses on critical goals: sustainable development, increasing national income, improving quality of life, environmental sustainability, and social cohesion. Additionally, for the second consecutive year, COMPASS 2024 is conducting a field survey to capture the views of the Greek business community regarding Greece's attractiveness as an investment destination.

COMPASS always aims for more effective policy planning. Systematic data evaluation in relation to international indicators and the strategic plans of the government and other key institutions, allows us to identify gaps and challenges and propose strategies that enhance constructive discussions on the future of Greece's competitiveness and development.

1. Purpose of the Report

COMPASS serves as a guiding initiative, fostering meaningful dialogue and highlighting its vital role in consultations. By focusing on the most significant and transformative areas for the country, it provides policymakers with thoughtful directions. Through its flexible and dynamic methodological framework, COMPASS aims to:

1. Systematically monitor the evolution of Greece's competitiveness over time, taking into account official input and output indicator data published by recognized international organizations.
2. To analyze and evaluate the opportunities and challenges arising from the comparative analysis of indicators between countries similar to Greece but also to identify the strengths from the governments' reforms so far.
3. The drawing of conclusions and the mapping of challenges that emerged from the Field Research and the methodical business meetings aimed to capture the point of view of Greek businesses.
4. The submission of proposals with strategic guided actions to address the challenges that have emerged but also to improve the competitiveness of the economy.

The analysis of the above data leads to conclusions and proposals that will enhance the prospect of businesses becoming more competitive, while also guiding government bodies to address the challenges of strengthening the country's economic competitiveness.

This year's 5th edition of COMPASS approaches competitiveness differently from the past, choosing to persist on a more realistic basis of analysis and evaluation of the data we have available from international sources.

COMPASS 5.0 examines competitiveness through inputs and outputs, thus, it examines what is invested and its return, taking into account the model of sustainable development and competitiveness set by the state.

From the five Pillars (Innovation & Technology, Society and Talent, Resources and Infrastructure, Business Environment, Institutions and Economy) we highlight the last "Institutions and Economy" as the fundamental Pillar, which is, the basic prerequisites, a country sets as a necessary field to develop its policies. The essential conditions include the institutional framework, the macroeconomic situation and the endowments in which we ought to identify the opportunities and challenges that differentiate us from region to region.

Comparative analyses of Greece are presented alongside selected countries that are of interest, due to certain characteristics that make them competitive, drawing conclusions that are worth highlighting in order to better understand the challenges that exist for improving the country's performance.

2. Introduction

Greece's overall performance in the Global Competitiveness Index, based on 67 countries, fluctuates over the past five years from 2019 to the present. Greece ranks 47 in the Global Competitiveness Index for 2024, showing slight fluctuations in recent years (position 49 in 2023, 47 in 2022, 46 in 2021, 49 in 2020).

The analysis of Greece's ranking regarding the four dimensions, Economic Performance, Government Efficiency, Business Efficiency and Infrastructure according to the IMD[1] for the years 2020-2024, proves that despite the turbulence in the economy and the government challenges, business efficiency and stability in infrastructure are areas in which Greece may focus its efforts to enhance its overall competitiveness.

Greece in Economic Performance initially showed an improvement in its ranking, reaching 51st place in 2022. However, in 2023 there was a drop to 58th place, probably due to the effects of the pandemic and price increases affecting financial stability. Stabilization at 52nd place in 2024 indicates an expected return to a positive trajectory.

Greece's government effectiveness ranking remains stable around 52nd place, with a slight decline in 2022. This perhaps suggests that the government needs to improve its governance and effectiveness to meet the challenges, although a return to 52nd place in 2024 shows a stabilization effort.

The area of business efficiency has shown improvement, reaching 44th place in 2021 (from 51st in 2020), before retreating again to 46 and 48 places in the coming years. The return to 44th place in 2024 means that Greece is making efforts to strengthen the business environment.

The Infrastructure ranking ranges between 38th and 41st, indicating a relative stagnation. Stability in the 40th place over the past two years suggests the need for further investment and infrastructure improvements, which are fundamental to the development of entrepreneurship and the economy as a whole.

Greece's key challenges for 2024 (IMD 2024) focus on critical sectors of the economy. Increased investment, aimed at broadening the productive base, is necessary to ensure economic stability and create new growth opportunities. The country's economy needs more productive dynamics in order to face today's challenges and increase its competitiveness internationally. At the same time, reforms in vocational education and training are of high importance to address labor market shortages. The skills gap remains significant, limiting productivity and the absorption of new workforces, and companies often find it difficult to hire appropriately qualified workers.

The green and digital transition of businesses are also critical. This transition is not just a trend, but a necessity for the long-term viability of businesses and the competitiveness of the country. Businesses that do not adapt to new, more sustainable technologies and practices risk being left behind in the global market. Judicial reform is another

1 IMD, Greece Profile

priority for Greece. Accelerating court procedures could create a more investment-friendly environment, as delays in decision-making are an obstacle for many investors and businesses. Finally, the simplification of the regulatory framework for entrepreneurship is necessary, due to the fact that an easier process for the establishment and operation of businesses, will enhance business activity and make Greece more attractive to investors. Although the country's economic performance is stable, the challenges to the workforce and investment remain severe, which requires targeted policies to strengthen these sectors.

3. The Input-Output Model and Sustainable Development (Competitiveness Pyramid)

To understand this year's COMPASS approach, it is useful to clarify the importance of inputs and outputs. Inputs include the strategic investments of resources and expenditures that each country chooses to create the right conditions for growth. The goal of Inputs is to pave the way for achieving the intended outcomes, creating an enabling environment for innovation, entrepreneurship, and gaining a competitive advantage. Outputs highlight the results of Inputs and reflect the efficiency and success of the country's strategic choices. Outputs include value-added production, economic productivity, innovation development, employment and social inclusion, among others. Outputs reflect the efficiency of both Inputs and the country's overall competitiveness. These flows operate within an organizational framework that combines various economic and societal factors to determine a country's overall competitiveness and sustainable development. This framework is reflected in the Competitiveness Pyramid. The structure of the "competitiveness pyramid"[2], is defined by four key objectives: increasing national income, improving quality of life, environmental sustainability, and social cohesion. At the bottom of the pyramid are the fundamental conditions for competitiveness, which include institutions, macroeconomic stability, and endowments. The next level of the pyramid includes the Inputs that affect future competitiveness. For example: 1. Existing business environment, 2. Investment and infrastructure 3. Innovation, technology and market complexity, 4. Knowledge and skills (talent), compared to the results achieved, i.e. the outputs which are above the inputs and include 1. Business performance, 2. Costs, 3. Productivity and 4. Employment, which determine current competitiveness At the top of the pyramid is sustainable development. Economic prosperity is pursued through an increase in national income, while better everyday life and citizens' health are the main objectives for improving the quality of life. Protecting and preserving the environment is crucial to achieving environmental sustainability, while social cohesion is promoted by reducing social inequalities and enhancing social inclusion.

2 The "Competitiveness pyramid" based on Ireland's NCPC, Compass 2023, CompeteGR.

4. Essential Conditions

This year's analysis starts from the bottom of the competitiveness pyramid, that is, from the fundamental conditions for competitiveness, which include institutions, macroeconomic stability, and endowments.

Institutions

The quality of institutions, although difficult to measure, is critical to long-term economic performance. It is increasingly recognized that transparent and democratic institutions play a central role in promoting growth and ensuring competitiveness.

Greece presented mixed results in the field of Government Efficiency (IMD 2024) with significant fluctuations in its performance in five key indicators. Out of the 67 economies evaluated, the strongest performance of the country was observed in Operational Legislation, in 31st place and in Social Context in 40th place. At the same time, the lowest performance was recorded in Public Finance, where Greece ranked 60th, while in Tax Policy there was a drop by nine places, reaching 57th, mainly due to high tax rates and delays in administrative procedures. Although the Institutional Framework has remained relatively stable in 49th place, there is still room for further improvements.

From a different perspective we see the perception of governance in a country with the Government Effectiveness Index by the World Bank, taking into account the quality of public services. Greece recorded a percentage of 67% in 2022, showing a gradual increase of 4% compared to 2018. This improvement is mainly attributable to the progress made in the digitalization of public services in recent years. Major initiatives in the area of e-government, digital coverage, and digital services to citizens and businesses have enhanced the effectiveness of the public sector. Although Greece has approached countries such as Italy and surpassed other Balkan countries, further effort is needed to converge with the efficiency levels of southern European countries such as Portugal and Spain.

Greece showed fluctuations in its ranking in Business Efficiency issues (IMD 2024), with some areas showing improvement, while others lagging behind. In Productivity and Efficiency, the country managed to climb to 37th place, achieving its best performance in the last five years. At the same time, in Attitude, Behavior and Values, it ranked 36th, steadily increasing in recent years. However, the Labor Market decreased in 2024 to 58th, highlighting the serious employment challenges that remain. On the other hand, Finance improved, climbing to 45th place, while Management Practices recorded an increase of 8 places, reaching 51st.

The Regulatory Quality Index captures the perception of a government's ability (World Bank 2018-2022) to formulate and implement consistent policies and regulations that support and encourage private sector development. In 2022, Greece recorded a rate of 67% in this indicator, which reflects a mild improvement compared to 2018. Despite this positive development, Greece continues to lag behind other Southeast European countries and Cyprus, which maintain a higher performance in this area. However, Greece still outperforms Bulgaria and Romania, which fell in their respective rankings.

Greece's overall Corruption Perception Index score fell in 2022.This index ranks 180 countries globally based on perceived levels of corruption in the public sector, using a scale from 0 (very high corruption) to 100 (very clean). In 2022, Greece scored an overall score of 57, ranking 59th out of 180 countries, with a loss of three places compared to 2021. Despite the upward trend of recent years, in 2022 Greece fell back in the ranking, with corruption remaining a perennial problem that undermines citizens' confidence and discourages investment. It is worth noting that, while European countries have traditionally performed well on this indicator, Transparency International has expressed concerns about the stagnation of overall scores over the past decade, with some EU countries recording downward trends.

Macroeconomic Sustainability

The macroeconomic environment plays a key role in shaping the context in which businesses operate. A stable macroeconomic situation is necessary to strengthen the confidence of entrepreneurs and to encourage them to invest in the development of their activities, through the creation of physical and human capital, research and development, and other initiatives. From 2012 to 2023, The gross dept of the General Government of Greece (Trading Economics) as a percentage of GDP fluctuated significantly, reflecting the economic crisis, fiscal adjustments and the impact of the COVID-19 pandemic. Over the past decade, debt has reached historically high levels, surpassing 180% of GDP, as a result of bailout policies and austerity measures implemented to stabilize the economy. In the coming years, despite achieving primary surpluses, debt remains high. The 2020 pandemic brought a new increase in debt, due to the need for fiscal measures to support the economy, with the percentage exceeding 200% of GDP. However, from 2021 onwards, there was a gradual reduction in debt, with the economy returning to growth and public finances stabilizing, leading to a reduction in debt to 161.9% in 2023, the lowest level since 2010. Despite the improvements, high debt remains a major challenge for Greece's long-term financial sustainability.

