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Article

Crises in Greece and Sustainable Development

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Abstract Sustainability and conditions that support a country to achieve its strategic goals are usually considered a critical priority for the international community. This paper examines the case of Greece, a country that was called upon to face successive crises during the last decades which in almost all cases posed serious risks to the security of the country and its citizens. In crisis events that Greece faced lately, these were imported from abroad and they affected all levels of society: the global financial crisis that started in the US in 2008, the pandemic crisis that first appeared in China in late 2019, and finally the energy crisis that intensified from the beginning of 2020. Greece has tried to respond with internal balancing strategies at home with a series of measures and actions, while at the same time acting with external balancing strategies, as a member of the EU and the North Atlantic Alliance (NATO). The country has tried to deal with the successive crises having a positive result so far, but at a heavy price that has negatively affected the country's development, often causing setbacks and delays in many areas of the economy, environment, and social life. As a result, the Greek economic crisis followed which affected all aspects of the social life in the country, making worse the economic parameters, affecting the relationship between the citizens and the state, and putting the normality of life into question. There are several studies published during the last years highlighting various aspects of the Greek economic crisis that provided specific answers regarding the main causes of the eruption of the Greek economic crisis as well as the proposals to deal with it. The purpose of this study is to highlight the impact of successive crises, which are due to both exogenous and endogenous factors, and that Greece has recently faced and identified the main effects on the Greek economy and its sustainability. The analysis adopts the time series of crises: economic, pandemic, and energy.

Keywords sustainability; crisis; economy; COVID-19; energy; Greece

JEL Classification E61, E66, F62, F63, H12, Q56

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1. Introduction

The beginning of the new millennium was soon accompanied by world-wide events that have affected the world economy and most of the countries around the globe with long-term consequences. The 2007–2009 economic crisis, known as "the Great Recession", was deep and prolonged and it was followed by a long but unusually slow recovery. It has been characterized as the worst United States economic disaster since the Great Depression, which was the longest and deepest downturn in the history of the US and the modern industrial economy lasted more than a decade, during the period 1929–1941. During the last economic crisis, in the US the stock market dropped dramatically and caused a loss of almost $8 trillion, while major consequences are considered the unemployment peaking at 10 percent at the end of 2009 and US citizens lost $9.8 trillion in wealth as their home values plummeted and their retirement accounts vaporized [1]. In all, the Great Recession led to a loss of more than $2 trillion in global economic growth, or a drop of nearly four percent, between the pre-recession peak in the second quarter of 2008 and the low hit in the first quarter of 2009 [2].

In the advent of the COVID-19 pandemic, every country was found unprepared to confront such a large-scale and intense health crisis, resulting into wasting valuable time assessing the situation and the appropriate actions that do not even seem to have been in the choices of the governments. According to the recent report of the Governor of the Bank of Greece on the Greek economy [3], the world economy has faced with the worst recession of the last 100 years in a period of peace while at the same time, the global Gross Domestic Product (GDP) estimated that it recorded a significant decrease of 3.5%. The turmoil in international markets and financial markets has dealt a major blow to the emerging growth of all economies with significant cracks in long-term planning and budgeting issues. It is becoming more and more common that rational planning is not possible on the horizon beyond three years or at most five years, due to the lack of basic data, which is mainly due to growing uncertainty in the world and the unpredictable nature of the events that overwhelm societies. In this general chaos that prevailed until the beginning of the year 2022, Greece could not be an exception to the rule at all. The pandemic appeared in the country on 26 February 2020, and then spread to every region, prefecture, and municipality of the territory. The annual change of the country's GDP in the year 2020 compared to the previous one was of the order of almost 8% in contrast to the small increase that had taken place in the previous year. The main reason for the significant decrease in the country's GDP in the first year of the health crisis due to COVID-19 is the consumption in the private sector which amounted to about 5%, in contrast to the consumption in the public sector which increased by about 2.5% due to the emergency created by the crisis mainly in the health sector with needs of immediate coverage of basic needs and support of the National Health System. In particular, the decline in the country's GDP was greater in the second quarter of 2020, reaching 13% compared to the lowest rate of about 5% in the last quarter, which is precisely due to the imposition of restrictive measures, now known as lockdown.

The European Commission has recently announced the Next Generation program that puts forward a €750 billion recovery plan for the period 2021–2027. This plan, together with the next long-term EU budget approved by the Member States and European Parliament, aims to create a greener, more digital, and ultimately more sustainable Europe, as well as to increase resilience to the recent crises such as climate crisis as well as the pandemic one [4]. Among the actions included in the EU program are those related to green growth and energy transition to a continent that ideally by 2050 will have become zero emissions and which in this way will be able to help the maximum to address the phenomenon of climate change. The production and use of energy is estimated to be more than 75% of the greenhouse gas emissions that European Member states produce. For that, decarbonizing the EU's energy system is very important to achieve as per 2030 climate objectives and the EU's long-term strategy of achieving carbon neutrality by 2050.

The European Green Deal focuses on three main principles for the clean energy transition, such as ensuring a secure and affordable EU energy supply, developing an integrated, interconnected, and digitalized EU energy market and also prioritizing energy efficiency, and developing a power sector based largely on renewable sources. By such main actions, it is expected that EU reduce greenhouse gas emissions and improve the quality of life. However, just recently, another new crisis has appeared in the international markets that concerns an energy crisis. Energy prices in most of the energy types have reported very large increases that finally affect the economic activity in each country, slowing down their annual growth and burdening inflation and citizens' pockets. One of the main questions is to capture the impact of the recent energy crisis in Europe and especially in Greece. Energy has been always directly linked with the economy of a state and it contributes to all aspects of economic life: heating and lighting for housing, buildings, transportation, industry, and social life. The importance of energy in the economy has been raised by many scholars in international relations [5–11]. As per the secretary general of the Organization of Petroleum Exporting Countries (OPEC), there have been several changes occurred in the energy industry since the establishment of OPEC in 1960. As both the world population and per capita income are expected to continue increasing until the end of 2040 [12], energy demand will also increase and this causes intense struggle among states for securing resources all over the world. In parallel, energy demand is affected by several important parameters such as the amount of energy used per unit of economic growth, known as energy intensity. It is seen that energy intensity has declined steadily for many years on a global scale in both OECD and non-OECD countries, because many large economies started to change their production processes from high energy-intensive to less energy-intensive [13].

