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# Social development and public debt sustainability

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## Κοινωνική ανάπτυξη και βιωσιμότητα του δημόσιου χρέους

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### ABSTRACT

The issue of public debt sustainability is of exceptional importance in the case of Greece. As a rule, the relevant analysis is limited to the examination of the fiscal policy measures reported to contribute to reducing public debt leaving out the investigation of the factors that caused the country's debt crisis. The objective of the present paper is to explore the determinants of Greece's debt crisis and the strategy required to address it. Our work highlights the issue of social development, which is found to be a necessary condition for ensuring the long run sustainability of the country's public debt.

### ΠΕΡΙΛΗΨΗ

Το ζήτημα της βιωσιμότητας του δημόσιου χρέους είναι κεντρικής σημασίας στην περίπτωση της Ελλάδας. Κατά κανόνα, η σχετική ανάλυση περιορίζεται στα μέτρα δημοσιονομικής πολιτικής τα οποία εκτιμάται ότι συμβάλλουν στον περιορισμό του δημόσιου χρέους, χωρίς να διερευνώνται οι παράγοντες που προκάλεσαν την κρίση χρέους της χώρας. Σκοπός της παρούσας εργασίας είναι η διερεύνηση των προσδιοριστικών παραγόντων της κρίσης χρέους της Ελλάδας και της αναγκαίας στρατηγικής για την αντιμετώπισή της. Στο πλαίσιο αυτής της ανάλυσης αναδεικνύεται ως κεντρικής σημασίας το θέμα της κοινωνικής ανάπτυξης, η οποία βρίσκουμε ότι αποτελεί αναγκαία συνθήκη για τη διασφάλιση της μακροχρόνιας βιωσιμότητας του δημόσιου χρέους της χώρας.

**KEY WORDS:** Social Development, Governance, Public Deficit, Public Debt, Political Budget Cycles, Shadow Economy.

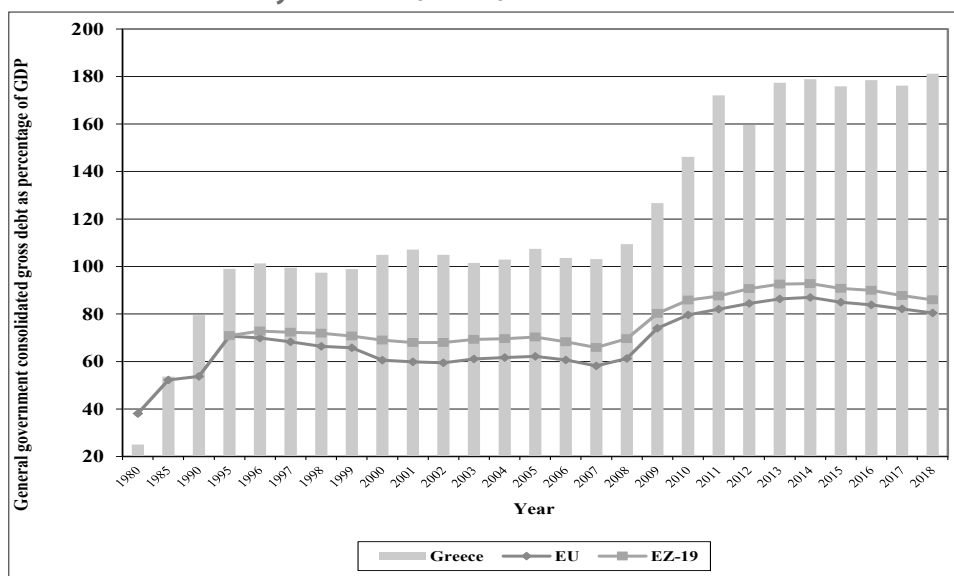
**ΛΕΞΕΙΣ-ΚΛΕΙΔΙΑ:** Κοινωνική Ανάπτυξη, Διακυβέρνηση, Δημοσιονομικό Έλλειμμα, Δημόσιο Χρέος, Πολιτικοί-Δημοσιονομικοί Κύκλοι, Παρασικονομία.