Greece's General Government deficit (Eurostat) as a percentage of GDP showed a remarkable improvement from 2021 to 2023, falling from -7.0% to -1.6%. This development reflects the continuous fiscal consolidation and the return of the economy to positive growth rates. Compared to other countries of the European Union, our country achieved a better performance than the average of the Eurozone and the EU, which stood at -3.6% and -3.5% respectively in 2023. At the same time, it managed to overtake countries such as Italy and Romania, which continued to record high deficits. This progress strengthens Greece's fiscal stability, while highlighting the positive trends recorded, compared to many other European economies.

Gross debt of Households (Eurostat, National Accounts) as a percentage of income in Greece declined significantly from 2021 to 2022, from 79.7% to 68.6%. This decline reflects the improvement in the financial position of Greek households, possibly due to the stabilization of the economy and the decline in borrowing levels. Compared to other Southern European countries, Greece had a lower debt-to-income ratio than Spain, Portugal and Cyprus, which, although declining, still maintain higher debt ratios.

Italy and Croatia, although with even lower rates, recorded smaller declines. This trend suggests a more conservative approach of Greek households to managing their finances, compared to other European countries.

The ratio of loans of non-financial corporations (Eurostat, financial balance sheets) to GDP in Greece showed significant fluctuations in the period 2019-2023. In particular, it rose from 54.2% in 2019 to 65.4% in 2020, reflecting the need for borrowing during the COVID-19 pandemic, which created significant pressures on business liquidity. However, from 2021 onwards, this ratio began to decline, reaching 52.4% in 2023, as the economy recovered and businesses were now able to service their obligations. Compared to the Eurozone, Greece noted a higher growth in 2020, but returned to lower levels of borrowing than the European average.

Greece's tax revenue (International Tax Competitiveness Index) for 2024 shows an increase compared to 2023, especially in income tax and VAT, while there is a slight decrease in customs revenue. Income tax increased by about €3 billion, while VAT increased by €2 billion, possibly showing an improvement in tax compliance or economic growth. At the same time, the Greek tax system displays competitive features, such as the low dividend tax rate (5%) and corporate income tax (22%), which enhance the attractiveness for investment. However, high VAT rates (24%) and restrictions on the use of operating losses are challenges that may burden businesses and limit consumption in the market.

Greece's Government expenditure (Ministry of National Defense and Finance) for 2024 demonstrates significant economic priorities and challenges. The increase in employee benefits (from €13.8 billion to €14.9 billion) indicates greater investment in human capital, while the marginal increase in social benefits and transfers shows continued support for the most vulnerable social groups. Interest increased significantly, reaching €7.7bn, possibly reflecting increased borrowing or debt management costs. What is impressive is the skyrocketing of loans over €1 trillion, which may be linked to financing or refinancing strategies. Although appropriations under allocation have declined slightly, the overall picture shows that the government is focusing on key areas while facing challenges in debt management and economic stability.

Greece's current account balance (Eurostat, financial balance sheets) deteriorated significantly in 2019-2023, with the deficit rising from -1.5% in 2019 to -10.3% in 2022, before declining to -6.3% in 2023. This deterioration is mainly due to increased dependence on imported goods and soaring energy prices, which burdened the trade balance. In addition, the COVID-19 pandemic caused a serious blow to tourism and services exports, two main pillars of the Greek economy. Despite a slight improvement in 2023, with the balance of goods and services showing positive signs, the deficit remains high, demonstrating the ongoing challenges for the country's external balance. In contrast, countries such as Italy, Portugal and Spain have managed to restore positive balances, showing a faster recovery and greater economic stability.

ECB interest rates (ECB, 2024) rose successively in 2023, starting at 2.5% in January and reaching 4.25% in June, as part of the strategy to contain inflation. From September 2023, the interest rate stabilized at 4.5% and remained unchanged until the beginning of 2024, with a slight decrease to 4.25% in June 2024. Stabilization and small declines have confirmed the end of the cycle of aggressive increases, as the effects of past policies begin to loom on the economy. However, an approach with small changes suggests that the bank is still cautious, trying to balance the need for stability with addressing the risks of slowing growth . Based on the recent Commission report on Greece, Greece's economic outlook points to a gradual recovery. Real GDP growth is projected from 2.0% in 2023 to 2.3% in 2025, mainly driven by strong investment, particularly in infrastructure, and the recovery in external demand. Inflation is expected to fall from 4.2% in 2023 to 2.1% in 2025, although persistent pressures on food and services prices remain worrying. Public finances are improving, with the fiscal deficit declining, while public debt is on a downward path thanks to economic growth and fiscal discipline. Key risks to this outlook include contingent legal liabilities and increased wage pressures, however improvements in tax compliance and revenue growth may offset these risks. Overall, the outlook signals a cautiously optimistic recovery for the Greek economy.

Endowments

A country's competitiveness is significantly shaped by its endowments, which impact productivity over the medium and long term. These factors include natural resources, geographic location, and demographics, such as aging populations and migration patterns.

The median population age in European countries (Eurostat, Population Structure) shows a continuous increase over the period 2019-2023. In Greece, the average age increased from 44.9 years in 2019 to 46.5 years in 2023, indicating the ageing of the population, similar to the trend observed in other European countries such as Italy and Portugal, where the average ages reach 48.4 and 46.9 years respectively in 2023. Although Greece is at a similar level to other Southern European countries, it still has a higher average age than the European Union average, which stood at 44.5 years in 2023.

Greece shows a decreasing trend in crude birth rate (World Bank Group, Gender Statistics) in the period 2019-2022, reaching from 7.8 births per 1,000 inhabitants in 2019 to just 7.3 in 2022. This decline reflects the country's low birth rate and demographic challenges, which are in line with wider standards in the European Union and southern countries such as Italy and Spain, with even lower birth rates. Greece remains below the EU average, which also fell to 8.7 births per 1,000 inhabitants in 2022.

The old-age dependency rate[3] (OECD, Demographics Statistics) in Greece increases significantly from 33% in 2015 to an estimated 39.2% in 2025, with a forecast of 73.4% in 2050. This trend indicates the ageing of the population, thus burdening the pension system and the economic stability of the country. A similar trend is observed in other southern countries, such as Italy and Portugal, where rates are expected to reach 72.4% and 73.2% respectively by 2050, significantly exceeding the European and OECD average.

The net migration rate (The World Factbook) in Greece in 2024 is estimated at 1.1 immigrants per 1,000 inhabitants, showing a low but positive migration flow. Greece remains below the countries with higher migration, such as Cyprus with 6.3 migrants per 1,000 inhabitants, but still attracts migrants in contrast to countries such as Romania and Bulgaria, which have negative migration rates.

3 "The combination of young and old dependency indicators provides the overall indicator of age-related dependence (which is calculated as the percentage of dependent, young and old people, compared to the population considered to be of working age, in other words aged 15 to 64)."(Eurostat, 2020)

Data on the net migration balance for people aged 15 and over according to their educational level (Eurostat) in Greece show an interesting breakdown according to educational background. In 2023, immigrants with secondary education made up the majority, with 3,524 people, while those with tertiary education were fewer (2,208 people). The influx of people with primary education or less was lower, reaching 2,069 people. These data suggest that, unlike countries such as Ireland, where highly educated immigrants are significantly more numerous, Greece attracts a workforce with different levels of education, meeting needs in wider sectors of the economy. Despite a lower influx of people with tertiary education, their presence remains important for strengthening the skilled workforce.

The Human Capital Index (HCI) (World Bank) measures the level of human capital a child is expected to develop by the age of 18, highlighting the importance of health and education for the productivity of the next generation of workers. According to the data, Greece has an index of 69%, lower than countries such as Cyprus (75.6%) and Portugal (76.9%), but higher than Romania (58.4%) and Bulgaria (61.4%). Greece's position in the index indicates that, although the education and health system contribute to the development of human capital, there is room for improvement, especially compared to other southern European countries. The country's performance in this area will shape the productivity and competitiveness of the future generation of workers.

In Greece, agriculture accounts for 36.8% based on the land use index (Eurostat), while forestry accounts for 28.6%, indicating the rural nature of the country. The percentage of abandoned areas stands at 28%, due to urbanization and demographic changes. By comparison, neighboring countries such as Italy and Portugal show different land use rates, with Italy focusing on agriculture (42.5%) and Portugal on forestry (44.2%). Greece, however, remains within European standards, with the total environmental footprint from land use estimated at 3.5%.

5. Inputs

Existing business environment

Venture Capital Investment (OECD) amounted to $21.8 million in 2023, lower than 2022 and 2021 ($67.8 million and $78.5 million, respectively). It appears that the availability of private capital for start-up financing in Greece remains limited, creating significant challenges for the development of the innovation ecosystem. Although there are funding opportunities through European programmes and national initiatives, the proportion of venture capital investments as a percentage of GDP was only 0.009% in 2023, compared to the EU-27 average (0.043%). This divergence highlights the relative backwardness of the innovation ecosystem and the funding gap facing start-ups in the country, which hinders their ability to grow and contribute in terms of high value-added production processes and modern technology.

Despite the consolidation and recovery of the banking system, the cost of borrowing of enterprises (ECB) remains at higher levels in Greece than the Eurozone average. The highest spread between the cost of borrowing in Greece compared to the Eurozone average was recorded during the period of the sovereign debt crisis, reaching 3%-4%, indicating higher uncertainties, combined with unfavorable prospects for the Greek economy. In recent years, there has been a trend of convergence towards the Eurozone average, with the spread reaching less than 1 percentage point for the first time since 2008. However, the cost of borrowing remains significantly high in the Greek economy over the last two years (close to 6%), which is largely attributed to inflationary pressures and contractionary monetary policy, as well as to the reluctance of banks to issue new loans. The high cost of borrowing, the fact that many businesses, especially SMEs, rely heavily on bank lending, combined with the increased cost of inputs and shortages in required human capital, make it difficult to implement investment projects, which are necessary for Greece to converge with the European average and improve competitiveness.

Greece, compared to other European countries, shows a clear decrease in the creation of new businesses in the period 2015-2022 (Eurostat, Business Demography). Greece started 2015 with lower rates than most countries (9.88% new businesses as a percentage of active businesses) and then recorded a further decline of 7.22% in 2021.