This paper examines the case of Greece, which was called upon to face successive crises during the last decades that were imported from abroad and posed serious risks to the security of itself. The purpose of this study is to highlight the impact of successive crises on the Greek economy, which have been due to both exogenous and endogenous factors as well as the fact that Greece has recently faced the main effects on both its economy and sustainability.

The analysis may further contribute to the existing literature in regard to Greece and the main crises that the country faced during the last decades and explore the effect caused to its growth and development [14–16]. Finally, conclusions are given about the sources of the crises and vulnerability of the economy and also recommendations about what is the way forward in the future of the Greek economy.

At the beginning of the analysis, the sustainable development concept is described with particular emphasis on how sustainability and proper political measurements can strengthen the endurance and continuity of the state's operation first with a view to its subsequent desired development. Following the analysis of this paper, a reference to the main crises that Greece has faced during the last decade is provided. In particular, the economic crisis during 2008–2010, the pandemic crisis of COVID-19 from February 2020 until late 2022, and the energy crisis since the end of 2021 which has been worsening drastically from the beginning of 2022 when Russia invaded Ukraine. In the final section, the main conclusions are made and recommendations that would improve the country's competitiveness within the global economy are given.

2. The Sustainable Development Concept

There are 17 Sustainable Development Goals (SDGs) that represent the common targets of sustainable development on the current complex social problems as identified in the 2030 Agenda for Sustainable Development and presented in September 2015. The 17 SDGs are considered an important reference for the international community and nation-state countries in order to be able to properly design their national policies so they can effectively be aligned to reach them. The Intergovernmental Panel on Climate Change (IPCC) set a specific target in its report that clear benchmarks are required for action, such as cutting all emissions in half by 2030, while those countries with more capacity and responsibility must lead the way and support others in their journey.

The SDGs are global in nature and of general application with an implementation schedule of 2030. They create implementation commitments for all countries, considering different national scopes, levels of development, and national priorities. Each government decides how the SDGs can be integrated into the national context, development policy, and strategic priorities. Agenda 2030 promotes the integration of all three dimensions of sustainable development—social, environmental, and economic—into all sectoral policies, while promoting the interconnectedness and coherence of SDGs-related policy and legislative frameworks. Governments have been requested to align their targets and plans and based on their current policies it looks like we are only on track to a critical future. They have responded to the challenges they confront and the continuous crisis that occurs globally, so they understood that close collaboration is self-evident and urgent need to be able to find the most painless way to respond to the enormous challenges that plague every country in recent years. There have been several conferences and events where leaders from all over the world such as the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, the Sendai Framework for Disaster Risk Reduction 2015–2020, and the Paris Agreement under the United Nations Framework Convention on Climate Change. They gathered together and they discussed possible options to adopt and apply for their societies in order to achieve prosperity in a healthy and peaceful world.

The implementation of SDGs has been monitored and evaluated on an annual basis in the framework of the United Nations High-Level Political Forum for Sustainable Development (UN). The Forum meets, under the auspices of the Economic and Social Council (ECOSOC), at the ministerial level every July, and at the level of Heads of State (under the auspices of the General Assembly) every four years, in September. The evaluation of the implementation of the SDGs will be mainly based on the data and conclusions that will emerge from two United Nations reports—the Annual Progress Report on Sustainable Development Goals (paragraph 83 of Resolution 70/1), and the World Report for Sustainable Development, which will be drafted every four years [17]. UN Member States are invited to keep the Forum informed of the progress and means of implementing SBAs at the national level by submitting voluntary evaluation/review reports (National Voluntary Reviews).

Such ambitious goals as those of the SDGs, always involve the risk of a possible delay, postponement, or eventual change in their original form due to the fact that the initial conditions in the external environment have been finally changed or no longer exist. In the case of the EU and in particular of Greece, the recent successive crises are forcing the member state's governments and leaders to take necessary corrective measures in order to adapt to the changes coming from the external environment and causing structural change into distinct categories. It is also a challenge to maintain the original interest and sincere intention of any state to meet the general goals and to declare solidarity for the common aim, since cooperation among states is ultimately the quintessence of the effort that brings the necessary synergies in order to achieve the respective goals and to maintain sustainability plans for each country.

As previous studies have already highlighted, there is a point of view that has an evolutionary basis and mentions as a necessity for the appropriate structural reforms to change the production prototype of the Greek economy, which will ultimately be able to ensure long-term economic development for the country. The combination of sustainability, sustainable governance, proper political functioning, the inclusiveness of the economic system, and cultural behavior is deemed necessary in order to have the appropriate conditions that would facilitate the development of the country and its strengthening in the face of new crises that most likely is that it will be called upon to face a new [16].

3. Confronting the Crisis in Greece

In this rapidly changing world, with an unknown and often hostile environment, Greece's effort to adopt sustainable goals at the national level has been quite a challenging task during the last decades. The country's membership in the EU as a full member had a positive effect on its efforts to confront the crisis, as otherwise, the country would have faced painful consequences in case it had tried only with its own internal capabilities. In some cases, measures within the European framework and rules are individualized and they target on respective priorities for a country. Due to the ongoing crises that the country has gone through even until today, the sustainable development of Greece has been called into question in recent years. The main issue for the country seems at first to be the survival and coverage of basic needs and goods, such as human life and resilience against the economic poverty, the pandemic, and the energy poverty as well as freedom of speech and movement and the right to security and hope for a better tomorrow.

