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## **The absorption of a shadow economy in the Greek GDP**

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### **Abstract**

The aim of this paper is to explain why a small part of shadow economy was absorbed by the Greek GDP once in 2008 and the necessity to do so again in order to overcome the current economic/debt crisis in Greece. It is believed that the negative result of the austerity measures that were imposed to the countries which have been hit by the sovereign debt crisis create a decisive European issue. The size of the shadow economy in Greece is debateable although there is research that estimates it between 28%-

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30%. Also, the majority of people in Greece during the current economic crisis are trying to balance "the lost part" of their income through their participation in the shadow economy. In the previous years, Eurostat had expressed its reservations on the credibility of the quality of the Greek debt and deficit figures. Specifically, Eurostat had publicly expressed doubts on the debt and deficit figures transmitted by the Greek authorities since 2002 by the way of "footnotes" or specific comments in the press releases where these figures are published. Also, Eurostat continued to express its reservations on the data presented at the notification of March 2004. Because of the present Greek sovereign debt crisis, the authors of this paper present their opinion that part of the shadow economy must be adopted in the Greek GDP and become part of the official economy.

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## 1. Introduction

This paper presents why a shadow economy was included in the Greek GDP in the past and the necessity to do so again in order to overcome the current economic crisis. The membership of Greece into the EU is a special case and worth mentioning (see also <http://www.ecb.europa.eu/pub/pdf/conrep/cr2000en.pdf>) Commission of the European Communities, 2000, "European Central Bank (ECB) Convergence Report 2000 (prepared in accordance with Article 122 (2) of the Treaty). Greece entered the Exchange Rate Mechanism (ERM) I on 16 March 1998. At that time, the central parity was 357 Greek Drachmas (GRD or GDR) against the European Currency Unit (ECU) and the fluctuation band +/-15%.

However, the ERM II replaced the ERM I in January 1999 and the euro replaced the ECU – for further discussion see various Convergence reports of 1996-2012 (<http://www.ecb.europa.eu/pub/convergence/html/index.en.html>). After the conversion rate of the euro had been determined, the drachma was valued at a central rate of 353,109 GRD against the euro. On 17 January 2000, the central rate of the Greek drachma was re-valued at 340.75 GRD against the euro.

As mentioned in Bitzenis and Makedos (2013) the statistical issues of the shadow economy, GDP, debt and deficit figures were debatable between the Greek statistical authorities and Eurostat. Eurostat continued to express its reservations as to the data presented at the notification of March 2004. Because of the present (2009-2013) Greek sovereign debt crisis, the authors present their opinion that part of the shadow economy should be absorbed (included) in the Greek GDP and become part of the official economy.

## 2. The Revision of the Greek Government Deficit and Debt Figures in 2002-2004

Statistical issues in this field were debated between Eurostat and the Greek statistical authorities far more frequently than with any other EU Member State. Eurostat was forced to introduce several times footnotes about reservations especially on the quality of the Greek debt and deficit figures. Decisions and interventions of Eurostat forced in 2002 the Greek statistical authorities, amongst others, to reclassify share convertible bonds and share exchangeable bonds in government debt, to treat some capital injections as capital transfers, to treat debt assumption by the government as non financial operations, to classify DEKA (a state-owned company) internal part of the general government, and to launch a new survey on social security funds.

As mentioned in Bitzenis and Makedos (2013) Eurostat had publicly expressed doubts on the debt and deficit figures transmitted by the Greek authorities since 2002 by the way of “footnotes” or specific comments in the press releases where these figures are published. Following these reserves, the Greek authorities transmitted in November 2002 a revised notification for the years 2000 and 2001, published by Eurostat. This press release referred only to Greece. In 2002, the correction led to a deterioration of the Greek deficit by 1.0% of gross domestic product (GDP) for 2000 and 1.3% for 2001, while public debt increased by 1.5% and 1.9% of GDP respectively. The main reason for the increase of the public debt was the inclusion of information on share convertible bonds issued by special purpose vehicles in the context of securitisation operations undertaken by the government. Eurostat again had reservations on the data presented at the time of the notification of March 2004. Thus, Eurostat published on 7 May 2004 another specific press release on Greece (n° 62/2004), where the Greek deficit for 2003 was corrected from -1.7% to 3.2% of GDP, and the debt from 102.4% to 103.0% of GDP.

Thus, in 2004 the Greek statistics underwent a drastic revision. In September of the same year it was announced that the real government deficit for 2003 was 4.6% of GDP instead of 1.7% of GDP, which had been initially reported. Also, the government deficits for 1997-1999 and 2000-2002 were revised upwards at least two percentage points of GDP. Data revisions of such a scale raised questions about the reliability of the Greek statistics on public finances. The ECOFIN Council of 21 October 2004 took note of the Commission’s information note on the fiscal notification of Greece and welcomed the Commission’s initiative to present a detailed analysis of Greece’s deficit and debt data back to 1997.

