

A Post - Keynesian Analysis of The Greek Crisis

Yunanistan Krizinin Post-Keynesyen Analizi

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Abstract

The purpose of this study is to analyze the causes of the Greece debt crisis and discuss about possible solutions for the Greek economy in Post - Keynesian perspective. In this framework, first, the establishment and evolution of the European Monetary Union will be briefly examined. Second, the effects of the monetary union on the Greek economy will be discussed. Then, the remedies for the crisis along with the measures taken within the scope of the rescue package adopted will be examined from a Post Keynesian perspective. At this point, Hyman Minsky's Financial Instability Hypothesis and Michal Kalecki's profit function will be used to analyze the reasons behind the crisis. Last but not least, Employer of the Last Resort Programme, which can be summarized as a program where the government takes into employment of anyone who is willing and able to work, will be discussed as a cure for the recovery.

Key Words: *European Union, Greece Debt Crisis, Post-Keynesian Economic Policies*

Jel Code: *E12, F15, F45, O52.*

Özet

Bu çalışmanın amacı Yunanistan borç krizinin nedenlerini analiz etmek ve Yunanistan ekonomisi için olası çözüm önerilerini Post - Keynesyen bir bakış açısıyla incelemektir. Bu çerçevede, ilk olarak, Avrupa Para Birliği'nin kuruluşu ve gelişimi incelenecektir. İkinci olarak, para birliğinin Yunanistan ekonomisi üzerine olan etkileri irdelenecektir. Daha sonra, krizin ardından öne sürülen kurtarma paketi kapsamında alınan tedbirler dahilinde, kriz için olası çözümler Post-Keynesyen bir bakış açısıyla incelenecektir. Bu noktada, Hyman Minsky'nin finansal istikrarsızlık hipotezi ve de Michal Kalecki'nin kar fonksiyonundan yararlanılarak, krizin nedenleri analiz edilecektir. Son olarak, devletin çalışmaya istekli ve de çalışabilecek durumda olan herkese iş olanağı sağlaması anlamına gelen devletin nihai işveren olma rolü, ekonomik toparlanma için bir çözüm önerisi olarak tartışılacaktır.

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Anahtar Kelimeler: Avrupa Birliđi, Yunanistan Borę Kriđi, Post-Keynesyen Ekonomi Politikaları

Jel Kodu: E12, F15, F45, O52.

Introduction

Economic integrations aim to increase wealth by eliminating the barriers on free trade between countries. Integration can be made in a wide range. Bilateral discount in tariffs by preferential trade arrangements is a pure example where the strict one is economic and monetary unions that takes away the economic self-dependence of the country. In economic and monetary unions, some economic decisions are made by the delegated authority for the member countries, which might cause them to lose economic/monetary policy independency. The dynamics of integration can be explained by the degree of openness and also economic and political dependence (Köse and Karabacak, 2011). The more level of integration the more dependent the country is.

European Union (EU) was including six countries³ in 1951, when European countries started making economic cooperations with each other. In time, the number of the members of the union increased to twenty eight⁴. Although Greece has entered the European Union in 1981, the economic integration process of Greece had been progressing since 1951. Greece has entered in 2001 to the economic and monetary union, after completing required criterias and accepted euro as its single currency. In Greek economy, there had been ongoing structural problems (fiscal deficits etc.) for long years. Furthermore, by entering the union, Greece experienced severe competition from economically strong countries such as Germany, and using single currency in the union restricted Greece to follow an independent monetary policy. When all these factors are triggered with the subprime mortgage crisis in the US, Greece went into a debt crisis.

Although Greece is not the only country in the Economic and Monetary Union (EMU) to experience the crisis, she was the most affected country. One of the reasons for the EMU was to support member countries in the case of social and economic problems. However, it was experienced that the Eurozone countries failed to give the message that they were supporting Greece clearly. For instance, Germany was not sure about giving support to

³ Belgium, Germany, France, Italy, Luxemburg and Holland

⁴ Germany, Austria, United Kingdom, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Croatia, the Netherlands, Ireland, Spain, Sweden, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and Greece.

Greece. “Because of the disagreements among EU countries, markets assumed that the implicit guarantee on Greek debt by other EU countries has been withdrawn. While Eurozone policy makers were debating whether bailouts are illegal, at the same time there were some ambiguities about European Central Bank’s (ECB) collateral eligibility criteria that is the ECB’s policy to accept or refuse the downgraded” (Kouretas and Vlamis, 2010 : 396). The hesitations about supporting Greece raised criticism of European and Monetary Union (EMU) and people started to question whether the EMU can continue or not. All of these discrepancies created a suspense on the intervention of the Eurozone in terms of the debt crisis in Greece and the intervention of the Eurozone⁵ comes from the Article 122/2 of the Lisbon Treaty⁶,

“Where a Member State is in difficulties or is seriously threatened with severe difficulties caused by natural disasters or exceptional occurrences beyond its control, the Council, on a proposal from the Commission, may grant, under certain conditions, Union financial assistance to the Member State concerned. The President of the Council shall inform the European Parliament of the decision taken.”