3.1. The Economic Crisis

The current situation of Greek's economy in regard to its position within the global economy can be considered a result of a series of economic policy choices taken by the Greek government, while other economic developments distorted the global economy finally caused the global financial crisis in August 2007 [4,18,19]. There are several studies published during the last years highlighting various aspects of the Greek economic crisis [20–22]. All these approaches provided specific answers regarding the main causes of the eruption of the Greek economic crisis as well as the proposals to deal with it [23].

In 2008 the global financial crisis brought several consequences that eventually affected all economies around the world including Greece. The Greek economy faced financial problems that became serious since 2008 as the size of the budget deficit was at 15.2% of the country's GDP and international markets were not lending cheap money to Greece anymore, as happened in the previous decades [24].

In 2010, the global markets and banking sector appeared unwilling to continue supporting Greece, thus the country reached a dead end and it was isolated with the inability to access money in order to cover its fixed and regular needs in key areas of public life. Fears of general unrest were already evident, with protests and demonstrations on the agenda of the country's political life. The country requested for external support and finally, it received enormous financial aid from three international institutions, named the Troika: The European Union (EU), the European Central Bank (ECB), and the International Monetary Fund (IMF). The total financial aid that Greece finally received was €239 billion through three separate Memorandums in the coming years 2010, 2012, and 2015, which were immediate and radical Economic Adjustment Programmes [25]. After three consecutive Memorandums and ten-year period of strict austerity measurements, the general government gross debt of the country increased by 53.8% debt as a percentage of its GDP during the period 2009–2019 [23]. In Figure 1, the internal debt of Greece as a percentage of its GDP is presented for the period 1980–2022, in which a general increase appears during all this period with minor changes for some years.

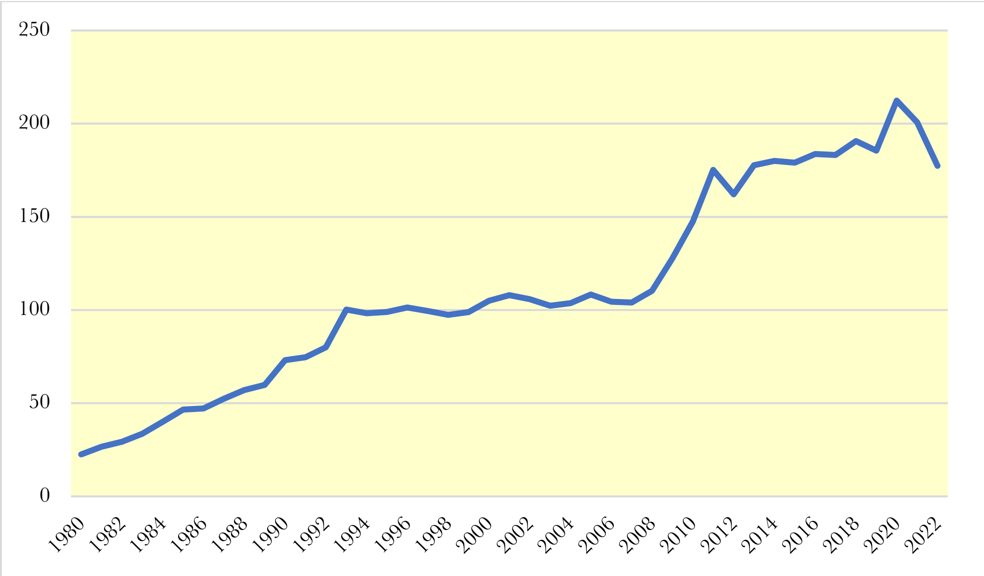

Figure 1. Internal Debt of Greece (% GDP). Source: Author 2023 based on [26].

According to the recent report of the Governor of the Bank of Greece (BoG) on the Greek economy for the year 2020 [3], the world economy was faced with the worst recession of the last 100 years in a period of peace while at the same time, the global Gross Domestic Product (GDP) is estimated that it recorded a significant decrease of 3.5%. Based on a global survey of business executives, their expectations for the current economic climate appear to be positive even in the wake of the ongoing health crisis in the last two years or so. They themselves believe that the general economic situation today is on an upward trajectory and they are optimistic about its future course. More specifically, 71% of executives expect an improvement in global economic conditions over the next six months, while about 35% believe that no further improvements in the economy are expected.

Despite the rather optimistic expectations expressed about the course of the world economy, the long duration of the pandemic and the constant appearance of new mutations in different parts of the world, create a counterweight with an expression of concern for the upcoming negative effects, emphasizing the discontinuities in supply chain and rising inflation. Of the total number of respondents operating in developed economies, almost half of them consider the crisis as a risk to the economic development of their countries, with a strong reservation for the improvement of conditions in local economies as well as the difficulty of growth and prospects of their businesses [27]. In this general chaos that prevails even today, Greece could not be an exception to the rule.

3.2. The Pandemic Crisis

The pandemic crisis of COVID-19 appeared in Greece in February–March 2020 and soon after it was spread internally in the whole country. From that time and for the next one-and-a-half-year period until the end of November 2021, the deaths caused by the COVID-19 virus are calculated to be around 16,000. Such a range of losses in peacetime can only be compared to that in wartime; in particular, the losses of Greece from the German occupation during World War II were of the order of 100,000 ([28], pp. 195–196). Based on the available info that has been disclosed by the Foundation for Economic and Industrial Research (known as IOBE) in its quarterly report distributed in the first quarter of 2021, the effects of the coronavirus pandemic on the Greek economy took place throughout 2020 and continued throughout 2021, with less intensity. The annual change in the GDP of Greece during the pandemic is remarkable when compared to the previous years. In Table 1, the real GDP growth of Greece for per the period 2000–2002 is provided where negative growth appeared in several years.