At the same time, mobility is also observed in the countries of comparison, which seem to have been equally affected by the global economic environment, with the average number of new businesses as a percentage of active in the EU-27 amounting to 10.7% in 2021 compared to 10.93% and 11.65% in 2020 and 2015, respectively. Countries such as Portugal and Romania have higher rates of start-ups as a whole, which may be due to different levels of incentives or policies to support start-ups.

Regarding the sector level, Greece has a high concentration of active businesses (Eurostat, 2022) in the wholesale and retail sectors (25% of all active businesses in the economy in 2022), as well as accommodation and catering (12%). The sectors of information technology and telecommunications, property management, as well as energy, concentrate a relatively smaller percentage of active businesses (2.6%, 1.6% and 1.3% respectively), but show the highest rates of new business creation.

Specifically, the percentage of new enterprises (Eurostat) in the real estate management sector increased to 22.7% in 2022 compared to 4.1% in 2019. The energy sector showed the second largest growth of new businesses, from 2.7% in 2019 to 17.6% in 2022, followed by the IT and telecommunications sector with a rise from 7.4% in 2019 to 19.5% in 2022, suggesting dynamic growth in these sectors. On the other hand, industries and wholesale and retail trade show more stable but less pronounced growth, noting the lowest participation in the creation of new businesses. This analysis shows the shift in business interest towards high-tech and construction sectors, while traditional sectors such as industry and retail appear to be growing more slowly.

Investment and infrastructure

The data presented show gross fixed capital formation (GFCF) (Eurostat) as a percentage of GDP for Greece compared to the EU-27 average for the period 2008-2023. The UCP is an indication of investments in infrastructure, equipment and buildings throughout the economy and is a critical indicator of economic growth and productivity.

For Greece, this rate dropped significantly during the years of the financial sovereign debt crisis, dropping from 24% in 2008 to its lowest point of 11% in 2013-2016, suggesting a significant decline in investment. Despite the increase in recent years (14% in 2023), the level of investment, as a percentage of GDP, remains significantly lower than the pre-crisis levels, as well as the EU-27 average (22% in 2023). Regarding the investment structure (Eurostat), Greece showcased in 2023 a lower percentage of investment in buildings and residences (38.3% of total investment compared to 51% on average in the EU-27) and a higher percentage in machinery and equipment, especially in IT and telecommunications products (10.2% compared to 3.2% on average in the EU-27) and in transport products (10.5% compared to 9.2% on average in the EU-27) compared to other countries.

Public investment (OECD) as a percentage of GDP amounted to 3.61% in 2022 in Greece (from 2.46% in 2019) higher than the EU-27 average of 3.33% in 2022 (from 3.05% in 2019). The increase in public investment in Greece in 2022 shows efforts to recover and restore investment dynamics, with the aim of stimulating growth and strengthening infrastructure. It is further observed that public investment in Greece is higher than in other southern European countries (Italy, Spain, Portugal), which can support long-term economic growth.

In 2022, Greece's total public expenditure (Eurostat) amounted to €109.2 billion (i.e. approximately 53% compared to GDP), increased by 23.8% compared to 2019. In comparison to the EU-27 average, Greece has a higher proportionate expenditure on defense (4.9% in Greece compared to 2.6% in the EU-27), which reflects the geopolitical pressures and unrest in the wider region, as well as in public services (13.5% compared to 12.0% in the EU-27). At the same time, Greece directs comparatively fewer funds to critical sectors such as health (11.3% vs 15.5% of the EU-27) and education (7.2% vs 9.5%) .

In the period 2019-2023, Greece's level of investment in housing (Eurostat) as a percentage of GDP was the lowest among the EU-27 countries, with 2023 amounting to 1.9% compared to an average of 5.7% in the EU-27. In contrast, countries such as Cyprus (8.6%) and Italy (7%) invest significantly more of their GDP in housing, showing a stronger growth in the housing sector. Still, limited investment in housing also acts as an obstacle to the effort to reduce the so-called investment gap. This low rate can limit the growth of housing supply, keeping the pressures on rental and sale prices high. However, affordable housing prices are critical to retaining and attracting labor, as rising prices reduce real incomes and living standards.

Greece's low investment in inland transport infrastructure (OECD, 2021) suggests a limited focus on improving these, thus, negatively affecting the competitiveness and efficiency of transport in the country. It is noted that the multiplier effect on the economy from investments in infrastructure is clearly greater in the long term than in the short term and is a necessary - though not sufficient - condition for the creation of a durable and sustainable growth model. In addition, the launch of investments in domestic freight transport and logistics could contribute to the emergence of the country as a transit hub of SE Europe, enhancing the competitiveness of the internal market of Greece, due to the rise observed in recent years in e-commerce and courier services.

However, between 2020 and 2022, Greece recorded a small but steady improvement in high-speed internet coverage (Eurostat), from 10.2% (% of households with high-speed coverage) in 2020 to 27.8% in 2022. However, Greece seems to lag significantly behind the EU-27 average, which rose from 59.6% in 2020 to 73.4% in 2022, while significant differences are found internally between large cities and non-urban areas. Countries such as Romania, Spain and

Portugal recorded significantly higher coverage rates, with Romania reaching an impressive 95.6% in 2022. Other countries such as Cyprus and Italy also improved their coverage, but to a lesser extent. Despite the remarkable progress made by Greece in fiber optic connections (Eurostat), from just 0.2% in 2019 to 8.3% in 2023, the country remains far behind the OECD average (42.5% in 2023) and other European countries such as Spain (85.8%) and Portugal (66.3%). Italy, although improving, is also at low levels, reaching 24.3% in 2023.

Similar results are also noted in the lower speed broadband (EC) coverage (i.e. at least 100 Mbps) which amounted to 63.9% in 2022 (from 54.6% in 2021) and continues to lag significantly behind the European Union average (86.6%) especially compared to countries such as Portugal (94.9%) and Romania (94.5%). Even countries such as Italy and Cyprus, with relatively lower indicators in 2021, have achieved significant improvement and far outperform the Greek performance.

Regarding health infrastructure, it is indicative that in 2022, Greece records 4.29 hospital beds per 1000 inhabitants (OECD, 2022), which places it in higher positions compared to other European countries, such as Portugal (3.47), Italy (3.09) and Spain (2.95) and close to the average of the OECD countries (4.30). Greece's position in this comparison is encouraging, but the numbers suggest that there is room for improvement, especially considering demographic trends and the growing needs of the population for medical care. To ensure adequate coverage and quality of health services, particularly in times of crises or epidemics, targeted public investment, public spending review and restructuring, infrastructure improvements and better health system management are needed. Also, strengthening outpatient care services and reducing reliance on hospitalizations, along with investment in technology, could increase efficiency and improve access to health services, without the need for a dramatic increase in beds.

Innovation, technology and market complexity

The Regional Competitiveness Index (RCI) assesses the competitiveness of regions in Europe based on factors such as infrastructure, innovation, human capital and economic development. The results of the 2022 Regional Competitiveness Index confirm a polycentric pattern, with most capitals and regions that include large cities demonstrating higher performance due to economies of concentration, better connectivity, and a high concentration of human capital.

The regions of Southern and Eastern Europe, including Greece, record comparatively lower values in the Regional Competitiveness Index (RCI), compared to many regions of Northern and Central Europe. Regarding Greece, the performance of the regions has several disadvantages compared to other European regions, while at the same time there are significant differences internally between the regions of Greece. The Attica region, which includes Athens, stands out with an index of 92.3, approaching the EU average (100), while the rest of the regions show lower prices.

According to the Global Innovation Index (GII, 2024), Greece seems to be relatively stable in its performance compared to the other 133 countries in the sample. Specifically, during the period 2020-2024, Greece's position in this index fluctuated between the 42nd and the 47th. In 2024, the country ranked 45th, marking a comparative deterioration in its performance compared to 2023, where it rose to 42nd place.

What is noteworthy, however, is the significant improvement that the country showed in the Input-Output relationship of innovation, reaching the 43rd place in both categories in 2024, when in 2021 it ranked 39th in inflows and 60th in outflows. This suggests perhaps a gradually more efficient use of innovation inputs, such as human capital, research spending, infrastructure, institutional framework, etc., in higher commercialization, such as patenting, scientific publications, innovative products, improved processes and services, etc. According to the European Innovation Scoreboard (EIS 2022-2024), Greece's performance is generally lower than the European Union average in 2024 in most of the factors examined. This includes its human resources, which stand at 74.1% of the EU average, its research systems, at 67.7%, and digitalization, which stands at 50.5% of the EU average in 2024. The exception is the percentage of the population aged 25-34 with tertiary education, which is 44%, slightly higher than the EU average (43%). Similarly, in international scientific co-publications, Greece is significantly approaching the EU average. A major weakness is the persistently low participation rate in lifelong learning, which remains at 3.5% for the population aged 25-64 as of 2017. Another challenge is the low penetration of broadband networks, which reaches 37.5% of the EU average in 2024.

The Regional Innovation Scoreboard (RIS) is an extension of the European Innovation Scoreboard (EIS), assessing the innovation performance of European regions based on a limited number of indicators, covering 239 European regions in total. Greece, with an overall score of 79.5, is classified as a "Moderate Innovator" according to the Regional Innovation Index. Overall, there is a positive increase in innovation for all Greek regions, with this increase exceeding the European Union average (8.5%). The biggest improvements in 2023 occurred in Epirus and the Peloponnese. However, the total of regions still shows lower indicators than the EU, with Attica approaching the average. In conclusion, Greece's performance in terms of innovation shows significant progress, with room for further development especially in regions characterized as "Emerging Innovative", such as Central Greece and Western Macedonia.

The interconnections include three indicators that measure innovation capacities, looking at collaborations between innovative firms, research collaboration between the private and public sectors, as well as human resource mobility in the field of Science and Technology (HRST) from job to job. Between 2023 and 2024, the EU average in the connection factor decreased by 11%. In 17 Member States, performance declined, with Estonia (-40%) and Greece (-35%) recording the largest declines.

Despite this negative change between 2023 and 2024, there was a strong improvement in performance over the long term. Between 2017 and 2024, connectivity performance improved for almost all Member States, leading to a 36% increase in EU performance. The most significant increase in performance occurred in Cyprus (174%), but some member states increased their performance by more than 40% (Ireland, Italy, Croatia, Hungary, Sweden, Slovenia, Luxembourg, Spain, Malta and Lithuania). The only two countries where interconnection performance declined are Greece (-8%) and Romania (-4%).

