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Notes on the Accumulation of Greek Public Debt between 1981 and 2000

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Abstract

This paper examines the issue of accumulation dynamics of the Greek Public Debt between 1981 and Greece's entry into the Eurozone on 1 January 2001. The author argues that the recent research on the Greek Sovereign Debt Crisis (May 2010) did not take this matter into consideration. The paper uncovers the causes of the Public debt accumulation in the 1980s but also points out that its service costs were minimal since the Greek government sold domestically its non-indexed drachma obligations. The costs of refinancing rose since the end of the 1980s when Greece started to sell internationally debt denominated in other currencies. This move was in effect a result of the process of financial liberalisation of Greek markets and the abolishment of capital controls. The rising costs of debt servicing and public expenditures along with insufficient tax revenues troubled the government of the Nea Demokratia (1990-1993). As the case was, the bright prospects of Greece joining the Economic and Monetary Union reflected upon the diminishing interest rates of new debt issued in the second half of the 1990s. This allowed the Greek government to keep the debt-to-GDP ratio, so far reached, at a lesser expense. However, the financial liberalisation, which allowed foreign and local buyers to purchase government securities denominated in foreign currency, exposed Greece to the first speculative attack on its exchange rate in 1994 since the foreign speculators were attracted by the high debt-to-GDP ratio. Although the Greek government and the Bank of Greece repelled the attack, a more prudent policy decision would have been to decrease the debt-to-GDP ratio in the years to follow, but myopic policy constraints did not allow its execution although it has been strongly argued in the literature.

Keywords: Greek Public Debt Accumulation, European Sovereign Debt Crisis

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1. Introduction

The beginning and persistence of the European sovereign debt crisis from 2009 to 2014 – although regarded as a continuation of the 2008 global financial crisis – reflected the wide public concerns about the capabilities of several Eurozone Member States to repay or refinance their government and government-guaranteed debts. In late 2009, the country that ignited these fears was Greece. It was the first developed country in the world that defaulted on its obligations since World War II and that sought international assistance in servicing its outstanding debt. The Greek sovereign debt crisis put forward a number of questions to the policy-makers and wider academic community. What Greece has done wrong in its transition from a flexible exchange-rate economy to a fixed-exchange-rate economy in the 1990s? Whether the role the international financial market played in Greece's demise was precipitated by the lack of compatibility between its financial liberalisation policies and its fiscal policy in the 1980s and the 1990s? Were there any other instances in recent Greek financial history of speculative attacks due to the financial liberalisation of its financial markets? What were the background reasons for a developed country's default in a currency union apart from its absent monetary policy? Whether the level of Greek sovereign debt was unsustainable in 2010 taking into account that it had reached similar levels in the 1990s or not?

While these questions could be examined in a plethora of academic research papers, here, we will endeavour to offer some preliminary remarks on the issue of the accumulation dynamics of the Greek public debt from 1981 to the end of 2000. In some aspects, the paper continues the work of Stournaras (1992) and Stournaras (1993) on the accumulation of public debt in the 1980s by analysing Greece's economic developments in the 1990s. It will also add to the literature discussed in the next section on how joining the Eurozone affected the Greek economy positively by decreasing debt-servicing interest rates and falling budget costs. At the same time, the paper will argue that the financial liberalisation that eased the establishment of the European Economic and Monetary Union (EMU) caused a number of negative effects, such as dependence on debt refinancing due to low servicing interest rates as well as extensive exposure to the volatility of international financial markets. We will also argue that several Greek governments did not take into account that the European regulatory amendments concerning financial liberalisation transposed in Greek legislation in the 1990s might adversely affect government debt accumulation in the future once the years of growth end if no appropriate fiscal policies balancing them were put in place. The government debt mismanagement by the main political parties has also contributed to a major upward shift in external indebtedness of the Greek state in the years preceding its accession to the EMU — this process connected directly excessive budget deficits and the country's electoral cycles.