Table 1. Real GDP growth for Greece (%).

Year	GDP Growth (%)	Year	GDP Growth (%)
2000	3.9	**2011**	−10.1
2001	4.1	**2012**	−7.1
2002	3.9	**2013**	−2.5
2003	5.8	**2014**	0.5
2004	5.1	**2015**	−0.2
2005	0.6	**2016**	−0.5
2006	5.7	**2017**	1.1
2007	3.3	**2018**	1.7
2008	−0.3	**2019**	1.9
2009	−4.3	**2020**	−9
2010	−5.5	**2021**	8.4
		2022	5.9

Source: [26].

It seems that the annual change of the country's GDP in the year 2020 compared to the previous one was of the order of almost 8% in contrast to the small increase that had taken place in the previous year. The main reason for the significant decrease in the country's GDP in the first year of the pandemic crisis was the consumption in the private sector which amounted to about 5%, in contrast to the consumption in the public sector which increased by about 2.5%. The higher demand in the public sector was due to the emergency created by the crisis mainly in the health sector with the necessity of immediate coverage of basic needs and support of the National Health System (NSS). In particular, the decline in the country's GDP was greater in the second quarter of 2020, reaching 13% compared to the lowest rate of about 5% in the last quarter, which is precisely due to the imposition of restrictive measures, now known as lockdown.

Based on the change in the Gross National Product of Greece (GNP) during the last 25 years, it is observed that the pandemic crisis caused a major blow to the Greek economy and the GDP of Greece declined at the end of the first year of the pandemic having a record as €168 billion. This is essentially a return 22 years ago when the country's GDP was €170 billion in the year 1998.

In Figure 2, the GDP of Greece in current prices as billions of US$ is provided for the period 1980–2022.

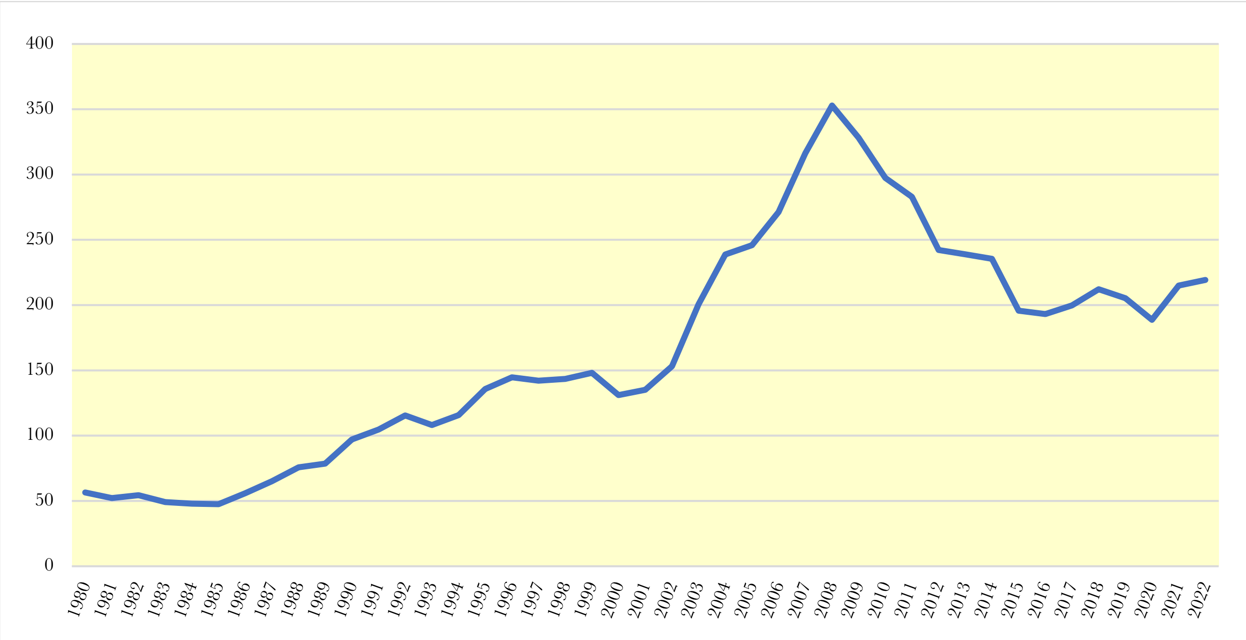

Figure 2. GDP of Greece current prices (billions of US$). Source: Author 2023 based on [26].

The European Commission (EC), the European Parliament, and EU leaders, in order to assist the EU Member States in dealing promptly and vigorously with the various socio-economic consequences of the unexpected arrival of COVID-19, have designed and announced a plan, which will lay the solid foundations for the future of a modern, competitive, and healthy Europe that will be able to play its role for future generations. The European Parliament has stated that it wants the recently announced Green Deal to be at the heart of the European Union (EU) recovery package, and in its resolution adopted on 15 May 2020, the European Parliament called for an ambitious recovery plan [29]. The EU's long-term budget, together with the European Union's Next Generation EU Program constitute the largest recovery package ever funded by the EU budget. The purpose of this package is mainly to strengthen flexibility mechanisms in order to deal with unpredictable and future uncertainty more immediately. The plan, together with the next long-term EU budget approved by the Member States and Parliament, aims to create a greener, more digital, and sustainable Europe and to increase resilience to future crises such as the climate crisis [30].