The information provided at the time of Eurostat’s mission to Athens at the beginning of September 2004 made it possible to clarify with the Greek authorities some of the severe problems. Accordingly, based on Eurostat (2004, p.12), the data transmitted by Greece at the time of the notification of September 2004 and published by Eurostat on 23 September (press release No 117/2004) made it possible to withdraw some of the reservations previously expressed on certain budgetary data during the years 2000 to 2003. The Greek deficit passed, in relation to previously published data, from -2.0% of GDP to -4.1% for 2000, and from -1.4% to -3.7% for both of the years 2001 and 2002, and finally from –

1.7% to – 4.6% for 2003.

As mentioned in Bitzenis and Makedos (2013) following these revisions, which concerned data from 2000 up to 2003, a mission was sent to Athens on 12 October 2004 to check with the Greek authorities the debt and deficit data for the years before 2000. As this concerns historical data, the Greek authorities could not provide in place data concerning transactions undertaken in the period 1997 - 1999. Therefore Eurostat asked them to provide the relevant information by 18 October 2004. This concerned, among other things, data on military expenditures, the recording of EU grants, and data on interest expenditures and capitalized interest, as well as methodological explanations on the recording of capital injections. Mr Kontopirakis, General Secretary of the National Statistical Service in Greece, addressed the response to Eurostat on 18 October 2004. This response was not complete and did not fully answer all the questions asked by Eurostat ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_PUBLIC/GREECE/EN/GREECE-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/GREECE/EN/GREECE-EN.PDF)).

The big differences between the notifications in March 2004 and in September 2004 were an undeniable fact. The economic figures of that period explain the accounting rules and the contacts between Eurostat and Greek authorities. The Greek general government consolidated gross debt level at extraordinary nominal value was continuously increased as well as the general government deficit.

## **2. The 9.6% inclusion of shadow economy in the Greek GDP in 2008**

Greece after the above describe revisions that took place in 2004 because of misreported and biased/over-reported statistical data wanted to revise upward its Gross Domestic Product (GDP) for the period 2003-2010 by as much as 25 percent (a quarter) by including parts of its underground economy in the real GDP. This revision would help Greece to meet deficit standards by shrinking its budget deficit as a percentage of GDP.

As mentioned in Bitzenis and Makedos (2013), Greece's debt was the EU's highest at 107.5 percent of GDP (2005). The country had the lowest credit rating among the 12 countries sharing the euro. A change took place that added in the nation's robust black-market industries such as prostitution and money laundering. But becoming "richer" turned out not to be as good as it sounded: The revised GDP figures did cost the Greek government as much as \$600 million ([http://ec.europa.eu/economy\\_finance/economic\\_governance/sgp/pdf/20\\_scps/200607/01\\_programme/2006-12-18\\_el\\_sp\\_en.pdf](http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/20_scps/200607/01_programme/2006-12-18_el_sp_en.pdf)). The country also had the lowest credit rating among the 12 countries sharing the euro. Moody's Investors Service ranked Greece's debt A1, its fifth-highest investment grade rating. Standard & Poor's and Fitch Ratings grade the debt one level lower at A (International Herald Tribune, 27/9/2006).

Greece, decided “to salute” the contribution of high class prostitutes to economy, according to the models of the ancient times. Athens said that its economy was 25% stronger than in reality, in part, thanks to the duties of the prostitutes (The Guardian, 2006). The Greek authorities revised the country's GDP after deciding that the black market should be included in the figures. Greece's economic output was €180bn (£128bn) in 2005 and it would be expected to rise to €194bn the next year (2006). The black economy was estimated at up to €60bn, according to Reuters.

The new figures were the result of Greece's determination to avoid being thrown out of the EU, which had the right to impose hefty fines on a Eurozone country if its budget deficit rises above 3% of GDP. By boosting the size of its economy the Greek deficit would fall from 2.1% of GDP to 1.9%. “Without this change, the deficit would have fallen from 2.6% of GDP to 2.4%”, according to the Financial Times.

The revision of GDP by 26% in 2008 was never accepted during the examination of the data by Eurostat, and it led to an upward revision of 9.6% (OECD, 2009).