However, observing the data for 2024, we conclude that Greece is not far away from the comparison countries, ranking it in a relatively satisfactory score in innovation performance (EIS 2024). This suggests that Greek businesses have started to recognize the importance of collaboration and networking to promote innovative ideas.

Greece is making progress in its digital development (Desi 2022), but still faces challenges in some areas. Connectivity remains good, helping to enhance access to digital technologies for citizens and businesses. However, human capital is in need of further improvement, especially with regard to the digital skills of the population, which are a key factor in digital transition. Digital public services are in constant development, which demonstrates the will to improve e-government, although there is still room for greater integration of digital technology into businesses.

In 2024, 18.4% of Greek businesses participated in e-commerce, showing positive signs compared to the EU27 average (19.7%), indicating the dynamic course of Greek businesses in the digital world. With the growing trend in e-commerce, there are opportunities to further boost online sales and improve their market position.

According to a study in 2024 by the Centre for Research on Electronic Business (ELTRUN) of the Athens University of Economics and Business, Greek small and medium-sized enterprises (SMEs) have made progress in their digital readiness from 2020 to 2024, but the majority remain in the early stages of digital transformation, using only 50% of the available digital tools. The main reasons for this situation include financial constraints, lack of support from technology providers, inadequate information and training of staff, as well as hesitation for digital transition. Impressively, while 70% of SMEs cite financial constraints as the main barrier to the adoption of digital technologies, only 25% have exploited the available funding and subsidies.

Greek businesses showed a negative performance in 2024, with 5% of the total turnover of small and medium-sized enterprises (SMEs) coming from electronic sales (Desi), a percentage comparatively lower than the EU average (11.9%). Compared to other EU countries, Greek businesses appear to be insufficiently adapted to digital challenges and opportunities. Countries such as Portugal and Cyprus have made significant investments in their digital infrastructure, thus benefiting from the advantages of online selling and digital tools.

Although new technologies, such as Artificial Intelligence and augmented reality, are revolutionizing business strategies, improving the buying experience and boosting sales, SMEs appear to be lagging behind in utilizing these tools. Also, developments in logistics, such as the use of smart lockers and smart lockers, are changing the distribution model, offering greater flexibility and efficiency. Investments in automated lockers are increasing, with large companies expanding their networks across the country, but overall progress in online selling remains limited.

Knowledge and skills (Talent)

In 2022, Greece recorded gross expenditure on Research & Development (Eurostat, Research and Development Statistics) at 1.48% of GDP, with a slight increase from 1.46% in 2021. Despite the progress, Greece remains below the average of the Eurozone (2.28%) and the European Union (2.24%). Compared to other countries, Greece outperforms Spain (1.44%) and Italy (1.33%), but lags behind Portugal (1.7%). Despite the increase in funding for Research & Development, Greece is still lagging behind the average of the Eurozone and the European Union. Although it outperforms countries such as Spain and Italy, the low level of funding, limits Greece's ability to innovate and enhance its international competitiveness.

In 2022, Greece recorded R&D expenditure (Eurostat) of EUR 294.92 per inhabitant, well below the Eurozone average (EUR 880.54) and the EU average (EUR 793.92). Expenditure from the business sector (BERD) in Greece was EUR 144.78 per inhabitant, much lower than in the Eurozone (EUR 580.08), while public expenditure (GBARD) amounted to EUR 122.4. Greece's difference from the European average in spending per capita on Research and Development is substantial, thus limiting the country's ability to develop innovative solutions that could strengthen its economy. The low involvement of the private sector in R&D investment is particularly worrying, with the need to create more incentives for companies to increase their investment in research and to enhance the competitiveness of Greek products and services internationally.

Eurostat data for 2022 and 2023 show that Greece reduced the share of government budget appropriations for Research and Development (R&D) (Eurostat) from 1.4% in 2022 to 1.15% in 2023, which is a significant decline. Compared to the average of the Eurozone (1.53%) and the European Union (1.47%), Greece is below European levels. Comparable countries to Greece also exhibit similar levels, which are below the European average. Countries such as Romania and Bulgaria record even lower rates, remaining below 0.6%. The downward trend in the share of government spending on R&D in 2023 compared to the previous year is of concern, especially as many European countries are boosting their spending in this area. It is necessary to implement policies that will encourage an increase in public funding for Research, in order to keep the country on track of development and technological progress.

In 2022, looking at the annual expenditure in public and private educational institutions (OECD), Greece spent significantly less money per student at all levels of education than the OECD average and other European countries. Specifically, spending on primary education amounted to $7,467 per student, on secondary education to $6,901, and on tertiary education to $4,300. Greece records lower expenditure per pupil compared to the OECD average, which can negatively affect the quality of education. Especially in higher education, low funding limits the ability of educational institutions to provide innovative curricula and high-quality research. It is necessary to increase public and private investment in education, with the aim of improving infrastructure and upgrading the quality of studies, in order for the country to meet the growing demands of the global economy.

In 2022, total public expenditure for education in Greece amounted to 3.3% of the total government expenditure, lower than the OECD average (4.3%) and other countries such as Portugal (4.1%) and Spain (4%). Although Greece's public spending on education is above that of countries such as Romania and Bulgaria, it remains below the OECD average and other European countries. Upgrading educational infrastructure and adapting the education system to the modern needs of the economy requires increased public investment, especially in the fields of digital education and STEM, in order to strengthen the country's competitiveness.

Looking at the educational level of the population (aged 25-64) (OECD), in 2022, in Greece 20% of the population aged 25-64 had completed only primary education, 45% secondary education and 35% tertiary education. Compared to the OECD average, Greece has a higher rate of secondary school graduates (45% vs 40%) and a lower rate of tertiary (35% vs 40%). The high percentage of secondary school graduates in Greece indicates the country's positive performance in this area, compared to other European countries. However, the rate of tertiary education graduates remains below the OECD average, which limits the country's potential to develop a skilled workforce. To meet the demands of the modern labor market, the strengthening of higher education is required, through improvements in quality and access.

In 2021, in primary education, Greece devoted 14% of its compulsory teaching time (OECD) to mathematics, slightly below the OECD average (17%). Foreign language teaching accounted for 9% of the time, respectively in Italy and above the OECD average. Social sciences covered 6% of the year, lower than Italy and Portugal (14%). Finally, the teaching of religion accounted for 3%, remaining close to the OECD average. Greece spends less time teaching mathematics than the OECD average, which can limit students' performance in this critical area. It may be necessary to allocate teaching time with greater emphasis on the skills necessary for the development of technological and scientific education.

In 2022, Greece had 21.3 higher education graduates in stem subjects per 1000 persons aged 20-29 (Eurostat), an increase from 2021 (20.1). The country is close to the European Union average (23), but still lags behind countries such as Spain (23) and Portugal (22.7). Despite the positive increase in STEM graduates, Greece still lags behind other European countries. The country must continue to strengthen curricula in the fields of Science, Technology, Engineering and Mathematics in order to meet the increased demands of the modern labor market focused on innovation and technology. In addition, the creation of partnerships with the business sector could offer internships and employment opportunities to graduates of these sectors.

In the QS World University Ranks for 2025, the National Technical University of Athens reached the 321st place (from 347th) and the National and Kapodistrian University of Athens to 393rd (from 444th) compared to 2024. In contrast, the University of Crete fell to 601-610 (from 534), while the University of Patras rose. The Universities of Ioannina and the Technical University of Crete maintained the same positions in relation to 2024. The variations in the rankings of Greek universities demonstrate the need for targeted improvements. Although the National Technical University of Athens and the National University of Athens improved their positions, other universities, such as the University of Crete, recorded a decline. This underlines the need to systematically improve the quality of education, research activities and international cooperation in order for Greek universities to maintain or even improve their international position.

In 2023, the proportion of scientists and engineers (Eurostat) in the 15-74 age group in Greece increased significantly to 4.8%, from 4.6% in 2022 and 3.9% in 2021. Despite positive progress, Greece is still below the average of the European Union (5.6%) and the Eurozone (5.5%). The increase in the proportion of scientists and engineers in Greece is encouraging, but the country is still below the European Union average. This continuous improvement indicates progress in relevant skills and employment, but additional actions are needed to strengthen human resources in these areas, as well as the implementation of policies that will facilitate the development and implementation of new technologies.

In 2022, the participation rate of the population in lifelong learning (Eurostat) in Greece for the population aged 25-64 remained stable at 16.6%, slightly lower than the 16.7% in 2016. In contrast, the Eurozone and the European Union saw an increase, with the Eurozone reaching 49.4% from 47.4% in 2016 and the European Union 46.6% from 43.7%. The stagnation in participation in lifelong learning and the lag in relation to the EU show that the country has not yet effectively integrated adult education into its development policies. It is important to provide incentives to increase the participation of the population in such programs, especially in digital and green skills.

In 2023, the proportion of the population with basic or higher digital skills (Eurostat) in Greece stood at 52.4%, below the average of the Eurozone (57.57%) and the European Union (55.56%). Greece is behind countries such as Spain (66.18%) and Croatia (58.95%), while it surpasses Cyprus (49.46%) and Italy (45.75%). Romania records the lowest rate (27.73%). Greece's low performance in the field of digital skills indicates the need for policies that will enhance digital education. This includes investments in upgrading curricula in schools and universities, as well as lifelong learning for adults. The aim is to reduce the digital divide and equip more citizens with the skills required by the modern economy.

6. Outputs

Business Performance

Greece's performance in international trade (i.e., total exports and imports of products and services) as a percentage of GDP, showed significant fluctuations during the period 2018-2023, reflecting international conditions and internal challenges. In the years before the pandemic, trade transactions as a percentage of Greece's GDP amounted to more than 80%, exceeding the global average (~57%). The sharp recession in 2020 (71.8%) and the subsequent fluctuations (108% in 2022 and 94.7% in 2023 (World Bank, 2023)) indicate the strong dependence of the Greek economy on specific sectors, such as shipping and tourism, and by extension the impact that uncertainty in international markets has on them. To improve the sustainability of trade performance, Greece needs to diversify its export base and invest in more resilient sectors, reducing dependence on specific sectors of the economy.

Greece showed a significant increase in its imports and exports as a percentage of GDP from 2021 to 2022 (OECD, 2022), with imports increasing by 10 percentage points and exports by about 8. In 2023, Greek exports recorded the second-best performance after that of 2022. Although there was a reduced trade deficit by 20%, there is an improvement in export performance in the traditionally strong sectors.

However, despite the increases in exports, the difference with imports shows that Greece still relies heavily on imported products, which may intensify the pressure on exporting companies to become more competitive. The success of Greek exports is directly linked to the ability of businesses to respond to global economic challenges and to take advantage of the opportunities offered, especially in the field of technology and innovation, in order to expand their export activity.