The European Green Deal (Green Deal) is a roadmap for Europe that is expected to become a climate-neutral continent by 2050. In this context, energy and the way it is produced and used are critical factors in the success and contribution to achieving the goals set by the 2050-time horizon for a climate-neutral continent with zero emissions into the atmosphere. The analysis of this transition and the socio-economic impact on EU member states, local regions, local communities and, ultimately, on European citizenship is interesting and useful. More than 50% of the amount will support modernization, through the following policies: research and innovation—using the Horizon Europe program; fair climate, and digital transition—using the Fair Transition Fund and the Digital Europe program; recovery readiness, recovery and resilience—through the Recovery and Resilience Fund, the RescEU program, and a new health program, EU4Health. In regards to the distribution of funds to the to various sub-sectors, the funds come from both the Multiannual Financial Framework for the period 2021–2027 and the NextGenerationEU Program [31]. In Figure 3, the distribution of funds per sub-sector as per the Multiannual Financial Framework of the EU for the period 2021–2027 is provided.

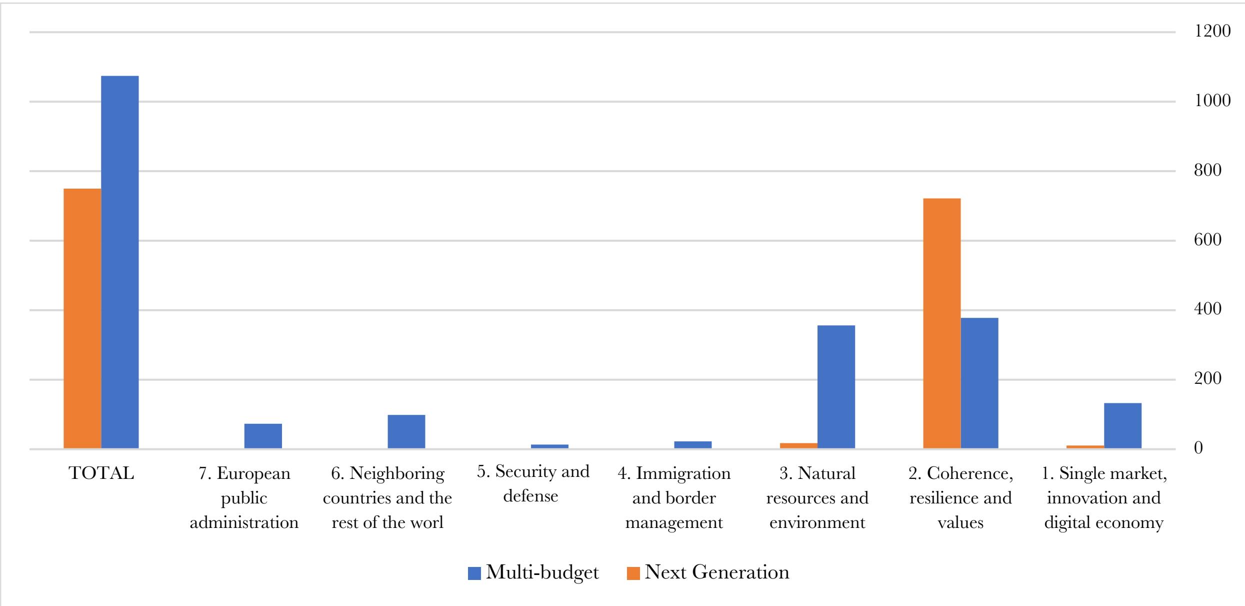

Figure 3. Multiannual Financial Framework of the EU 2021–2027 (bn Euros). Source: Author 2023 based on [31].

The various areas in which the funds available under the European Union budget and the Next Generation EU program are expected to be allocated are those of the single market-innovation and digital, cohesion-resilience-values, natural resources and the environment, migration and border management, security and defense, the European Union's neighboring countries and the European public administration. Based on the initial distribution of funds, it is immediately apparent that most of them concern the cohesion, resilience, and securities sector, with a total amount of €1.1 trillion for the period 2021–2027. It is followed by the natural resources and environment sector with a total budget of €374 billion, followed by the single market, innovation, and digital economy sector with a budget of about €144 billion.

Regarding Greece, the forecast concerns the receipt of €32 billion through the Recovery Fund, of which the amount of €19.5 billion relates to funds that will be given in the form of grants, most of which equal to 70% is expected to have been disbursed by 2022. The remaining amount of €12.5 billion relates to funds in the form of loans, with a time horizon of disbursement until 2027. Finally, the amount of €40 billion of the total amount of €72 billion corresponding to Greece, is expected to be allocated through the new multiannual financial framework with a horizon of implementation until 2027. The National Recovery and Resilience Plan for Greece (NRRP 2020) envisages the existence of four main pillars on which it is based and more specifically on green transition, digital transformation, employment, skills, social cohesion, and private investment and transformation of the economy [32]. In Figure 4, Greece's proposal to the EC for fund allocations for some main sectors is provided.