The paper is organised as follows: Next section offers an examination of the accumulated literature concerning the issue of Greek sovereign debt. Then follows a section summarising the empirical data about its accumulation during the period from 1981 to 2000. The fourth section explores the historical facts related to the legal amendments in the European regulatory framework and outlines how their transposition in the national banking and financial legislation in the late 1980s - early 1990s had allowed the Greek government to change from borrowing from the internal financial market to expanding its foreign liabilities by the process of financial liberalisation. The final section concludes with a number of observations on the impact of the transition from internal to the external refinancing of sovereign debt and its reflection upon the sustainability of the country's servicing and refinancing capabilities. It also offers additional questions for further surveys.

2. Literature

The economic causes of Greek debt accumulation between 1981 and 2001 have only a limited cover in the literature about the topic of the Greek sovereign debt crisis (2010-2018) (Alogoskoufis (2012); Arghyrou and Tsoukalas (2011); Dellas and Tavlas (2012)). One may observe a tendency to place responsibility for the debt accumulation on political parties of the PASOK (Πανελλήνιο Σοσιαλιστικό Κίνημα) and Nea Demokratia (Mitsopoulos and Pelagidis (2011b)).

Most scholars consider Greece's default on its sovereign debt in May 2010 an expected development of several political, social, and economic rigidities and deficiencies that troubled the Greek economy for decades. Scholars pay attention to its various macroeconomic disbalances such as the deteriorated fiscal sustainability, enormous public debt-to-GDP ratio, widespread tax evasion, a generous pension and social security system, vast state administration, and abuse of Greek and European subsidies to support private consumption and business investment (Akram et al. (2011); Alogoskoufis (2012); Arghyrou and Tsoukalas (2011); Kollintzas et al. (2011); Lapavitsas (2019); Mitsopoulos and Pelagidis (2011b); Nelson et al. (2011); Reinhart and Trebesch (2015); Zestos (2016)). Several studies outline labour market rigidities that adversely affected the competitiveness of the Greek economy (Boukalas and Müller (2015); Bozani and Drydakis (2015); Theodoropoulou (2016)). Other researchers examined tax evasion as a possible cause of Greek fiscal unsustainability (Matsaganis and Flevotomou (2010); Mitsopoulos and Pelagidis (2011a)).

Very few of these papers have examined Greek sovereign debt accumulation in a historical retrospective or have taken into account the oil shocks of the 1970s, which had ended the post-WWII period of economic growth. The global economy entered a period of high inflation and contracting consumption. It was a period of profound change (OECD (1991); Cooper (1994)). Most governments aimed to keep the rising unemployment under control at the expense of stimulation of consumption in the 1970s. Many developed countries followed such demand-driven Keynesian policies, which they ran at the cost of expansion of their public liabilities and promoted extensive social programs. Greece could not be left untouched in this global environment. In the 1970s, the oil shocks led to an upsurge in Greek inflation that continued to persist in the 1980s (Figure 1). The widening budget deficit due to extensive social programs and state subsidies to loss-making companies caused an increase in government debt domestically and abroad (Figure 2).

Only four pieces of research by Stournaras (1992), Stournaras (1993), Arghyrou (2015), and Koliopoulos and Veremis (2010) – the author is acquainted with – have taken into account the change in the external environment in the 1970s that affected Greece's balance of payments and the competitiveness of Greek companies a decade later.

Stournaras (1992) and Stournaras (1993) considered the failure of the Greek economy to adjust after the oil shocks of the 1970s and pointed out that three more factors caused a sharp increase in the public debt. Firstly, the government-induced wage increases and price controls reduced the profitability of the Greek companies, which affected their taxation. Secondly, the country subsidised outdated and internationally uncompetitive sectors in the economy. Thirdly, Greek companies failed to restructure themselves after joining the EU in 1981 due to their family ownership and traditional technologies. Stournaras emphasised the importance of the election years on the primary public sector deficits due to the excessive rise of social expenses.

Arghyrou (2015), on the other hand, noted that the Greek economic policy in the 1980s followed the outdated Keynesian approach with significant state expansion in the economy resulting in double-digit inflation rates and budget deficits, while the public debt-to-GDP ratio increased from 22.5 per cent in 1980 to 94 per cent in 1989.