Greece's main trading partners for 2023 (Trend Economy, 2023) include mainly European countries, with Italy occupying the first place in Greek exports (11.4% of total exports), followed by Bulgaria (6.79%) and Germany (6.59%). The geographical proximity and existing trade agreements seem to play a decisive role in shaping the country's export flows and highlight the importance of the European Union as a key trading partner, as well as the dependence of Greek businesses on the EU markets for the promotion of their goods. At the same time, non-EU countries, such as the United States and Turkey, also play an important role, indicating the diversification of the Greek export strategy. Especially the increased US presence in Greek exports (4.15% of total exports) reflects the effort of Greek businesses to strengthen their position in high-demand markets, beyond the narrow European limits. This diversification helps to reduce the risk of external shocks to European markets, but requires strategies to adapt to the specificities of each market. Greece's imports show a wide range of trade partnerships, with Germany (10.1% of Greece's total imports) occupying the top of the list, followed by China (8.42%) and Italy (7.49%). China's strong presence highlights the importance of Asian markets for the supply of goods to Greece, particularly in sectors such as technology and consumer products. What is interesting is the participation of countries such as Iraq (6.41%) and Kazakhstan (4.26%), which mainly supply raw materials, which shows the importance of energy resources for the country's import needs.

Overall, the variety of import partners suggests that Greece depends on a diversified supplier base to meet the needs of its economy.

The value of world trade decreased by 3% in 2023, with trade in goods recording a decrease of 5%, while trade in services increased by 8%, mainly due to a significant increase (almost 40%) in tourism and travel services.

Regarding Greece, the total value of exports for 2023 (World Trade Economics 2023) amounted to €50.99 billion, showing a decrease of 8.6% (-2.8% excluding petroleum products) compared to 2022. At the same time, there was a decrease in imports by 12.4% (€82.87 bn), (-2.7% excluding petroleum products), which, in combination with the above, led to a reduction in the trade deficit by 20.0%, to €31.88 bn from €38.79 bn in 2022.

A decline is observed in the categories of industrial products (-4%), fuels and raw materials (-21.5% and -18.4%) compared to 2022. The same is observed in low-value exports of other products (-12.8%), while agricultural exports are increasing (12.8%)[4] .

Regarding the structure of Greek exports, most products concern raw materials or low value-added goods, with less emphasis on high-tech products. Fossil fuels and refined products account for the largest share, at 32%,

4 WCC: Exports at 50.41 billion euros in 2023, reduced by 8.5%, capital.gr, March 7, 2024

suggesting the economy's high dependence on energy. Pharmaceuticals follow with 5.5%, while metals such as aluminum (4.9%) and electronic equipment (4.3%) also contribute significantly to exports. At the same time, agricultural products are exported, such as fruits and vegetables (3%), which play an important role in the country's export activity, but have a smaller share in the export base.

Greece's exports of goods in 2022 are divided into several sectors, with the agriculture, forestry and fisheries sector holding the largest volume of trade, especially with countries of the European Union. The contribution of the agriculture, forestry and fisheries sector, although smaller than in manufacturing, remains significant, especially in trade with third countries. The EU countries are Greece's main export partner, mainly in the field of trade and repair services for motor vehicles, while trade with third countries is more focused on the export of raw materials and agricultural products. According to a report by the Foundation for Economic and Industrial Research (IOBE), Greece's export activity has improved in recent years, especially in the manufacturing and energy sectors, due to growing demand from the European Union and third countries.

The concentration of Greece's exports is of interest with the top five Greek companies in 2022 accounting for 30% of total exports. Correspondingly, the next five firms contribute 10%, and the remaining 21% is distributed to firms ranked 11th to 50th.

Compared to other countries, Greece has a higher concentration in the top firms than countries such as Italy (6% of the top 5 firms) and Portugal (17%), but a lower concentration than countries such as Ireland, where the top 5 firms account for 44% of exports. This shows that the Greek economy relies heavily on a few large exporters, which makes it vulnerable to potential problems of these companies or sectors.

In recent years, Greece has evolved into an economy that focuses mainly on the provision of services, which is reflected both in the structure of the economy and in the daily activities of citizens. The weakening of the industrial sector and increasing reliance on imports of goods indicate a significant transition from an industrial economy to a service economy.

Analysis for 2021 shows the country's strong dependence on the European market, which absorbs almost 68% of total services exports. Greece's main trade partners (WITS, 2021) in the services sector, such as Italy (10.4%), Bulgaria (7.7%), Germany (6.3) and Cyprus (5.5%) play an important role in the extroversion of the Greek economy, with Italy being a leader among the countries.

Focusing on emerging markets, as well as developing new services, could strengthen the country's position in the global market. The use of digital technologies and the promotion of Greek culture and know-how could contribute to the success of Greek services exports.

Greece has a significant dependence on the maritime transport sector in terms of exports of services, with 2020 recording a value of $14.3 billion. This reflects Greece's strong presence in the shipping sector, which is traditionally one of the most competitive and export-oriented sectors of the Greek economy. In the same category, personal transportation also ranks high with $4.57 billion, which is related to tourism, another pillar of the Greek economy. It is noteworthy that in 2020, Greece's services exports (OECD) show a strong performance in areas such as business services ($1.9 billion) and air transport ($0.9 billion). However, dependence on a few sectors, mainly maritime transport, makes the Greek economy vulnerable to external shocks.

A key challenge for Greece is the reduction of its dependence on the maritime and tourism sector and the diversification of exported services, promoting innovation and internationalization in sectors such as telecommunications, construction abroad and professional travel services.

Regarding imports of services (OECD), maritime transport was also the main sector, with imports of $7.8 billion. Importations in the business services sector, which amounted to $1.45 billion, are also noteworthy, reflecting the need for specialized services that are not fully covered by the domestic market. The insurance sector, with imports in cargo insurance ($0.6 billion) and life insurance and pension funds ($0.4 billion), highlights the development of financial services and the country's connection with international financial institutions.

Cost

In 2022, Greece showed an annual rate of change in the HICP (Harmonized Index of Consumer Prices) (Eurostat 2023) of 9.3%, recording a relatively high increase, which was however lower than countries such as Romania and Bulgaria, which had inflation rates of 12.0% and 13.0%, respectively. In 2023, inflation in Greece fell significantly to 4.2%, following the general trend in the EU, with Greece showing a considerably more pronounced decline compared to the average in the Eurozone (6.4%) . The decline in inflation in 2023, although a positive development, demonstrates the sensitivity of the Greek economy to external factors, such as international energy prices and the chain effects of the pandemic and geopolitical upheavals. Despite the decline, inflation continues to pose a challenge to the Greek economy, especially in relation to Southern European countries.

To reduce the impact of inflation on the purchasing power of Greek consumers, the country could focus on policies that promote domestic competition especially in highly concentrated markets, energy autonomy, stabilizing raw material prices and boosting productivity. Strengthening market competition and strategies to support sectors with a high import dependency, such as energy and raw materials, could also help reduce price pressures.

The average Consumer Price Index (CPI) (Eurostat, ELSTAT 2024) for the period of twelve months from July 2023 to June 2024, compared to the corresponding index for the period July 2022 to June 2023, increased by 2.8%. The annual rate of change of the average CPI between the period of July 2022 to June 2023 compared to the period of July 2021 to June 2022 was 7.0%.

Analyzing the consumer price index for 2023 compared to 2022, it is observed that the category "Nutrition and Non-Alcoholic Beverages" showed a significant increase by +11.6%, indicating the pressures on consumers from the prices of basic goods. In contrast, in the housing sector, prices fell by -8.3%, possibly due to the fall in energy and rent prices. In the Health and Transport categories, the increases were milder, with +6% and +0.2% respectively, while the category "Hotels, Cafes, Restaurants" showed an increase of +6.5%, reflecting the recovery of tourism activity. The changes point to the challenges facing the Greek economy and the need for targeted policies to support household welfare.

The cumulative change in the general price level in Greece during the period 2020-2023, which includes the negative inflation of the first year of the pandemic, the strong increase in demand after the pandemic and the energy crisis, amounted to 13.0%, equivalent to an average annual rate of 3.2%. Correspondingly, in the Eurozone, prices rose by 17.5% and 4.2% per year, exceeding the medium-term inflation target of the European Central Bank (2.0%).

The largest cumulative price increases were observed in the categories of nutrition and non-alcoholic beverages (28.5%), housing, water, electricity, gas and other fuels (15.4%) as well as in hotels, cafes and restaurants (13.6%). In contrast, a cumulative price decrease of 8.4% was recorded in communications.[5]

Comparative price levels of final consumption of private households (Eurostat 2023), including indirect taxes, show that Greece maintains a relatively low-price level compared to the European Union average (100). In 2023, Greece's index was 87.2, slightly lower than in 2022 (88.2) and considerably lower than other countries such as Italy (99.0) and Spain (92.8). Price moderation in Greece is partly due to low incomes and limited purchasing power, as well as a relatively slow rate of growth in household incomes after the crisis and pandemic.

The comparison of industrial producer prices in the domestic market for the year 2023 shows that Greece is below the EU-27 average. Specifically, the industrial producer price index in Greece in 2023 (Eurostat, 2023) amounted to 137.6, while the EU average was 139.8. This discrepancy shows that industrial prices in Greece are slightly lower than the EU average. Compared to countries such as Spain (143.9) and Italy (140.9), it seems that industrial producer prices in Greece remain lower than those of the more developed countries of the South. In contrast, countries such as Romania (193.9) and Bulgaria (154.3) have significantly higher prices, which may be due to different levels of productivity, production costs and structural parameters of their economy.

In Greece, in 2023-unit labor cost competitiveness continued to improve. This is due to the fact that nominal labor cost growth in Greece was less than in the Eurozone, amid high nominal wage increases per employee and small or negative changes in labor productivity. In terms of structural competitiveness, Greece's ranking in the composite relevant indicators is stagnant or even declining, after recording great progress in the previous period (2020-22)[6].

The average wage in Greece (Eurostat, 2023) amounts to €12.6 per hour, comparatively significantly lower than the European Union average. On the other hand, non-wage costs in Greece (Eurostat, 2023) are also low, at €3.1 per hour, but making up almost 20% of the total salary.

However, low compensation may both limit consumers' purchasing power and negatively affect consumption, but also act as a brake on attracting skilled labor. In this context, one of the main challenges for the Greek economy is the tightness of the labor market, as shown by the annual percentage increase in job vacancies in 2023 by 62.6%, especially in the construction, manufacturing, trade, tourism and agricultural sectors[7].