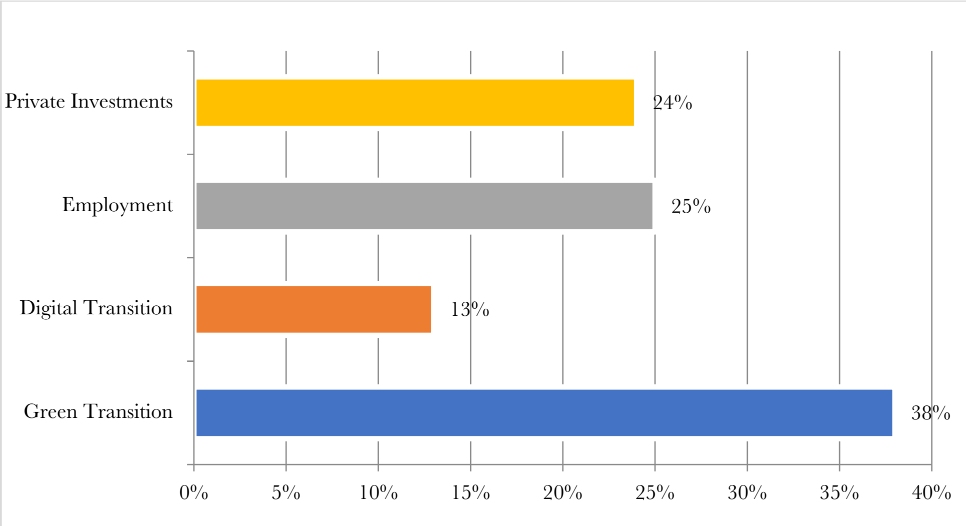

Figure 4. Greece's proposal for Fund Allocations. Source: Author 2023 based on [32].

It is clearly understood that the major share is provided for the actions that belong to the pillar of the green transition with a percentage of 38% of the total, while the actions that belong to the pillar of employment and digital transformation with percentages of 25 and 24% respectively. Finally, the percentage of actions related to private investment is set at 13% of the total.

3.3. The Energy Crisis

The European Parliament has stated that it expects to have the Green Deal at the heart of the European Union (EU) recovery package, while its resolution of 15 May 2020 called for an ambitious recovery plan that is in line with the core concept of the Green Deal. During the pandemic, the impact of COVID-19 on public life at European and global levels has become unprecedented, leading to a slowdown in global economic activity. In particular, in Europe, the decline in GDP of the euro area was 3.8% in the first quarter of 2020. At the same time, due to the reduced economic and social activity of the citizens, a temporary reduction of energy consumption and carbon dioxide (CO_2) emissions appeared to be recorded, which may affect the energy mix and the consequent re-targeting of the Member States. The European Commission Communication on the European Union's next generation puts forward a €750 billion recovery plan for the next 2021–2027. This plan, together with the next long-term EU budget approved by the Member States and Parliament, aims to create a greener, more digital, and ultimately more sustainable Europe, as well as to increase resilience to other crises such as energy poverty and climate change. Both energy production and consumption are seen as critical success factors for the proper achievement of the goals set by the time horizon in 2050 for a climate-neutral continent with zero emissions of pollutant gases into the atmosphere and thus contributing to a more sustainable future. The analysis of this transition and the socio-economic impact on EU member states, local regions, local communities and, ultimately, on European citizenship is critical and useful [33].

Energy policy in the EU has been a voluntary process, with each Member State autonomous in formulating and adopting its desired energy strategy. In the well-known oil crisis during the 1970s, the current EU Member States acted individually and each Member State adopted an autonomous energy policy without any prior coordination between them. The behavior and reaction of the Member State are the result of many different factors, including several political factors and perceptions, as they have been quite reluctant for several years to reveal any energy security responsibilities to the European Commission. In the 1980s, even with the introduction of the internal market, there was no vision for a common energy policy, despite its importance to governments, interest groups, and the European Commission. However, the EU is expected to be able to meet a number of important challenges in the coming period, such as rising imports and the environmental impact of energy production and use. In October 2005, the EU decided to formally adopt a promising energy policy and two years later, the European Commission published "An Energy Policy for Europe", which was approved by the Council and the European Parliament [23].

In order to achieve the European Union's stated goals for energy and climate by 2030, it was decided that all European Union countries should design and implement a ten-year integrated National Energy and Climate Plan (NECP), which is expected to be implemented during the period 2021–2030. In these National Plans, each Member State of the European Union must analyze, plan, propose, and finally implement how it will address concepts such as reducing greenhouse gas emissions, renewable energy sources, energy efficiency, interconnections, research and innovation in order to build up a proper resilient and sustainable future. In order to provide further support for the achievement of the EU objectives, each Member State should communicate its process and actions towards the achievement of the national objectives. Achieving a sustainable low-carbon economy, the European Commission has foreseen the need for changes in public and private investment, in addition to incentives across the policy spectrum [34]. Although Member States prefer to have control over energy policy issues, especially in times of crisis, the European Commission has found a way to extend supranational power by introducing new instruments for control and compliance. Indeed, this strategy is closely linked to the wider institutionalized efforts of the European Commission to prevent non-compliance, while energy policy has both structural and political causes, as well as features that may affect implementation and compliance [35]. In Figure 5, the Total Energy Supply (TES) by source in Greece for the period 1990–2020 is provided.