## 1. Introduction

**I**n the year 1980, the general government consolidated gross debt as percent of gross domestic product (GDP) in Greece amounted to just 25%, which was well below the European Union (EU) average of 38.1%.<sup>1</sup> Since then, the country's public debt has been steadily increasing. In 1985, it reached the average EU levels and, by 1990, it far exceeded the EU average. As a result,

the issue of public debt sustainability makes its first appearance in Greece in the late 1980s. In 2000, the Greek public debt that amounted to 104.9% of GDP exceeded the EU average of 60.6% of GDP by 44.3 percentage points. The deviation of less than 50 percentage points lasted until 2008. In 2009, the gap mounts to 52.7 percentage points (126.7% compared to 74%). In 2010 the divergence reached the 66.6 percentage points (146.2% compared to 79.6%), while in 2011 it reached the 90.1 percentage points (172.1% compared to 82%). In 2012 the difference between the Greek and average EU public debt shrank to 75.2 percentage points (159.6% compared to 84.4%), but the decrease was mainly due to the “haircut” of private sector bonds, known as “Private Sector Involvement – PSI”.<sup>2</sup> In 2013 the divergence bounced back to 91.1 percentage points. That relative size was maintained until 2015 but, in 2016, it increased further and, by 2018, it had exceeded the 100 percentage points (100.8). That year the Greek public debt reached the level of 181.2% of GDP, and amounted to 334.721 million euro. In 2018, the Greek public debt, as a percentage of GDP, was by far the highest of all EU member states, followed by those of Italy (134.8%) and Portugal (122.2%). The spectacular increase in Greece’s public debt during the period 2009-2013, both in absolute (millions of euro) and in relative terms (as percentage of GDP), is attributed to large public deficits associated with negative real GDP growth rates. In Figure 1 we depict the evolution of the general government consolidated gross debt as percentage of GDP in Greece, the EU and the Eurozone in the years 1980, 1985, 1990 and 1995-2018.

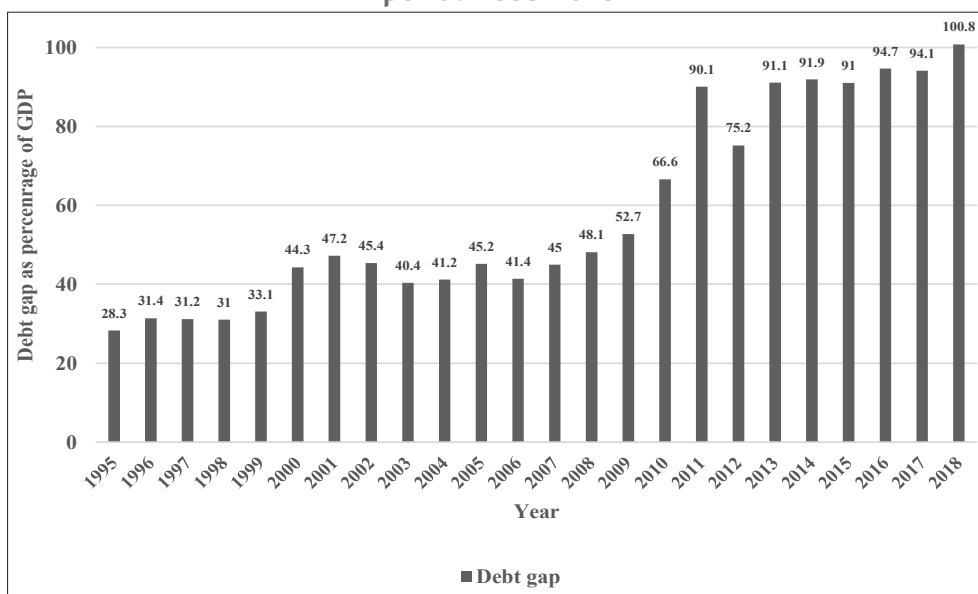
**Figure 1: The evolution of the general government consolidated gross debt as percentage of GDP in Greece, the European Union and the Eurozone in the years 1980, 1985, 1990 and 1995-2018**



Source: Eurostat, Government deficit/surplus, debt and associated data (update: 22.10.2019).  
 Note: EU = European Union of 28 for the period 1996-2018 and European Union of 15 for the period before 1996, EZ-19 = Eurozone of 19.