#### **4. The Greek statistics from 2009 to 2012 and the pressures of the Eurozone for another revision**

Although most countries have seen estimates for their budget deficit swell over the course of 2009, the magnitude of the Greek revisions (over both 2008 and 2009) and the implications for already excessive external debt financing, have been shocking. The estimated 2009 deficit rose from 5.1% for 2009, as reported to the EC during the spring, to 12.7% by late autumn while the 2008 deficit was corrected from 5.2% to 7.7%. Then, the Greek government was therefore pressed to come up with a convincing program for fiscal restructuring, one which would satisfy the EU and the financial markets.

Greece should cut the budget deficit below 3% by 2012 through reduced spending on public sector workers, defence and healthcare, as well as increased tax collection. Furthermore, despite forecasting a -0.3% drop in GDP for 2010, growth was expected to pick up afterward, reaching 2.5% in 2013. Financial markets reacted negatively based on the implausibility of achieving both the tough fiscal target and the forecast rate of GDP growth target as well as the lack of clarity over where spending would be reduced after 2010 (Rosi and Guilera, 2010).

Greece had the last opportunity to send a strong message to the markets as the aftermath of the October election. On 22 October 2009 the new strong deficit was estimated at 12.5% of GDP and published by Eurostat, and consequently Fitch downgraded Greece. Fitch, S&P and Moody's downgraded Greece again on 8, 16 and 22 December 2009, since the 3.6% of GDP deficit provided by the 2010 budget did not satisfy the international markets.

In the updated SGP, the decline in deficit was envisaged at 4% of GDP and then spreads were at

369pb on 26<sup>th</sup> January 2010. On the other hand, the significant fiscal measures did not appease the international markets and a new round of degradation began in April 2010. The next year (April 2011) Eurogroup decided to help Greece, bringing on the worst financial-economic crisis in the economic history of Greece.

Some of the most serious reasons of the severe Greek crisis were the continuous deficits of the last 36 years, the high and rising public debt, no systematic and real efforts to control expenditure or contain tax evasion, the not suitable fiscal consolidations (1986-1987, 1994-1999, 2005-2006), the Greek entry in EMU without adequate preparation, the continuous worsening of competitiveness after EMU entry, and lastly the magnitude and the frequency of the fiscal data revisions (Manessiotis, 2011).

In the decade before the crisis, a significant portion of rising government expenditures was allocated to increasing the public sector wages and benefits. In 2009, Greek government expenditures accounted for 50% of GDP, with 75% of (non-interest) public spending going to public sector wages and social benefits. Analysts often point out that Greek politicians have traditionally viewed the provision of public sector jobs and benefits as an important way to grant favours and thereby secure electoral support. Among other things, this tendency appears to have helped politically influential public sector unions consistently negotiate generous wage and pension agreements (Nelson, Bekin and Mix, 2010).

On 2 and 21 October 2009, the Greek authorities transmitted two different sets of complete Excessive Deficit Procedure (EDP) notification tables to Eurostat, covering the government deficit and debt data for 2005-2008, and a forecast for 2009. In the 21 October notification, the Greek government deficit for 2008 was revised from 5.0% of GDP (the ratio reported by Greece, and published and validated by Eurostat in April 2009) to 7.7% of GDP. At the same time, the Greek authorities also revised the planned deficit ratio for 2009 from 3.7% of GDP (the figure reported in spring) to 12.5% of GDP, reflecting a number of factors (the impact of the economic crisis, budgetary slippages in an electoral year and accounting decisions). According to the appropriate regulations and practices, this report deals with estimates of past data only. Revisions of this magnitude in the estimated past government deficit ratios have been extremely rare in other EU Member States, but have taken place in Greece on several occasions.

As far as the EDP notification of 21 October 2009 is concerned, the data had not been validated by Eurostat and a substantial number of un-answered questions and pending issues still remained in some key areas, such as social security funds, hospital arrears, and transactions between government and public enterprises.

As mentioned in Bitzenis and Makedos (2013) these questions needed to be resolved, and it could not be excluded that this would lead to further revisions of the Greek government deficit and debt data particularly for 2008, but possibly also for previous years. The most recent revisions were an illustration of the lack of credibility of the Greek fiscal statistics (and of Greek macroeconomic statistics in

general) and showed that the progress in the compilation of fiscal statistics in the country, along with the intense scrutiny by Eurostat since 2004, had not sufficed to bring the quality of Greek fiscal data to the level reached by other EU Member States. Even if the existing governance framework for fiscal statistics at EU level functioned satisfactorily and enabled improvements of a statistical and methodological nature, it could not prevent deliberate misreporting of data ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_PUBLIC/COM\\_2010\\_REPORT\\_GREEK/EN/COM\\_2010\\_REPORT\\_GREEK-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/COM_2010_REPORT_GREEK/EN/COM_2010_REPORT_GREEK-EN.PDF)).