Koliopoulos and Veremis (2010) offer a more detailed account of the policies implemented by two successive PASOK governments of Andreas Papandreou in the 1980s (1981-1989). Many Greek exporting companies faced deterioration of their competitiveness due to higher energy bills and raising labour costs at the beginning of the 1980s. Since these firms employed a substantial number of workers, the Greek government decided to nationalise and subsidise them to keep unemployment within reasonable limits. In 1983, Papandreou's government passed Legal Act No 1386/83 via the Greek Parliament for the establishment of the Organization for industrial restructuring (Οργανισμός Ανασυγκρότησης Επιχειρήσεων, OAE). The OEA ran a program of state nationalisation of all industrial companies that could not service their incurred debts in the long term and applied for this measure. By 1985 about forty companies - out of two hundred and fifty that filed restructuring applications - employing about 30 000 workers had been taken over and managed by OAE. The Organisation covered their debts, arranged new credit lines, and appointed new boards (OECD (1986); OECD (1987); OECD (1990)). Most of these companies ended up operating or were privatised by 1991, whereas once the OEA accomplished its purpose, it was closed in August 2002.

Koliopoulos and Veremis (2010) also noted a peculiar change in Greek society under Andreas Papandreou – the establishment of a wide network of PASOK's political clients such as labour unions, regional associations, agricultural cooperatives and other social groups and their leaders. Until then, the client–patron relationship was personal - all clients were trusted associates of the political leader. The political patron-client network suggests that the party would assume the responsibility for the mismanagement, caused damages or running of the public company into loss of each party member appointed to manage a state or municipal public company. While these political bonds do not necessarily imply corruption and bribery, Trantidis (2016) argued that the newly established political network had changed the rules of the political game and had grossly affected the worsening of disbalances of public finances. The expansion of the public liabilities by the Papandreou government however has been mostly in the domestic market. OECD (1991) noted that the Greek private and state-owned commercial banks were the main buyers of the Greek government bonds (non-inflation indexed) denominated in Greek drachmas.

Given the persistent double-digit inflation in the 1980s (Figure 1), however, and several devaluations of the drachma by 15%, the government effectively financed its expenses at a minimal cost since it was selling its non-inflation indexed bonds to the state-owned banks. In Stournaras's (1992) calculations the effective real interest rate on central government debt, which is composed of the average interest rate plus the revaluation effect due to the drachma depreciation minus the CPI inflation rate, was about zero. While the oil shocks of the 1970s and the social policies advanced by the Papandreou government were the main causes for the inflation in the early 1980s, Koliopoulos and Veremis (2010) maintain that its persistence in the late 1980s was due to constant catching-up of the wages of state administration and public enterprises with inflation levels.

Zestos (2016), on the other hand, argued that most of the Greek public debt is due to the policies of the Nea Demokratia governments (1974-1981; 1990-1993; 2004-2009). The one of Konstantinos Mitsotakis (1990-1993), which is within the period of current examination, tried to alter the social policies of previous PASOK governments and to change the inflation expectations decided to freeze the state administration salaries, cease indexation of pensions, raise taxes and improve public finances. The government had to refinance part of PASOK's incurred public debt and take a new one to meet up its public obligations. Its revenues collapsed due to widespread tax evasion. Yet, after three years of unsuccessfully fighting inflation, the government had to resign and lost the parliamentary election to PASOK. The next four socialist governments (1993-2004) could not improve the state of public liabilities. It is within their terms that Greece decided to join the EMU. The major challenge to the Greek government was to align its economic indicators to the requirements laid down in the Maastricht Treaty (1992) and Growth and Stability Pact (1997). Greece did not cover three main targets: its debt to GDP ratio exceeded 60%, so it was considered not fiscally sustainable; its budget deficit was over the stipulated 3% threshold. Acceptance to the EMU required that Greece rein in its inflation and align it to the recorded inflation of the three member-states with the lowest rate of inflation to ensure the stability of the country's economic growth.