The evolution of the general government consolidated gross debt gap as percentage of GDP between Greece and the EU over the period 1995-2018 is more clearly depicted in Chart 2.

**Chart 2: The evolution of the general government consolidated gross debt gap as percentage of GDP between Greece and the European Union over the period 1995-2018**



Source: Chart 1.

The large increase of Greek public debt in absolute and relative terms poses serious issues of public debt sustainability although we must note that there does not exist a generally accepted definition as to when a public debt becomes unsustainable. According to the European Commission (EC), the public debt is sustainable when the government of the country referred to can continue to service it without requiring unrealistically, from the social and political points of view, large corrections to its future revenues or primary expenditure path. In practice, debt sustainability is assessed by asking the question whether the current course of fiscal policy can be sustained without facing an exploding debt path.<sup>3</sup> Moreover, the EC has developed a debt sustainability analysis (DSA) framework to identify “vulnerable” countries from the point of view of public debt sustainability (EC, 2014). This framework is in line with the relevant framework developed by the International Monetary Fund (IMF) for market-access countries (IMF, 2013). It is beyond the scope of the present paper to identify and analyze the details of DSA in market-access countries. It suffices to note however that, assessing debt sustainability for market-access countries involves probabilistic judgments about the trajectory of debt and the availability of financing it on favorable terms (IMF, 2013). In market-access economies like Greece the conditions of markets to finance a country do not only depend on the economic and political performance of the borrower, but also on the international willingness to finance and the availability of funds as well (Karavitis, 2018).

## 2. The main determinants of public sector deficits

The most important factors that affect the size of public sector deficits in the Greek economy are the following (Vavouras, 2019). Firstly, the bureaucratic mode of production in the public sector, the main characteristics of which are the “allocative inefficiency” (the level of public sector output is not the socially desirable) and the “ineffective cost management” (the cost of production is higher than that the effective use of resources requires). The bureaucratic mode of public sector production results in higher budgets than those that could be technically possible and leads to low rates of productivity growth in this sector, that are accompanied by increases in public expenditures. The increases occur because, in order for the public sector to maintain a steady relative share of the total product produced, it must continuously increase the relative quantities of the capital and labor that it uses as inputs.

Secondly, the strengthening of the distributive role of the state. From the year 1974, when the expansion of public deficits started, the redistributive role of the state began to increase a phenomenon which intensified in the 1980s, 1990s, and especially in the 2000s. Transfers, which in 1973 constituted only 8.3% of GDP, had increased to 11% in 1980, and, in 2000, transfers and, in particular, under the ESA 2010,<sup>4</sup> social benefits other than social transfers in kind (including social security cash benefits, privately funded social benefits, non-funded employee benefits, and social welfare benefits) were estimated at 12.3%, while by 2010 they had increased to 17.7% of GDP. That is, they had more than doubled as a percentage of GDP compared to 1973. In 2012, they are estimated to have grown further to 20.3% of GDP. Subsequently, during the period 2013-2017 they stabilized between 19 and 20% of GDP. In 2018, it is estimated that they amounted to 18.6%. It is worth mentioning that, in this category of public expenditure expressed as a percentage of GDP, Greece presents one of the highest figures in the EU. Indeed, in the years 2011, 2012 and 2016 Greece, although in a period of economic recession and debt crisis, showed the largest size as a percentage of GDP relative to all other EU countries. In 2012, for example, the countries closest to Greece were France (19.5%) and Italy (19.3%), while the average in the euro area countries was 17.1% of GDP and the EU total 16.4% of GDP.<sup>5</sup> The strengthening of the redistributive role of the state has therefore been an important factor in expanding public spending and thereby exacerbating public deficits.