5 Eurobank: Inflation slowed to 4.2% in 2023 from 9.3% in 2022, Issue 489, January 2024

6 The Governor's Annual Report 2023, Bank of Greece, April 2024

7 Ibid

The analysis of hourly earnings of workers in Greece compared to the eurozone for 2023 reveals significant variations in the areas of economic activity (Eurostat, 2023). In the field of Administration, salaries in Greece amount to just €12.3 per hour, compared to the euro area average of €25.8. Similar differences can be observed in the areas of Transportation & Storage and Industry, where wages in Greece are significantly lower than the EU-27 average. Although in some sectors, such as Science and Electricity & Gas, earnings show some improvements, overall trends suggest that Greece is still at a disadvantage compared to other EU-27 countries.

In Greece, there is a particularly high increase in labor costs in the sectors "Accommodation & Food" (20.7%) and "Construction" (8.9%), far exceeding the average of the Eurozone and the EU-27. In contrast, in sectors such as “Industries” and “Moving & Storage”, labor cost growth in Greece is lower than in the EU-27, suggesting the resilience of these sectors in the Greek economy. The high growth in the "Accommodation & Food" and "Wholesale & Trade" sectors can be attributed to the strong demand for skilled labor and the difficulties of adapting the workforce to market needs. Increasing pressure in these areas requires strategies to improve productivity and efficiency, as well as the development of new infrastructure and the enhancement of vocational training.

The comparison of labor cost indicators from 2014 to 2022 shows that Greece follows a path of higher growth compared to the other European indicators. From 2014 to 2020, Greece presented comparatively higher labor cost ratios than the EU-27 and the Eurozone, with the index reaching 100 in 2020, the same level as the EU-27, but with a larger increase than in 2014 (93.5). In 2021 and 2022, Greece records the highest index among the three regions, reaching 100.7 in 2021 and 109.6 in 2022, compared to the EU-27 (107) and the Eurozone (106.2).

This may indicate that wage and labor cost increases in Greece have been more pronounced than in the rest of Europe in recent years, possibly due to the recovery after the economic crisis and the restart of the economy from a lower base. The continuous increase in labor costs in Greece, combined with the increasing competitiveness of the economy, may cause concern for the sustainability of growth and the competitiveness of the country at international level, if these increases are not accompanied by an increase in productivity.

Electricity prices in Greece (Eurostat, 2023) have shown increases in recent years, following a trend similar to that of the Eurozone. Since 2021, prices have risen significantly, influenced by the decline in gas supply due to geopolitical developments and the restructuring of the energy mix. In 2023, prices for the category <20 MWh amounted to €0.2788, showing a relatively attractive level compared to eurozone prices (€0.3045 in 2023), while prices for the category 20 MWh - 500 MWh were recorded at €0.2776, higher than eurozone prices (€0.2499). This development shows the adaptability of the Greek electricity market and the potential for improving international competitiveness.

Despite the positive development of the price decrease in 2023, energy costs remain relatively high and vulnerable to international fluctuations. This puts pressure on firms' competitiveness, as energy costs directly affect their productivity and economic viability. The stabilization or further reduction of prices is necessary to maintain competitiveness and sustainable growth in various sectors of the Greek economy.

During the first half of 2023, nominal prices for the purchase of high-end business properties (Bank of Greece, 2023) increased compared to the second half of 2022, with a particular emphasis on stores. The price index for high-end offices in the whole of Greece stood at 89.5, with Athens recording the highest index. Regarding the change in office prices, there was an increase of 2.8% overall, with Athens and Thessaloniki showing small changes, while the rest of Greece showed the largest increase, i.e. 4.9% .

Regarding high-end stores, the index reached 95.4 throughout the country, with Athens dominating equally. The change in prices for stores showed a general increase of 3.9%, with Athens and Thessaloniki recording an increase of 3.7%, while the rest of Greece recorded the highest increase in prices. These increases point to a general upward trend in the business real estate market, with the periphery showing stronger growth compared to large urban centers.

The increase in the average annual cost of renting high-end offices in Athens (Statista, 2023) from 324€/sqm in 2022 to 372€/sqm in 2023 is indicative of the increased demand for quality business premises. This trend may be linked to the recovery of the Greek economy, new investment and the strengthening of Athens as a business center. However, Athens remains more accessible than cities such as Madrid and Rome, where prices are much higher (480€/sqm and 530€/sqm in 2023). This shows that, although Athens is showing upward momentum, it has not yet reached the level of other European capitals, which makes it competitive for investors.

In 2022, in Greece, the net cost of childcare amounts to 8% of the average salary, derived from gross care fees of 48% and care benefits -41%. In Italy, gross costs for safekeeping amount to 38%, but full benefits eliminate net costs. Portugal has a 26% gross fee with benefits that reduce costs up to 5%. In contrast, Spain, with a gross fee of just 9%, has a net cost of 9%, indicating that families pay the full cost. The OECD average is 13%, higher than all reported countries. However, an emphasis on improving the accessibility and availability of childcare services (OECD, 2022) is critical to enhancing competitiveness. When parents are able to ensure quality and affordable care for their children, they can participate more actively in the labor market, leading to increased employment, particularly of women. Policies that promote the increase of childcare allowances, tax breaks and the development of more care structures will enhance financial participation and create a more favorable environment for business development, making Greece more competitive compared to other European countries.

In Greece, the net cost of childcare (OECD, 2022) for a single-parent family amounts to 43% of the average salary, which is entirely covered by childcare benefits. Italy presents a similar picture, with 40% net cost and full benefit coverage. In contrast, countries such as Cyprus and Spain do not offer such benefits, burdening families with the full cost. The OECD average is around 24%, with a small benefit contribution (16%). At lower levels are countries such as Croatia (12%) and Romania (9%), with little to no benefit support.

From 2020 to 2023, house prices in Greece (European Central Bank, 2023) recorded a steady and significant increase. In 2023, the annual change in prices amounted to 13.8%, continuing the upward trend of previous years, with 11.9% in 2022, 7.6% in 2021, and 4.5% in 2020. Despite the slowdown in growth rates in the last quarters of 2023, the overall picture shows that the Greek real estate market remains on the rise. This rise raises concerns about the affordability of housing, especially in urban areas, with housing costs burdening households and limiting opportunities to acquire primary housing. This is mainly due to demand for investment properties, which focuses on both short-term leases and the Golden Visa program.

The Bank of Greece, in its 2023 Annual Report, sounds the alarm about the impact of these trends on the real estate market. The need for interventions that will strengthen the housing supply and limit the demand for investment markets in primary residence areas is highlighted. Such interventions are estimated to hold back further price rises and, in some cases, lead to local property price corrections in order to ensure market sustainability and access to affordable housing. The failure to ensure affordable housing for workers combined with increased construction costs indirectly affects the country's competitiveness, as it may also be associated with an increase in the cost of living which, consequently, creates barriers to attracting and retaining talent. The national housing lease index in Greece for 2023 (Bank of Greece) shows a clear upward trend, with the price index rising from 88.6 in the first quarter to 95 in the fourth quarter. Athens shows the largest increase, reaching 101.1, with a change rate ranging from 17.3% in the first quarter to 10.8% in the fourth quarter. In contrast, Thessaloniki and the other large areas, despite the rise, remain at lower levels, with the index reaching 90.5 for Thessaloniki and 90 for the other areas.

In the global real estate market, Greece ranks sixth among the countries with the largest increases in real house prices in the first quarter of 2024 (Bank for International Settlements, BIS), while the first three places are occupied by the United Arab Emirates, Poland and Bulgaria.

According to the latest data on the housing price index (BIS Data Portal, 2023), there is a significant diversification in the real estate market of European countries. In particular, Greece recorded an increase of 8.75% in the last quarter of 2023, compared to the corresponding quarter of 2022, reaching the house price index at 87.1. Portugal also follows with a significant increase of 6.09%, starting from a much higher base however. Overall, Southern European countries, such as Spain and Italy, show mild increases, indicating a relatively stable market, while Bulgaria and Romania also show an increasing trend, with Bulgaria's index prices showing high comparative prices.

Analysis of the weighted housing price-to-income ratio in Greece from 2021 to 2023 reveals a growing trend. In 2021, the index was 98.5, which rose to 101.8 in 2022 and reached 107.5 in 2023. This increase signals that house prices are rising relative to incomes, which may negatively affect housing accessibility for households. In contrast, the euro area and the OECD index declined in 2023, with the euro area falling to 111.4 and the OECD to 111.7.

The increase in the weighted housing price-to-income ratio in Greece (Eurostat, 2023) raises concerns about the sustainability of the housing market and the economic well-being of households. As housing prices continue to rise faster than incomes, more families will have difficulty finding affordable housing. This can lead to an increase in the cost of living and the inability of many to meet their basic needs. Government interventions, such as the promotion of support programs for families seeking housing, may be required in order to improve the accessibility and sustainability of the housing market in Greece.

Analysis of the weighted ratio of house prices to rent in Greece (Eurostat, 2023) from 2021 to 2023 also reveals a worrying trend. The index started from 128.5 in 2021, rose to 142.0 in 2022 and reached 154.2 in 2023, indicating that house prices are rising faster than rents. By contrast, eurozone and OECD indicators are lower, with the eurozone registering 127.3 in 2023 and the OECD

134.7. This differentiation means that the Greek housing market faces a particular pressure that is not observed in the European average. The continuous increase in the weighted housing price-to-rent ratio may have serious effects on the housing market and society as a whole. Higher house prices relative to rents indicate that buyers may find it difficult to find affordable housing solutions, even if they decide to rent.

Productivity

GDP per hour worked in Greece grew steadily in 2021-2023, reaching $34.68 in 2023, up from $34.13 in 2021. Although Greece lags behind countries such as Spain ($53.80) and Italy ($53.50), the steady rise is a positive sign of improving productivity in the country. Greece also outperforms countries such as Romania and Bulgaria, which record lower levels of GDP per hour worked.

Continuous GDP growth per hour worked (Eurostat, 2023) is a positive sign of improved productivity, but Greece is still lagging behind other European countries, such as Italy and Spain. This suggests that, although productivity-enhancing policies have appeared to be paying off, further reforms capable of boosting the country's competitiveness at the international level are needed.

GDP per hour worked in Greece grew steadily in the period 2013-2023, reaching $34.68 in 2023, up from $33.62 in 2013. Despite the improvement, Greece remains below the average of the Eurozone ($60.02) and the European Union ($55.37). The steady upward trend since 2016 suggests progress in productivity, but with room for further improvement. The steady improvement in GDP per hour worked over the last decade shows that Greece is on a path of recovery and growth. Despite the improvement, however, the gap with the average of the Eurozone and the European Union remains.