The paper continues the analysis of Stournaras (1992) and Stournaras (1993) concerning the economic, legal, budget and other debt-related developments in Greece in the 1990s. Both papers of Stournaras – as well as these debt-affecting developments – were the major gaps in the literature summarised in this and the preceding section, which the paper tries to contribute by filling in.

3. Observations on the empirical evidence

The empirical evidence about the Greek government and public sector debt is rather contradicting. On the one hand, the Global Debt Database of the International Monetary Fund holds information about Greece's General Government Debt but provides no information about the Public Sector Debt between 1981 and 2000. On the other, the OECD database provides data from 1995 onwards. Both of them are collated in Table 1 at the end of the article.

The data in the OECD's *Surveys on Greece* seems to be a rather neglected source in consulted historiography on the issue although they provide historical datasets back to the 1960s. Of course, these reports reflect both the current state of economic data and later changes in methodologies of statistical accounting. The statistical methodology is outlined in the European System of Integrated Economic Accounts published in 1970 (ESA (1970); second edition 1978) and revised later in 1995. The ESA followed global guidelines on national accounting offered by the United Nations, i.e. the System of National Accounts. One finds several differences between currently available data on the OECD website and published country surveys on Greece in the past when comparing Table 1 and Table 2. In the latter, one may find that Greek authorities reported various statistical terms with different scopes and definitions. In their reviews covering periods of a year and a half, these reports provide information about public and publicly guaranteed debt or consolidated public sector debt – sometimes excluding military debt, gross public debt, wider public sector debt, etc. One also finds that there is no data concerning public sector debt as a share of GDP as this statistical category first appeared in 1987 (OECD (1982); OECD (1983); OECD (1986)). The OECD raised concerns about the quality of Greek statistics back in its 1992 report. Table 2 summarises how both data and definitions changed over different editions. Of course, statistical reviews of data are permissible regarding past periods, but incoherence in applied terminology makes it difficult to compile long datasets and offer systematic analyses.

While, on the one hand, within the period between 1981 and 2000, international organisations implemented a number of methodological alterations in statistical accounting. On the other hand, both the IMF and the OECD might have had different reporting requirements that have also affected the data. In spite of these observations, all three different kinds of sources of statistical information on Greece clearly demonstrate the public debt accumulation tendency (well evidenced in Graph 2).

4. Historical facts

4.1. Economic development in the 1990s

The OECD's *Surveys on Greece* are also a valuable source of historical information that deals with various government and legislative changes affecting the economic performance of the country. One finds, for instance, that once the Papandreou government was out of power in 1989, the Nea Demokratia could not manage to reduce the level of public liabilities, but rather increased them in their term of office (1990-1993). The OECD (1995) survey informs that the government deficit accounts for a part of the very fast upsurge in public debt in 1993. (115 per cent of GDP compared with 92 per cent in 1992). Its authors noted that the Government settled its liabilities to the Bank of Greece representing some 15 per cent of GDP by the Economic and monetary union stage two requirements. Because of this, the government issued debt to increase the capital base of state-owned credit institutions, so they could make provisions against non-performing assets.

To meet the requirements to join the newly established EMU, Simitis' government have run fiscal consolidation programme accompanied by a reduction of the debt-to-GDP ratio from 111 per cent in 1996 to a planned 103 per cent ratio in 2000. The numbers reported in the OECD surveys however differ as well evidenced when comparing Table 1 and Table 2. The OECD team found out that the substantial GDP growth in the 1990s, falling interest rates on refinanced debt securities, a primary surplus of more than 5 per cent of GDP since 1998, and significant privatisation receipts, did not lead to a rapid decline in Greek debt-to-GDP ratio. They argued that it was due to unfavourable "deficit-debt adjustments".[1] If performed correctly, these adjustments would result in a slow decrease in the debt-to-GDP ratio, but this is not observed in Greek data.