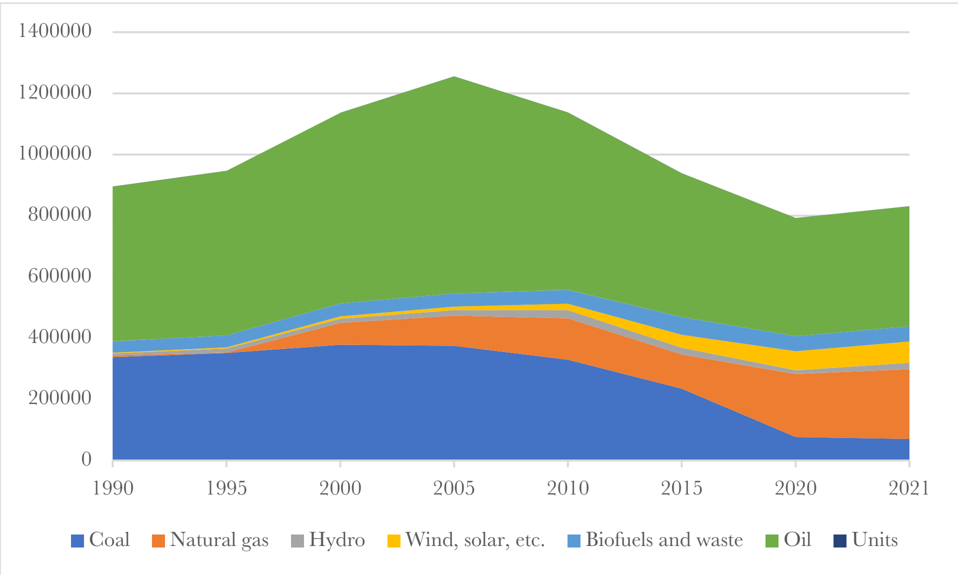

Figure 5. Total energy supply (TES) by source, Greece 1990–2020. Source: Author 2023 based on [36].

The energy mix for Greece during the last thirty years certainly shows a difference in terms of individual energy sources. During the 1990s and until the mid-2000s, the consumption of coal and lignite for the energy needs of the country showed a stability, which then began a declining course with an even greater rate of decline from the beginning of 2010 with a reverse course from that of natural gas. The change of the natural gas in the energy mix of the country becomes evident from 1997 with a positive sign, except for the period 2011–2014 during which a decrease of 33% in consumption is recorded, but it is reversed and since then until 2020 it has almost doubled. Regarding oil, its highest consumption as a fuel in the country's energy mix is reflected in the year 2005 and since then it shows a decrease every year until today, with a continuous decline compared to other energy sources, such as natural gas and Renewable Energy Sources (RES). In Figure 6, the energy production and balance of interconnections are provided.

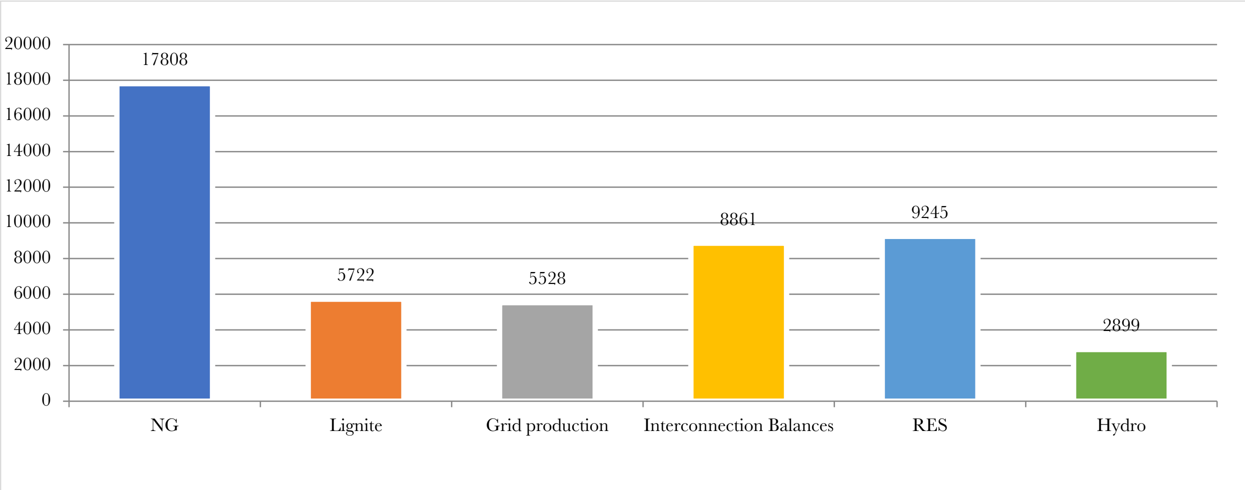

Figure 6. Energy Production and Balance of Interconnections (GWh). Source: Author 2023 based on [37].

For Greece, the year 2020 is seen as a record for natural gas consumption, with an increase of 9.6% compared to 2019 and 99% compared to 2014. In 2020, electricity producers covered 65% of natural gas demand, the distribution network 18.5%, and the industry 16.5%. Especially for the natural gas network in Greece, this is constantly expanding and the degree of coverage of the territory from 28% in the year 2022 is expected to rise to 40% by the year 2024. The Regulatory Energy Authority in Greece (known as RAE) monitors €6 billion in cash flows in the electricity market annually. The Energy Transition leads to €44 billion in upcoming investments by 2030. The interconnections of the islands are accelerated with a €2.5 billion investment program of IPTO until 2030. The energy balance in 2020 was 29% RES, 36% natural gas, 11% lignite, 6% hydroelectric, and 18% imports [37].

In Figure 7, the electricity prices for household consumers in Europe are provided for the first half period of the year 2021 (Euros/kWh).