A third factor, which has contributed in recent decades and continues to contribute to the widening of public deficits in the case of Greece, is the widespread underground or shadow or hidden economy. The shadow economy, which has been a structural phenomenon in Greece for decades, has a continuing major impact on the country's fiscal policy, and this is evident given that one of the most important reasons, perhaps even the most important, of the existence and growth of the shadow economy is tax evasion, including evasion of social security contributions. Notice that the widening of tax evasion leads to an increase in the tax burden on the official economy, a fact that constitutes an incentive to increase the propensity of tax evasion, as the latter is determined by, among other factors, the existing level of tax burden. Thus, economic policy-makers, and in particular state governments, are involved in a “vicious circle”, since the lower the tax base due to the shadow economy, the greater the tax burden on the official economy in order to collect a given amount of taxes.

The impact of the shadow economy is not only limited to the public revenue side, but also extends to the public expenditure side, mainly as a result of the pressure it exerts on increasing transfer payments. If then public deficit is expressed as a percentage of GDP, that is  $(G - R)/Y$ ,

where  $G$  is public spending on consumption, investment and transfers,  $R$  is public revenue and  $Y$  is GDP, the shadow economy is associated with the following effects on the relative size of public deficit: First, it has a positive effect on the fraction numerator ( $G - R$ ), since it increases  $G$  and reduces  $R$  ("numerator effect") and secondly, it affects negatively the fraction denominator ( $Y$ ), since  $Y$  appears significantly lower than it actually is ("denominator effect"). If the shadow economy covers a large portion of the total economy (official economy and shadow economy), as it is the case of the Greek economy, both of these effects have a significant impact on the absolute and relative size of public deficit and therefore on public debt.

For example, in the case of Greece, we can refer to the following specific years. In 1990, the "official" general government deficit and debt, that is the general government deficit and debt as they were estimated and recorded by the relevant state authorities (Ministry of Finance) accounted for 15.9% and 79.6% of GDP respectively. We have estimated that the "real" general government deficit and the "real" general government debt, that is the government deficit and debt after the integration of the shadow economy, amounted to 0% and 47.9% of "real" GDP respectively. Moreover, in 1999, when the "official" general government deficit and debt were estimated at 1.9% and 105.8% of GDP respectively, we have estimated that the "real" general government deficit and the "real" general government debt amounted to -4.1% and 76.6% of GDP respectively. That is, in 1999, without the shadow economy we would have a significant budget surplus of 4.1% of GDP.<sup>6</sup> We have also estimated that if the control of the shadow economy had only begun in 2006 and the shadow economy in Greece had been reduced to the OECD member-country average and had been incorporated to the recorded GDP, only during the period 2006-2010, the general government debt which was estimated to have grown from 107.7% of GDP to 144.9% during that period, would have increased from 92.9% to 112.2% of GDP, that is it would have been reduced by 32.7 percentage units.<sup>7</sup>

The above three factors have undoubtedly exercised significant effects on the size of public deficit in Greece and thus have contributed to the increase of its public debt. However, the most significant effect on the widening of public deficits and the increase in public debt in Greece has been the pursued political behavior. Looking at the evolution of the general government deficit as a percentage of GDP over the period 1980-2018, we observe the following: the years of general elections 1981, 1985, 1989, 1990, 1993, 2004, 2009 and 2015 coincide with spikes in the levels of public deficit as percent of GDP. It is obvious that, at least during the 1980s and up until the mid-1990s, intense electoral-fiscal cycles or political budget cycles (PBCs) appeared in Greece. From the mid-1990s on, there are four election years (1996, 2000, 2007 and 2012) on which there is no jump of public deficits. These election years happen during periods when the country was following fiscal policy rules either to comply with the fiscal criteria for joining the Economic and Monetary Union or the fiscal rules imposed by the European institutions when Greece was subjected to the Excessive Deficit Procedure under the corrective arm of the Stability and Growth Pact.