These economic trends are also due to the transfer and re-evaluation of government debt from drachma into foreign currencies (US$, ECUs, euros) and statistical acquisitions of financial assets, such as capital transfers into public enterprises. The public debt also changed its structure since the share of debt with initial short-term (less than a year) maturity fell from 9.4 per cent of GDP in 1998 to 3.9 per cent in 1999, indicating a lower sensitivity of the budget to changes in short-term interest rates. The Greek government has accommodated a policy aimed at lengthening the average debt maturity through the substitution of bonds for treasury bills and the issue of ten-year and fifteen-year securities. OECD (2001) recorded that this development provoked the continuing interest of foreign investors in purchasing long-term fixed-interest government securities so to capture the capital gains.

The 1990s illuminate certain institutional and fiscal rigidities in the economic policy of several different Greek governments. Despite the rather favourable conditions such as long periods of GDP growth, substantial privatisation receipts and falling interest rates of the newly issued debt,

[1] See ECB's definition: The difference between the change in debt and the deficit is known as the "deficit-debt adjustment" (DDA) or, more generally, as the "stock-flow adjustment". European Central Bank Statistical Data Warehouse web-site.

these governments could not alter the tendency of debt rollovers and renegotiations. Partly this was due to inflation persistence and spreading tax evasion, which burdened the fiscal policy decisions.

4.2. Financial markets liberalisation in the 1980s and the 1990s

Ericsson and Sharma (1996) and Hondroyiannis et al (2004) well overviewed the Greek financial market and its reforms between 1980 and 2001. Both pieces of research add to the thorough survey undertaken by Stournaras (1992) and the OECD (1995) on the state of banking and financial regulations and institutions prior to Greece entering the Eurozone.

Until the early 1980s, the financial system in Greece was institutionally determined and supported by the state. The supervision of the banking system reflected a sophisticated framework of credit rules, while interest rates were administratively fixed. Effectively, it was an instrument of the Greek government's fiscal policy either by means of public spending or by means of investment. The capital market was grossly underdeveloped. The liberalisation of the financial system slowly commenced in 1982, when the Monetary Committee transferred monetary policy management to the Bank of Greece and a limit on the central bank's financing of the government was imposed. Interest rates on government securities were gradually elevated to the level of bank deposits, while in 1985 the general public was allowed once again to buy treasury bills. One year later, drachma-denominated bonds were sold again at foreign markets. Following the 1987 Report of the Committee for the Reform and Modernisation of the Greek Banking System, the process of gradual and extensive deregulation and liberalisation of the market accelerated motivated by international developments and the need for participation in the single European market for financial services. The same year interest rates on deposits were deregulated so to align them with the market rates on short- and long-term loans.

In August 1990, the Bank of Greece lifted its injunction on individuals and legal entities to participate in Treasury bill auctions (OECD (1991)). The process of deregulation of the financial system continued at a fast-tracking pace due to the integration of European Council Directives (Second Banking, Prospectus, Insider Dealing, Admission of Securities, and Major Holdings) into the Banking Law of August 1992. The Bank of Greece removed the banks' obligatory investment ratio in Treasury bills from 40 per cent of deposits to zero by 1993. The banks had the option to convert their obligatory holdings of government securities into negotiable bonds with varying maturity (3-8 years) and pegged interest rates to the twelve-month Treasury bills (OECD (1992)) The Bank of Greece also completely abolished commercial banks' obligatory investment in government securities in May 1993 (OECD (1993)). The legal requirement obliging state and private commercial banks to allocate part of their total deposits as preferential loans to small- and medium-sized companies implemented similar changes in banks' investment behaviour. External transactions were also liberalised in 1991 and 1992 both with EC and non-EC countries. OECD (1992) recorded a partial liberalisation of capital movements concerning investments in securities and real estate in 1991. The entire process of financial liberalisation is well outlined in OECD (1995).

Foreign investors became the main buyers of Greek government bonds since the state commenced issuing bonds in foreign currency (ECUs) in the late 1980s and accelerated issuing such securities in the 1990s (OECD (1990); OECD (1991); OECD (1992)).