## 5. Conclusions

The indications became a reality when in March and then in September of 2002 Eurostat refused to validate the Greek data. The debt was revised two times in a row and the surplus that was presented from the Greek government appeared as deficit. As a result, in March 2004 Eurostat continued to refuse to validate the Greek data. Also, the main point was that the accounting method often affected seriously the deficit numbers. Unfortunately, the same scene continued in 2009 and 2010.

Eurostat in 2010 mentioned that *"Greece's fiscal deficit for 2009 has been upped to 15.4 percent of GDP and the state debt to 126.8 percent of GDP, in revised figures published by EUROSTAT in Brussels. A Greek finance ministry announcement issued later said that "the cycle of dispute and lack of credibility of the Greek statistical data closes today, and one more step in the direction of restoring the confidence of the citizens, the international partners and markets in the fiscal administration of Greece is completed"* (Europe Intelligence Wire, November 15, 2010, p.1, <http://www.accessmylibrary.com/article-1G1-242176114/greece-projects-deficit-9.html>).

In that context, the ministry reassured the public regarding speculation on new additional measures, noting that "the drastic reduction of the deficit by 2014 will be effected in a balanced and fair way and in accordance with the commitments that the country has assumed". According to the finance ministry, apart from Eurostat's lifting (with its publication of the finalised data for the period 2006-2009) of all its reservations on Greek fiscal data, equally important is the fact that the biggest deficit reduction ever in Greece (6 percentage points of GDP or more than 14 billion euros, much higher than initially planned) was achieved in 2010.

According to figures released by the finance ministry, the fiscal deficit for 2009 had been revised upward from 13.6 percent of GDP to 15.4 percent of GDP, or 66,150 million euros, representing an increase of 1.8 percentage points of GDP. The upward revision was attributed to the inclusion of public organisations to the General Government (representing a deficit increase of 0.7 percent of GDP), adjustment of the social security funds' and OTA (local government) accounts (representing a deficit increase of 0.9 percent of GDP), and a reduction of the 2009 GDP (corresponding to a 0.2 percent



increase in the deficit).

The revision also affected the figures of the state debt, into which the accrued debts of the state enterprises that had been entered into the General Government have been incorporated. The 2009 General Government deficit had revised to 298,032 million euros or 126.9 percent of GDP from 115.4 percent of GDP, representing an increase of 11.4 percentage points of GDP, the ministry said. The revision was attributed chiefly to the incorporation of the DEKO (public utilities and organisations) to the General Government figures (representing a debt increase of 7.75 percentage points of GDP, or 18,204 million euros) and adjustment of the off-market swaps (representing a debt increase of 2.3 percentage points of GDP, or 5,530 million euros).

Following the 2009 debt and deficit revision, the minister said that the deficit for 2010 was now projected at 9.4 percent of GDP, adding, however, that in relation to 2009, a fiscal adjustment of more than 14 billion euros had been achieved from over 36 billion euros in 2009 to approximately 22 billion euros in 2010. As for the state debt, it has now been revised to 144 percent of GDP. The ministry also claimed that the figures released by Eurostat was the result of close cooperation and hard and consistent work by Eurostat and the recently-established independent Hellenic Statistical Authority (ELSTAT) and all other agencies involved in the provision of fiscal statistics (Athens New Agency, 2010). The report by the International Monetary Fund (IMF) projected that Greece's public debt would peak from its current level of 143 percent of GDP to 172 percent of GDP in 2012 and remain above 130 percent through 2020.

In addition, Greece, decided to accept the shadow economy (9.6%) into the GDP, like the contribution of high class prostitutes to economy, according to the models of the ancient times. It said that economy was 25% stronger than in reality, in part, thanks to the duties of the prostitutes. The Greek authorities revised the country's GDP, after deciding that the black market should be included in the figures. Since that became one time with positive results, it can be again now, since can offer solutions against to Greek problems.

All these facts led members of the Eurozone to call Portugal, Ireland, Greece and Spain as "PIGS", the worst being Greece. The fact was that the Greek budgetary statistics have undergone a multiple and drastic revision and now the Eurozone is completely negative against the effort for deterioration. If Greece made the best effort to improve its statistics the control would be more effective. But if we reconsider all these facts, we can realize that in the latest European financial crisis few or no one is innocent. Initially, none of the Greek governments had tackled necessary structural reforms of the economy, nor had made real and genuine efforts to control public finances. Moreover, it is safe to believe that the EU must have known about the actual economic situation of the real numbers of Greek deficit and debt, but under the pressure of the financial market or other reasons, had preferred only to refuse to validate the Greek data and not to impose sanctions or to announce the real facts.



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