Considering these cycles, we conclude that public deficits as percentages of GDP increase before parliamentary elections and then, during the election cycle or election period, efforts are made to reduce them. Thus it can be argued that public deficits in Greece are not so much the result of accidental disruptions, structural instability or government failures in pursuing economic policy, but rather the result of governmental efforts of maximizing the number of votes cast in the forthcoming elections with the implementation of their ideological or party programs (MacRae, 1977). The acceptance of the existence of political-fiscal cycles or PBCs implies the acceptance of the hypothesis that governments themselves, facing a "myopic" electorate, and applying clien-

telistic practices, are not only unwilling to limit the relative size of public deficits, but rather have incentives to create PBCs. That is, it is accepted that governments hope that voters in the ballot box will mainly remember the recent period of benefits and not the austerity periods. In other words, they have a short memory or a “myopic perspective”.<sup>8</sup>

Perhaps, the most important negative consequence of the PBCs is that, after some repetitions, the latter are integrated into the system of society's expectations, with the result that even very stringent stabilization programs become ineffective, since voters have been convinced that any stabilization policy will not continue for the entire phase of the election cycle, but will be abandoned before the elections, so that the ruling party (or parties) can maximize its (or their) chances of staying in power.

### 3. The strategy to tackle the country's fiscal problem

**T**he analysis of the determinants of large public deficits and consequently the drivers of the enlargement of the Greek public debt indicates the general directions of what should have been the long-term policy response. Appropriate policies were repeatedly announced but were never effectively implemented. Public declarations often abstained from the objectives actually pursued by economic policy-makers yielding the inevitable result of the debt crisis, prompted by the global recession of 2007-2009.

According to the analysis outlined above, the effective control of the country's fiscal problem in the long run presupposes the following. Firstly, improving the public sector's productive process, notably by reducing the negative effects of its bureaucratic mode of production (budget control and public spending), which can be achieved by introducing a system of incentives and disincentives for the public sector management. Increasing public sector productivity and in particular increasing the productivity of the public sector employees can be achieved by improving its organization and administration methods, via the use of new technology, and by improving the quality and the use rates of the factors of production used and in particular of labor (education, retraining and specialization of public employees).

A second direction of the policy required is to limit the shadow economy. As it has already been noted, one of its major causes is tax evasion and evasion of social security contributions. There is a rich literature regarding the proposals on controlling the shadow economy. Crucially, we should point out that the control of shadow economy cannot be based on short-term recovery measures. It is only made possible through the formulation and implementation of a long-term policy aimed at limiting the conditions for its existence and growth. This policy should aim at improving the effectiveness of the tax system (improving its structure, improving its transparency, improving the organization of tax authorities, improving the system of tax confirmation and collection and improving the level of business accounting), improving the financial system, reducing distortive state interventions in production and consumption processes, and finally improving the level of tax ethics or tax morality. Finally, the reduction of the shadow economy could also be achieved through the improvement of the national accounts techniques in order to facilitate the recording of economic activity.<sup>9</sup>

A third key direction in tackling public deficits and public debt seems to be the change of the political behavior of both politicians and the electorate. From the above analysis it appears



that, as long as the existing voter-politician relationship is maintained, it is extremely difficult to eliminate PBCs. Change of political behavior implies changing the behavior of both parties. Politicians should not passively react to their constituents' preferences, perceptions and priorities, especially when they are incompatible with the more general social goals. This presupposes that governments should place greater emphasis on the implementation of their programs than on their political benefits, at least as they realize them in the short run. In addition, by improving their socio-political awareness, voters would become more capable to find out and "punish" governments that have created PBCs in order to increase their re-election chances. This would eliminate the phenomenon of PBCs.

## **4. Social development as a necessary condition of public debt sustainability**

**T**he causes of the Greek fiscal problem outlined above, that is the low public sector productivity, the expansion of the shadow economy and the pursued political behavior through the creation of politico-economic cycles or PBCs, are mainly the outcome of a low quality of governance which is characteristic of the upper-level political staff as well as the lower-level state bureaucrats. The behavior of these governance agents is largely determined by the level of political and social development prevailing in a given economy but also by their personal morals and principles. Sociopolitical development therefore becomes a central issue.