The European legislation implemented in the national laws did not lead to a more prudent fiscal policy since the high level of public debt persisted to burden Greece in the 1990s. The link between the implementation of European directives and sustaining a high debt-to-GDP ratio is not considered in the available literature, since European institutions cannot be held responsible for errors in the national fiscal policy. However, the bright prospects to join the Economic and Monetary Union helped Greece sell government papers at far lower interest rates in comparison with those countries that were not engaged in the establishment of the EMU. The servicing costs on the Greek government debt diminished as per cent of the budget expenses in the late 1990s. The OECD country surveys on Greece in the 1990s and early 2000s allow me to make two more observations.

Since Greece implemented European financial markets directives from 1987 until 1994, it opened its stock exchange and other financial markets to foreign players. The Greek exchange rate crisis broke in May-June 1994 as the drachma was the subject of a speculative attack. The substantial general government deficit of 13 per cent and the very high public debt-to-GDP ratio of 117 per cent provoked this attack (OECD(1995)). The Government and the Bank of Greece managed successfully to repel it, but it set an example that the high debt-to-GDP ratio may attract financial market speculators to attack a developed country.

The difficulties with the used terminology in the OECD surveys outlined above apply to the public debt servicing expenses as illustrated in Table 3: in various issues, one may discover information about the Total interest payments, Total external debt servicing, Total servicing of the external debt of the public sector, etc. On the one hand, one may observe a considerable increase in the interest payments on the external public debt, but on the other, one may also observe a change in statistical reporting as these categories ceased to be published in the OECD surveys and one finds them replaced with data about deficit-debt adjustment since OECD (2001).

The servicing costs on government debt, including interest payments, gradually diminished as per cent of the GDP and budget expenditures due to the prospects of Greece joining the EMU (OECD (2002); Dellas and Tavlas (2012)). Thus, OECD (2002) reports that the interest payments on public debt as per cent of the GDP decreased from 11.2 per cent in 1980 to 1.4 per cent in 1995. Of course, one is to take into consideration that the Greek public debt was bought mostly by domestic banks in non-indexed drachma securities in 1980. Given the inflation, the actual cost was not of such proportion as reported, but close to zero as Stournaras (1992) argued. The major buyers of Greek public debt were international banks and companies in 1995. Moreover, not only were securities inflation indexed but also their issuing bore a considerable exchange rate risk to the Greek government of drachma depreciation given their value in US$ or ECUs. Yet, should we accept OECD data, the savings from the decrease of this budget expenditure did not materialise in lowering the debt-to-GDP ratio as indicated in OECD (2001). The OECD staff observed that nearly half of the new government debt in the 1990s covered losses of Greek public enterprises and state-owned banks or their outstanding corporate debts. From 1984 to 1997, the annual gross financing needs of about fifty public enterprises was circa 4 per cent of GDP per year, while the current and capital transfers from the government budget averaged about 2 per cent of GDP per year. Public debt refinancing and depreciation explain the rest of the required financing as argued in OECD (1998).

5. Conclusions and further research directions

When we try to sum up the various developments outlined in previous sections, one finds that the piling up of public debt in the early 1980s was in line with the global tendencies to accommodate the oil shocks of the 1970s. However, once the debt level reached a mark over 90 per cent of the debt-to-GDP ratio, the Greek authorities had to design a sustainable long-term strategy to decrease this proportion and not leave this issue to international organisations such as OECD or IMF. Such strategy was the stabilisation program developed under Minister of Finance, K Simitis, in 1986-1987. Both the achieved results and Simitis himself had fallen victim to the electoral cycle since Andreas Papandreou overspent the public finances in the years preceding the parliamentary elections in 1989 and 1990. While Nea Demokratia targeted tax increases and freezing up wages and social expenses in the early 1990s, a number of successive Papandreou- and Simitis-led PASOK governments financed their stay in power by renegotiating debts and sustaining close debt-to-GDP ratios in spite of the positive GDP growth from 1993 until 2000. The PASOK governments allowed also increasing tax and social contributions evasion and expansion of the public sector (including public enterprises) wages and social spending in the 1980s and 1990s. As Stournaras (1993) observed, the PASOK governments did not address the disparity between rising pension and social expenses and the falling pension and social contributions but covered the difference by increasing public debt. By budget expenditure widening, the PASOK governments tried not only to support domestic consumption but also to create a class of people that will serve as a political backbone during the election process. None of these strategies did work out feasibly but allowed the level of public sector debt to fluctuate around 100 per cent of GDP, thus undermining the fiscal sustainability in the medium and long term. Greece successfully managed to stay afloat in years of abundance for over twenty years (the 1990s-2010) with this debt-to-GDP ratio. However, political and electoral dependency on the revenue and expenditure sides of the Greek government budget and the openness of the Greek financial market drew the attention of global financial risk-takers to attack Greece via the drachma exchange rate in 1994. This weakness was exploited after Greece joined the EMU when the global financial speculative players betted against Greece's public finance capacities to refinance its 2010 due euro-denominated securities.