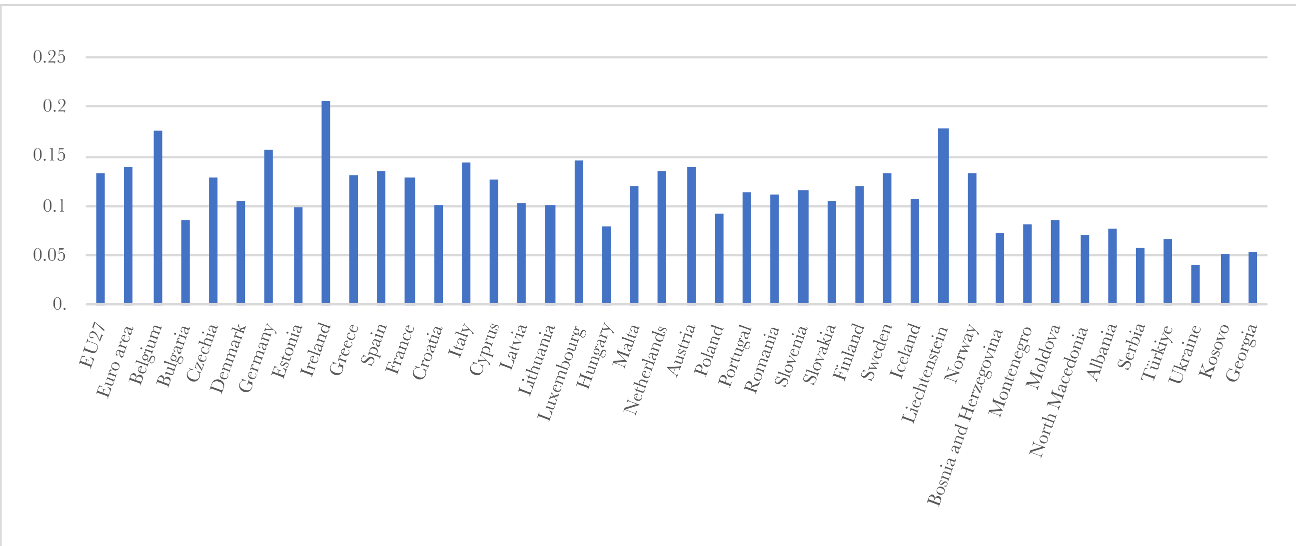

Figure 7. Electricity Prices (Euros/kWh) for Household consumers (H1 2021). Source: Author 2023 based on [38].

The development of electricity prices both for household and non-household consumers within the European Union (EU). When available, it also includes price data from Iceland, Liechtenstein, Norway, Montenegro, North Macedonia, Albania, Serbia, Turkey, Bosnia and Herzegovina, Kosovo, Moldova, Georgia, and Ukraine. The price of energy in the EU depends on a range of different supply and demand conditions, including the geopolitical situation, the national energy mix, import diversification, network costs, environmental protection costs, severe weather conditions, or levels of excise and taxation. Note that the prices presented in this article include taxes, levies, and VAT for household consumers, but exclude refundable taxes and levies for non-household consumers.

4. Conclusions

In human history there have always been crises that caused instability in the system and the structures of society and affected its path towards the future. The best response to a crisis requires prior preparation and readiness by the central state government as well as local administration, however, it is often not considered sufficient precisely because crises are most of the times unpredictable, different in nature as well as of different intensity and magnitude each time.

In addition to the well-known pathogenic characteristics that prevail in the Greek economy, there are new challenges emerging due to recent crises that appeared globally and have significantly affected without exceptions every geographical area and country. According to the Governor of the Bank of Greece (BoG), Giannis Stournaras [39], any attempt to predict the economic developments that follow, is in itself difficult and problematic in an environment of increased uncertainty. In his annual report for the year 2020, he stated that the pace of economic recovery depends on the evolution of epidemiological data in regards to COVID-19 and the vaccination program progress, while at the same time pointing out the risks that continue to exist and that affect the economy after the pandemic. Regarding the country's public debt, he considers that its viability may be not threatened until the advent of 2030 since "its favorable characteristics, the accumulation of sufficient liquidity reserves and the prevalence of historically low lending rates internationally allow its easy refinancing even in the very high levels" ([39], p. 5).

In a small economy like Greece, there are many more that need to be improved including the country's competitiveness in world markets. Any distortion and chronic pathogenesis of the political and social system of the country should be eliminated as soon as possible, since time is relentless. The increasingly frequent global crises make it more than ever necessary for the country to react immediately and for the political parties to reach an agreement on a common course for the country in the international environment. In general, better coordination and planning are needed to achieve SDG7, by aligning the country's priorities with the initial objectives, and actions with its priorities, so that all three pillars of sustainable development are equally reflected, in contrast to the current emphasis of the development process on the economic. Specifically, such goals are embodied through the National Climate and Energy Plan (NCEP), but also the Framework for Climate and Energy for 2030. The country declares commitment to the implementation of the 2030 Agenda for Sustainable Development and the 17 SDGs, which are seen as an ambitious framework for transformation into a new, equitable, and sustainable development path, ensuring a balance between economic growth, social cohesion and justice, and protection of the environment and its unique ecological wealth. In addition, Energy Communities are created and operated, with the aim, inter alia, of promoting the economy and innovation in the energy sector, based on society and solidarity, tackling energy poverty, promoting energy sustainability, improving energy self-sufficiency and security in island municipalities, and improving end-to-end efficiency. There are plans that envisage the installation of a network of wind turbines on dozens of uninhabited islands and have significant implications for the country on an energy and geopolitical level, since the electricity interconnection with the mainland system, job creation and the strengthening of the economy are expected to further contribute to a sustainable future for Greece.

Greece should minimize any corruption that still exists in several levels of governance. Such effort needs to be done through the further development of e-governance that has been one of the positive outcomes from the recent crises in the country. By that, it would be possible to achieve the required anonymity both of the citizen and the auditor and consequently the impossibility of trading and trying to influence each other. The politicians and the government should evaluate the last crises and they need to prepare proper risk management plans for each case—such as economic crisis, pandemic crisis, energy crisis—that would take into consideration the effect of the main stakeholders of Greece, such as the EU. In such risk plans, the internal capabilities and specific features of the country should not be underestimated, but a failure rate should always be taken into account when planning, given that uncertainty is a normal constant and not an exception. Sustainability has been proven to be a game changer in many aspects and Greece needs to consider this parameter as one of its main governmental policies that would bring the country to the next decades along with the main goals that the international organizations have already adopted.

Conflicts of Interest

The author has no conflict of interest to declare.

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