Productivity growth in Greece (GDP per hour worked), (Eurostat, 2023) was recorded as 1.6% in 2022, but slowed to just 0.3% in 2023. Despite progress from zero in 2021, productivity growth in Greece remains lower than in other countries such as Romania (3.1%) and Croatia (1.2%). However, Greece outperforms the Eurozone and the European Union, which recorded negative rates in 2023 (-0.9% and -0.6% respectively).

In 2022, Gross Domestic Product (GDP) per hour worked in Greece (Eurostat, 2023) amounted to $44.8, while Gross National Income (GNI) per hour worked reached $44.3. Greece is below the European Union average ($74.6 for GDP and $74.1 for GNI), and has comparatively lower productivity levels. Countries such as Spain ($68.8) and Portugal ($56.2) have higher rates, while the Eurozone average maintains the leading position at $77 per hour worked. The comparatively lower performance of Greece in relation to the European average indicates the immediate need for policies that will enhance productivity and innovation.

In 2022, the contributions of industrial sectors to the overall division of labor in Greece (Eurostat, 2022) showed signs of improvement compared to 2021. Specifically, the category of Economy and Insurance showed a positive contribution of 0.4% in 2022, after a negative contribution of -1.1% in 2021. Correspondingly, Business Services and Construction and Utilities saw slight improvements. On the other hand, the areas of Transportation, Accommodation and Personal Services and Information and Communication showed negative contributions, remaining lower than in the previous year. Overall, the contribution of all industrial sectors to the total amounted to 0.4% in 2022, an improvement over the total negative contribution of -3.2% in 2021.

In 2023, labor productivity growth in Greece (Eurostat, 2024) fluctuated, with the highest value recorded in the third quarter of the year (105.89 per hours worked) and gross value added (GVA) reaching 48.1 thousand million. In the first quarter of 2024, there is an increase in both GVA (49.3 thousand million) and productivity (99.74), showing a positive outlook for the coming year. Despite fluctuations within 2023, the trend remains upward, with improvements in both GVA and productivity. However, maintaining this trend requires continuous improvements to boost productivity and invest in new technologies. Consolidating this trend can lay the foundation for a more resilient and competitive economy.

In 2022, labor productivity in small and large enterprises (OECD, 2022) fluctuates significantly between countries. In Greece, firms with 1 to 9 employees (micro enterprises) had productivity of $19,310.9, well below countries such as Italy ($51,994.7) and Spain ($47,338.7). In small businesses (from 10 to 49 employees) the value added per employee reaches $34,125.4 in Greece, lower than in all three countries compared. In medium-sized enterprises (50 to 249 employees), Greece scored $65,403.2, also lower than other European countries such as Portugal ($67,488.3). In large firms (250 or more employees), productivity in Greece stood at just $91,785, underperforming Italy ($121,784.2) but higher than Spain ($91,445) and Portugal ($63,288.2).

In 2023, the productivity index (Eurostat, 2023) in the Construction sector increased to 117,360 points, continuing the upward trend from 2021. Industry recorded a small increase reaching 100,200 units, while Georgia continued its downward trend with 98,033 units. The Information and Communication sector showed a slight improvement (98,455), and the Economy sector showed a decline to 104,814 points after the rise of 2022. In 2019-2022, capital deepening fluctuated significantly. After a big rise in 2020 (11.81%), the showed declines in 2021 (-7.73%) and 2022 (-2.86%). However, the contribution of multifactorial productivity (MFP) to labor productivity growth (OECD, 2022) remained positive in most years, with values of 2.10% in 2021 and 1.98% in 2022. Despite the fluctuations in capital deepening, the contribution of multifactorial productivity is positive. Continuing reforms and boosting innovation could ensure that this positive trend is maintained, creating a more resilient and sustainable production model.

The ratio of capital stock to output for the period 2019-2022 (OECD, 2022) declined. Starting from 89.67 in 2019, it rose in 2020 to 97.12, indicating a temporary rise. However, a steady decline followed in the following years, with the ratio decreasing to 84.31 in 2022. The decrease in the ratio of capital stock to product production reflects the reduced ability to utilize investments in the production process. To reverse this trend, more intensive investment in infrastructure and productive sectors is needed, which will boost productivity and improve efficiency in the use of capital. In 2023, Tourism in Greece accounts for 27.4% of Gross Value Added, while Industry reaches 15.9%, lower than the EU (20.6%) (European Commission, 2024). Construction in Greece represents 10.2%, also below the European average (16.7%), and Science and Technology reaches 5.6%, showing room for growth in high-tech sectors.

Employment

In 2023, employment in Greece (ELSTAT, 2024) showed steady growth, reaching its highest level in the third quarter (89.2%), before rising slightly in the fourth quarter (89.5%) and falling in the first quarter of 2024 (87.9%). Unemployment gradually decreased from 11.8% in the first quarter of 2023 to 10.5% in the fourth quarter, before rising again to 12.1% in the first quarter of 2024. Long-term unemployment (Trade Economics 2024) hovered around 6%, with the lowest rate in the fourth quarter of 2023 (5.5%), but rose slightly in the first quarter of 2024 (6.2%).

In 2023 and the first quarter of 2024, the number of freelancers with employees in Greece (Eurostat, 2023) showed a steady upward trend, reaching 306.6 thousand in the first quarter of 2024, from 298.3 thousand in the first quarter of 2023. Similarly, freelancers without employees (Eurostat, 2023) increased steadily, from 830.4 thousand in the first quarter of 2023 to 854.9 thousand in the first quarter of 2024. Compared to other countries, such as Italy and Spain, Greece records lower levels of freelancers, while the trend shows stability in the labor market of freelancers with small fluctuations.

In 2023, the unemployment rate in Greece gradually decreased, from 11.3% in the first quarter to 10.8% in the third quarter. Correspondingly, Spain also recorded a decline, from 12.77% in the first quarter to 11.97% in the following quarters. Italy maintained a relatively stable unemployment rate, dropping slightly from 7.9% to 7.63%, while Portugal recorded a decrease from 6.9% to 6.4% in the second and third quarters of the year. Overall, there is a decline in unemployment rates in most countries during the year.

The fall in unemployment is positive, but Greece still records one of the highest unemployment rates (OECD, 2023) in Europe. Targeted policies, such as employment-enhancing programs in strategic sectors, are needed to sustain and strengthen the reduction in unemployment. The unemployment rate in Greece from January 2023 to January 2024 showed small fluctuations, starting from 11% and reaching its highest rate in April and June (11.4%). After this peak, unemployment followed a downward trend, reaching its lowest point in December (10.6%). In January 2024, the unemployment rate rose again to 11.2%, showing a mild return to the previous year's initial levels. The temporary fall in unemployment in 2023, followed by an increase in early 2024, indicates that the labor market remains vulnerable to external pressures and that stability has not yet been achieved.

In 2023 and the first quarter of 2024, the number of people over 15 in the Greek labor market (ELSTAT, 2024) showed slight fluctuations. The total workforce increased from 4,648.5 thousand in the first quarter of 2023 to 4,770.8 thousand in the third quarter, before declining slightly at the end of the year. The number of employees reached 4,256.2 thousand in the third quarter, while the unemployed steadily decreased from 550.5 thousand in the first quarter to 488.7 thousand in the fourth quarter. However, in the first quarter of 2024, there is an increase in the number of unemployed, reaching 574.1 thousand.

In 2023, the participation rate of people aged 15-64 in the labor market in Greece (ELSTAT, 2023) amounted to 61.8%, lower than the average of the European Union (70.4%) and the Eurozone (70.0%). At the ages of 55-64, the participation rate in Greece was 54.1%, also lower than the EU average (63.9%). Greece records lower participation compared to countries such as Cyprus (74.1% for ages 15-

64) and Bulgaria (69.5% for ages 55-64), which indicates room for improvement in the participation of older age groups in the labor market.

In 2023, the dispersion of unemployment at NUTS2 regional level in Greece (Eurostat, 2023) was 19.9%, lower than the European Union average (62.6%), but also from countries such as Italy (59.2%) and Romania (43.7%). In contrast, Greece records a higher dispersion of unemployment compared to Spain (29.5%) and Portugal (12.0%). Despite progress at the national level, the geographical disparity in unemployment between regions (Eurostat, 2023) is marked. Regions with higher unemployment rates require targeted growth and employment support policies to reduce inequalities and create conditions for sustainable growth at the local level.

The youth unemployment rate (15-24 years) in Greece (Eurostat, 2023) decreased significantly in 2023, reaching 26.7% from 31.4% in 2022. A similar trend was observed in Spain, where youth unemployment fell from 29.7% to 28.7%. In the European Union and the Eurozone, the rate remained stable at 14.5%. In contrast, countries such as Portugal and Croatia saw a small increase in youth unemployment in 2023. The significant fall in youth unemployment in 2023 is a positive development, but Greece still records one of the highest youth unemployment rates in Europe. In 2023, the percentage of young NEETs (without academic education and employment) in Greece (Eurostat, 2023) stood at 11.5%, slightly higher than the average of the European Union and the Eurozone (9.2%). Despite the improvement compared to previous years, Greece still records higher rates compared to countries such as Spain (9.9%) and Portugal (7.9%), but remains below countries such as Romania (16.5%) and Italy (12.7%).The proportion of new NEETs remains higher than the EU average, despite an improvement. In 2023, the largest gaps in the labor market in Greece (Eurostat, 2023) were observed in the fields of Sciences and Arts - Entertainment, with a percentage of 4.5%, as well as in the field of Catering with 4.2%. Notable gaps were also in the Construction (2.8%) and Business (2.1%) sectors. In contrast, sectors such as the Economy and Education showed the lowest gaps, with a rate of 0.6%. The uneven distribution of job vacancies in specific sectors shows the need for targeted training and specialization to fill manpower gaps in high-demand sectors. Adapting curricula and strengthening the link between education and the labor market will help reduce these gaps, while ensuring a reduction in unemployment and an increase in productivity.

On the part of workers, in labor mobilizations in Greece (Labor Institute of GSEE) there are recorded data until 2021. During the period 2011-2021, there is a significant decrease in the most intense and traditional forms of mobilization, such as strikes and occupations, which declined significantly from 2012 onwards, reaching historically low levels in 2021. Indicatively, strikes from 200 cases in 2011 decreased to just 45 in 2021, while occupations fell to almost zero. On the contrary, demonstrations and demonstrations showed a different course, with an increase mainly after 2016. Gatherings rose and peaked in 2021, while protest performances reached their highest level in 2020. These more peaceful forms of protest seem to have replaced the more dynamic forms of reaction, possibly indicating a change of strategy on the part of workers.