The prospects opened to Greece after 1992 when the EU Member States headed towards the establishment of the EMU along with the final stages of financial liberalisation that ended about 1993 allowed the Greek government to refinance its domestically sold securities with internationally demanded securities at similar yields. This transition in borrowing and the associated risk of international speculative attacks were not hedged with appropriate fiscal policies though. This process, along with positive GDP growth, could have been used to lower the debt-to-GDP ratio in the 1990s. Alas, the decline in this ratio did not occur and we shall explore further the reasons behind this phenomenon in future research.

The current research will be further advanced both by extending the survey of the public debt dynamics either until the outbreak of the Greek sovereign debt crisis in 2010 or until the more stable return of Greece to international financial markets in 2018. Another more general avenue of investigation is to re-examine the theoretical framework that covers the transition of an economy of a developed country from a flexible to a fixed exchange rate and what the policy challenges ahead of its fiscal policy are. Undoubtedly, Greece offers an example of some of them such as the persistent high budget deficit and widespread tax evasion. In light of recent global developments during the COVID-19 pandemic when many countries expanded their public liabilities over 100 per cent debt-to-GDP ratio, one further theoretical issue to be addressed in future research is what the maximum serviceable ratio is. This issue is even more pressing given the sharp and high increase of interest rates on their papers which central banks were forced to offer in order to fight the global and domestic inflation pressure caused – to a large extent – by the disruption of world supply channels during the pandemic years and the following Ukrainian crisis.

Table 1 - Greek Government Debt as % of GDP (1981-2000) in the IMF and OECD databases

Year	International Monetary Fund	OECD
1981	26.68	
1982	29.31	
1983	33.59	
1984	40.06	
1985	46.62	
1986	47.14	
1987	52.41	
1988	57.07	
1989	59.82	
1990	73.15	
1991	74.68	
1992	79.97	
1993	100.29	
1994	98.3	
1995	98.99	97.84
1996	101.34	97.84
1997	99.45	103.52
1998	97.42	102.13
1999	98.91	102.98
2000	104.93	112.57

Sources: IMF Datamapper. Debt. Greece; and OECD, General government debt

Table 2 - Total Public Sector Debt as % of GDP

OECD country review/year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
1982										
1983										
1986										
1987	39.9		54.2		81.5	81.8				
1990	39.7				76.9	79.4	84.5	91.5	100.0	
1991					85.1	86.5	93.5	99.9	104.2	
1992					85.1	86.3	93.0	99.6	104.3	110.4
1993					85.1			99.6	104.3	111.6
1995										83
1996										93.2

OECD country review/year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1992	113.2									
1993	113.8	118.2								
1995	86	92	115							
1996	93.3	99	121.4	120.9	120.8					
1997	93.3	99.0	121.4	120.9	121.0	120.9				

1998			121.2	119.7	118.8	120.8	118.1			
2001								105.5	104.6	
2002						111.3	108.2	105.0	103.8	102.8