Social development is concerned with the processes of change that lead to improvements in human well-being, social relations and social institutions that are equitable, sustainable and compatible with the principles of democratic governance and social justice (United Nations Research Institute for Social Development, 2011). The World Bank states that social development means the transformation of institutions to empower people (World Bank, 2005). These definitions emphasize social relations, institutional arrangements and political processes that are central to efforts for achieving desirable development outcomes. From this perspective, the concept of social development moves beyond a singular or one-dimensional focus on economic growth and material concentration, towards a multi-dimensional approach that integrates social, cultural and political achievements into the fundamental conceptualization, measurement and practice of development. Therefore, social development depends upon social transformation which focuses on qualitative changes in the cohesion and organizational structure of society, that contribute to better information and awareness of its members which help to highlight its collective goals and improve the degree of their collective achievements.

However, social development must be accompanied by political development. Political development refers to the ability of governmental structures and processes to respond to social change (Nye, 1967). Political development is therefore based on social development and implies, like social development, social transformation. Thus, ultimately, social development becomes the fundamental condition for reinforcing the role of the people as the originator of the political system.

The quality of governance is undoubtedly a critical issue for the sustainable tackling of the public debt crisis in Greece. Under this perspective, the strategic goal of tackling the debt crisis as well as the selected means in order to achieve this objective, should be feasible and compatible with the existing restrictions and the structure of the economy as well as the operation of



the economic, social and political system. This constitutes the core matter of the so-called issue "morality of governance". As a main determinant for improving the quality and the incentives of governance, emerges the need for a deep change of the established political culture and social beliefs through a long-run strategy of political and social transformation. Without this transformation, improvements in economic terms are unlikely to be sustainable over the longer-term (Vavouras and Syrmali, 2015).

Within this analytical framework, the goal targeting at the treatment of debt crisis and the means chosen for its achievement, should be attainable and compatible with the constraints, the structure as well as the function of the underlying economic and political framework. Also, the quality of governance proves to be a critical factor for the sustainable management of the debt crisis through the exercise of consistent and efficient and, as a consequence, reliable policy measures. At a more fundamental level, improving governance depends to a great extent on the improvements of the political culture as well as the level of social development. As Yehezkel Dror points out, improving the quality of senior government staff is of the outmost importance in improving governance, since no structure can offset a moderate governance leadership, nor mitigate the damage caused by corruption (Dror, 2001).

Sociopolitical development requires the acceptance on behalf of society of a new system of beliefs about the state and the political system. Moreover, it presupposes a structural change of the established political culture, which can be gained through an appropriate long-run strategy leading to a change in the perception of state power, both on the part of the political system and on the part of citizens. This results in a correction of the distorted perception of both the role and the content of the state and state power in both parties.

However, it should be emphasized that improving governance quality is not mainly the result of some exogenous to the society factors, such as the European institutions, although under certain circumstances they may also contributed. It presupposes the development of the society itself as highlighted above. This change cannot be the result of the influence of some random factors, unpredicted crises or externally imposed policies, but rather the result of adopting an appropriate institutional reforms strategy aimed at raising the awareness of society. This improvement of society awareness will lead to the improvement of the society's organization methods that will make full use of the skills and resources available to achieve its goals. The crisis of public debt in Greece is difficult to deal with in the long run effectively, in so far as the level of social development is limited, allowing members of society to have an individualistic behavior and representatives of the political system a clientelistic one. This is the core issue of public debt sustainability.

## Notes

1. The data before 1996 refer to the EU of 15 and for the period 1996-2018 to the EU of 28.
2. The PSI took place following the decisions of the EU Summit of 21 July 2011 and 27-28 October 2011.
3. European Commission, 0. macro\_2\_lecture\_3\_debt\_sustainability\_short.
4. European System of Accounts 2010.
5. Eurostat, Government revenue, expenditure and main aggregates: Social benefits other than social transfers in kind, payable.
6. See Vavouras and Manolas (2004, appendix 4).

7. See Vavouras, Manolas and Sfakianakis (2012).
8. For an analysis of the phenomenon of PBCs in Greece, see mainly Vavouras (1999), Afonso, Zartaloudis and Papadopoulos (2015), Chortareas, Logothetis and Papandreou (2016), and Lockwood, Philippopoulos and Tzavalis (2001).
9. For an analysis of the contribution of the shadow economy control to successfully tackling the country's debt crisis, see Manolas, Sfakianakis and Vavouras (2013).

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