Overall, the data show a shift towards more peaceful and mass forms of mobilization, which may be related to the economic and social changes that have occurred in Greece over the last decade.

7. Main Conclusions, Recommendations

Essential Conditions

The conclusions of the majority of institutions showed mixed results. On the one hand, progress is being made in areas such as transparency and control mechanisms, mainly due to European influence. However, weaknesses such as slow justice and inefficient administrative procedures continue to limit the uptake of positive change. These problems undermine the confidence of citizens and investors in the institutions, negatively affecting the country's competitiveness. In terms of macroeconomic sustainability, while improvements in economic growth have been achieved, high public debt remains a significant challenge.

The Greek economy is at a critical point, as macroeconomic sustainability remains vulnerable to international and domestic shocks. At the same time, low productivity weighs on the growth path. It is therefore necessary to promote policies that will enhance the sustainability of the economy through investment in innovative sectors and the strengthening of internal productive potential.

Regarding the endowments of the country, the demographic issue remains critical. The ageing of the population, the decline in labor power place serious constraints on growth prospects. In particular, insufficient land use and limited innovation in critical sectors such as agriculture limit the potential for sustainable development.

The country has not yet been able to make full use of its natural and human resources, which prevents it from achieving its full potential. To address these challenges and exploit the opportunities, the following actions are proposed, which emerged from the combination of the above conclusions, the findings of the questionnaire as well as the working meetings.

STRENGTHENING INSTITUTIONS:

- Accelerate the delivery of justice through the adoption of integrated digital solutions that will improve the efficiency and speed of decisions, reducing delays and backlogs.
- Strengthen transparency mechanisms with clear and transparent control procedures to combat corruption and strengthen citizens' and investors' trust in the institutions. "The degradation of social capital, i.e. the reduction of trust, social ties and cooperation networks, hampers institutional collective action and hinders the progress of the country and the structural transformation of the national economic and productive model.[8]"
- Improve public-private cooperation, with the aim of creating an environment that boosts entrepreneurship and competitiveness through more flexible and efficient regulatory frameworks. Establishment of the Triple Helix of Cooperation between Regions, Academic Institutions and Businesses on the basis of consultation.

IMPROVING MACROECONOMIC SUSTAINABILITY:

- Gradual reduction of public debt through fiscal discipline

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8 White paper: Can a Country Survive Without a Desire to Work? CompeteGR 2024

and adoption of measures that will attract new foreign investment in the fields of innovation and technology, helping to boost long-term growth.

- Developing strategies to improve productivity by upgrading infrastructure and enhancing incentives for innovative activities that will increase the added value of the economy.
- Adopt sustainable tax policies aimed at tackling tax evasion, as well as increasing public revenues through fairer taxation.·

EXPLOITING THE ENDOWMENTS OF:

- Supporting the workforce with policies that will encourage the return of young and skilled workers from abroad, and with actions that will facilitate the entry of young people into the labor market from any highly qualified country.
- Development of a sustainable strategy for land use, including investments in the agricultural sector and tourism, with the aim of highlighting the country's comparative advantages, starting with the regions.
- Creating educational actions that will improve the skills of the existing workforce targeted at market needs indirectly enhancing the country's attractiveness as an investment destination, especially in areas such as technology and innovation.

By implementing these proposals, the country can take advantage of the opportunities offered by the international environment, while improving its competitiveness and ensuring sustainable growth in the long term.

Inputs

ENHANCING THE BUSINESS ENVIRONMENT AND ACCESS TO FINANCE:

- Creating dedicated financing tools for start-ups and SMEs, focusing on facilitating access to capital through lower interest rates and accelerating lending processes. At the same time, encouraging cooperation with private equity funds will attract investments that promote innovation and sustainable development.

IMPROVING INFRASTRUCTURE:

- Focus on strategic investments in vital sectors such as health, education and transport in order to upgrade basic services and strengthen competitiveness. Digital infrastructure, especially broadband access, needs to be improved to enable the adoption of new technologies and attract foreign investment.

BOOSTING INNOVATION AND TECHNOLOGICAL PROGRESS:

- Creating an integrated regional framework to support innovation, with a focus on the geographical concentration of industries (clusters) and the development of synergies. Reducing disparities between regions and strengthening regional infrastructure is crucial for the balanced development of the country.

STRENGTHENING HR SKILLS:

- Target lifelong learning and vocational training programs focusing on new technologies and digitalization. Educational initiatives need to be tailored to the needs of businesses and emerging technologies in order to strengthen human resource skills.

The evaluation of the Inputs highlights the critical importance of investing in infrastructure, innovation and human capital for the long-term competitiveness of the Greek economy. Despite the challenges, strengthening the business environment and strategically tapping available resources can lay the foundation for more resilient and sustainable growth.

Outputs

DIVERSIFICATION OF THE GREEK EXPORT BASE:

- Promote innovative sectors such as technology, business services and agri-food businesses to reduce dependence on traditional sectors such as shipping and tourism. Strengthening the export potential of small and medium-sized enterprises, combined with the promotion of new markets, will contribute to sustainable development and reduce exposure to international economic fluctuations.

REDUCING PRODUCTION COSTS AND BOOSTING PRODUCTIVITY:

- Incorporating technological innovations in the production process, with the aim of increasing efficiency and reducing operating costs. Leveraging digital tools and automation can improve productivity while reducing energy consumption and business operating costs. Public-private cooperation to support innovation will help create a strong ecosystem that promotes sustainable development.

BOOSTING THE HOUSING MARKET:

- Addressing the crisis in the real estate market through the development of affordable housing solutions, while enhancing the supply of housing through urban planning and economic policies that will promote new construction. At the same time, it is important to take measures to limit increases in property prices due to excessive demand from investors, thus ensuring citizens' access to affordable housing.

IMPROVING THE LABOR MARKET AND STRENGTHENING SOCIAL COHESION

- Design and implement policies that will enhance the integration of young people and women into the labor market, through vocational training and employment enhancement programmes. Tackling long-term unemployment and regional disparities is critical to maintaining social cohesion and ensuring citizens' well-being.

8. Main Challenges

Bureaucracy and slow pace of reform

Bureaucracy, multiple approvals from different decision-making centers on the same issue, the delay in public sector processes, and the fragmentation of responsibilities and procedures among many actors lead to significant dysfunctions. Accountability is often dispersed among many stakeholders, which makes accountability subtle. This diffusion of responsibilities often leads to protracted litigation, burdening the system and delaying the implementation of important projects and initiatives. The dysfunctional, complex and slow system makes it more difficult to both start and run businesses. This leads to an increase in their operating costs, limiting their flexibility and reducing their competitiveness. Accelerating digital reforms in public administration can automate many processes, facilitating entrepreneurial activity and reducing barriers to market entry, which will boost overall competitiveness. Digitization must cover the whole process, from start to finish, to be truly effective. Segmental digitalization, where only individual stages of a process are done digitally, creates discontinuities and adds complexity rather than speeding up the operation of the business. A holistic approach to digitalization ensures interoperability between different phases and actors, eliminates unnecessary delays and reduces the chances of human error. In addition, full digitalization increases transparency, decision-making speed and efficiency, helping to create a more flexible and efficient administrative framework.

Lack of skilled human resources

The migration of skilled workers abroad and the weaknesses of the education system to provide skills tailored to the needs of the market make it difficult for businesses to access talent, while at the same time slowing down the adoption of new technologies. To fill this gap, the development of education and retraining programs tailored to business requirements is necessary, while at the same time more incentives are needed to attract foreign scientists and the return of qualified professionals who have migrated abroad. In Greece, the lack of mainly middle managers in manufacturing results in the malfunctioning of the industry. The industry faces serious challenges due to the limited availability of qualified personnel, which is crucial for the proper operation of production units. Emphasis on developing technical skills and adapting education policy to the real needs of the labor market are essential to fill this gap. Aligning education with industry requirements could boost industry competitiveness and productivity. Modifying the content of educational programs is critical to address the needs of the labor market and the shortage of skilled personnel, particularly in manufacturing. Curricula need to be updated and adapted to focus on the technical and practical skills required by industry, while offering middle management development-oriented education. Through such a reform of education, combined with internships and lifelong learning programs, the industry will be able to strengthen its competitiveness and fill the gap in the labor market.

Discontinuity in the implementation of strategic plans

Discontinuity and instability in the implementation of long-term strategic plans are a serious obstacle to the effective development of the country. Any strategic plan must be based on documented data. The use of reliable data and statistics is essential to properly analyze the current situation, anticipate future developments and understand actual market needs. A strategic plan based on accurate data allows for better informed decision-making and ensures targeted and efficient policy implementation. The approach proposed to be followed should not be at central level, but at regional (A' and B' level of local government) in order to eliminate regional inequalities. The Council on Competitiveness could contribute to the diffusion of know-how, helping to detect the competitive advantages of each region (based on M. Porter[9] Diamond Model). In addition, it could actively participate in the systematic evaluation and monitoring of the implementation of each strategic plan, thus ensuring its continuity and effectiveness.

Over time, frequent policy changes create uncertainty, discouraging investment and limiting the effectiveness of strategic interventions. Strengthening institutional continuity and creating independent structures to oversee the implementation of projects over time is critical to ensuring stability and successful implementation of policies with a view to long-term growth. The institutional trajectory of each nation[10] is decisive as to whether the institutions that function are able to make policies beneficial to citizens or not . However, the economic importance of institutions and not only of the market should not be forgotten as weak institutions continue to hinder competitiveness[11] , in many ways.

9 Porter M. "The Competitive Advantage of Nations". Harvard Business Review

10 Daron Acemoglu and James A. Robinson: Why nations fail: the origins of power, prosperity, and poverty Crown Publishing Group, New York, NY, 2012

11 Acemoglu et al., 2001; Hall and Jones, 1999; Knack and Keefer, 1995; Mauro, 1995; Rodrik et al., 2004

Corruption and mistrust

Despite the ongoing efforts to fight corruption in Greece, the issue remains a challenge for both the public and private sectors. Corruption affects the proper functioning of institutions and the economy, undermining citizens' trust in the state. Corruption not only discourages healthy business activity, but also significantly burdens operating costs, creating unfair competitive conditions. The constant effort to achieve increasingly effective democratic channels strengthens the rule of law, which is the most important framework within which a society can develop. The institutional strengthening of synergies and clusters, as well as the development of inclusive institutions, would enhance trust in the state and reduce inequalities. Fighting corruption and enhancing transparency in public administration are key factors in restoring confidence, promoting sustainable economic growth and of course attracting investment.

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