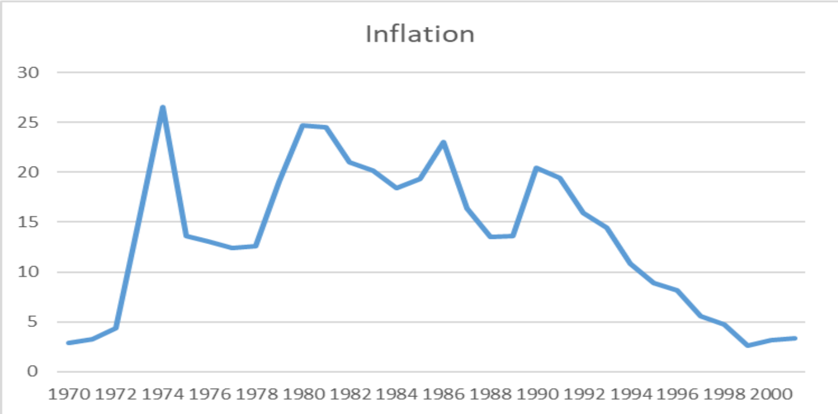
Sources: OECD (1984); OECD (1986); OECD (1987); OECD (1990); OECD (1991); OECD (1992); OECD (1993); OECD (1995); OECD (1996); OECD (1997); OECD (1998); OECD (2001); and OECD (2002)

Table 3 - Interest payments on external debt servicing in millions of US$

OECD country review/year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
OECD 1984	802.5	770								
OECD 1986	803	769	840	1070						
Public sector	703	641	728	922						
OECD 1987	803		840	1070	1222	1329				
Public sector	703		728	922	1083	1216				
OECD 1990	803		840		1222		1497	1628		
OECD 1991				1519	1845	2174	3382	3588	3307	3845
Interest payments				922	1083	1216	1385	1528	1649	1733

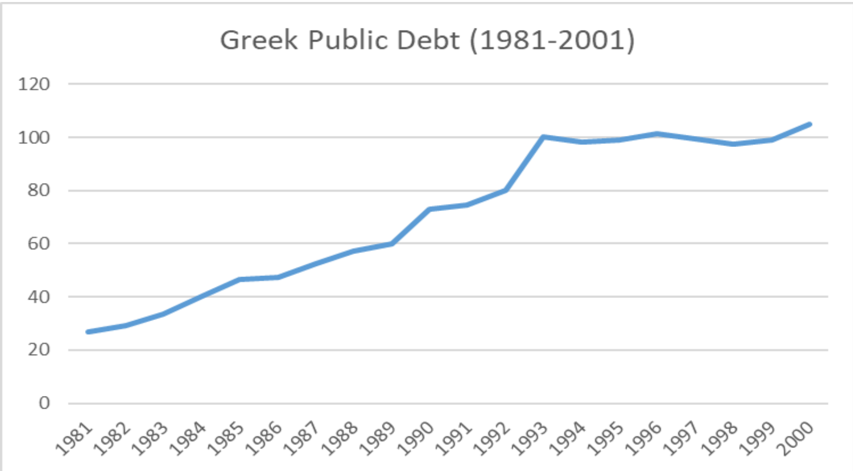
OECD country review/year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
OECD 1992	5364									
Interest payments	1812									
OECD 1996	4 520	6 790	5 800	6 089	8 933					
Public sector	1 936	2 262	1 984	1 986	2 490					
OECD 1997	4 520	6 790	5 800	6 089	8 933	14 367				
Interest payments	1 420	1 823	1 566	1 617	2 047	2 193				
OECD 1998		6 271	5 241	5 313	6 989	7 815	8 654			
Interest payments		1 823	1 566	1 617	2 047	2 193	1 896			

Sources: OECD (1984); OECD (1986); OECD (1987); OECD (1990); OECD (1991); OECD (1992); OECD (1993); OECD (1995); OECD (1996); OECD (1997); OECD (1998); OECD (2001); and OECD (2002)



Source: World Bank (2022)

Figure 1 - Greece's Inflation (1971-2001)



Source: IMF Datamapper. Debt. Greece (2022)

Figure 2: Greek public debt (1981-2000)

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Abbreviations

ECB – European Central Bank
IMF – International Monetary Fund
OECD - Organisation for Economic Co-operation and Development