The purpose of this study is to analyze the causes of the Greece debt crisis, and discuss about possible solutions for the Greek economy in a Post Keynesian/Minskyian perspective. Trying to examine the crisis through Post Keynesian arguments allow us to analyze the causes of the crisis from a different point of view. Specifically, we will emphasize the importance of Minsky’s financial instability hypothesis on the causes of the crisis. Furthermore, we will also discuss that Greek economy can recover faster through an employer of the last resort program. This paper contributes to literature by analyzing the Greek crisis through financial instability hypothesis and also offers a solution for the crisis from a Post Keynesian perspective. In this context, first section examines the institutional framework, causes and the historical and current developments of the crisis including the measures taken within the scope of the rescue packages. Second section explains the Post-Keynesian perspective and the remedies for the crisis and the last section concludes.

⁵ The countries that use Euro as its currency is considered as eurozone. These countries are; Germany, Austria, Belgium, Finland, France, the Netherlands, Ireland, Spain, Italy, Luxembourg, Portugal, Greece, Slovenia, Malta, Cyprus, Slovakia and Estonia.

⁶<http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-the-functioning-of-the-european-union-and-comments/part-3-union-policies-and-internal-actions/title-viii-economic-and-monetary-policy/chapter-1-economic-policy/390-article-122.html>

1. The Institutional Framework, Causes, the Historical and Current Developments of the Crisis

Economic and Monetary Union is the last stage of the European Economic Integration Process that includes a large number of countries. EMU needs convergence of the fiscal policies between member countries, and the biggest step for the convergence is the Maastricht Treaty which was signed in 1992 and entered in force in 1993.

The Maastricht Criteria⁷ can be summarized like below:

1-Harmonised Index of Consumer Prices: The HICP of the country should not exceed the average of the lowest HICP inflation + 1,5% of the 3 EU member countries HICP inflation.

2- Government Budget Deficit: The ratio of the annual government deficit to gross domestic product (GDP) at market prices must not exceed 3%.

3- Government debt - to - GDP ratio: The ratio of gross government debt to GDP at market prices must not exceed 60%.

4- Exchange rate stability: Candidate countries should not have devalued the central rate of their currency in the previous two years. Exchange rate stability before entering exchange rate mechanism will also be taken into account.

5- Long-term interest rates: Long term interest rates should not be more than 2% higher than the average of the similar 10-year government bond yields in the 3 EU member states that have lowest HICP inflation.

The common currency euro was accepted by the 12 member countries⁸ and EMU is completed in January 2002. The process started in 1999 but completed in 2002 so, old currencies of the countries remained till 2002. Greece has entered the union in 2001 after completing required Maastricht criteria. To maintain the Maastricht Criteria, countries should carry out tight fiscal policies. Carrying out tight fiscal policies using a single currency in a monetary union is not easy because the fluctuations in the value of the currency will affect all the countries, even if the country has nothing wrong in its national economy. In the long run the danger is that countries can ease up their fiscal policies so that the stability of the euro can be affected. Therefore, to state fiscal rules, Stability and Growth Pact (SGP) created and enacted in 1999. The aim of this pact is to prevent the formation of

⁷ https://europa.eu/european-union/sites/europaen/files/docs/body/treaty_on_european_union_en.pdf

⁸Germany, Austria, Belgium, Finland, France, Netherlands, Ireland, Spain, Italy, Luxembourg, Portugal and Greece.

excessive budget deficit in the medium term in member states by providing tracking balanced public finance policy. It was builded up for ensuring the robustness of the public finance. One important tool of SGP is the excessive deficit procedure (Köse and Karabacak, 2011). The ratio of intended or actual budget deficit to GDP should not exceed 3%. A small violation of the deficit ratio above the limit is accepted as it is thought to be temporary and the excessive deficit procedure will not be implemented. But if a state is found by the commission that its ratio is higher from the limit ratio substantially, commission will recommend the Council of the European Union to open up an excessive deficit procedure. By implementing excessive procedure, European scale of austerity policy was enacted (Güngen, 2013). In April 2009, European Union Council opened up an excessive deficit procedure to Greece and gave suggestions about procure fiscal balance. To ensure it, council remarked the measures that Greece should take until September, October and December 2010.

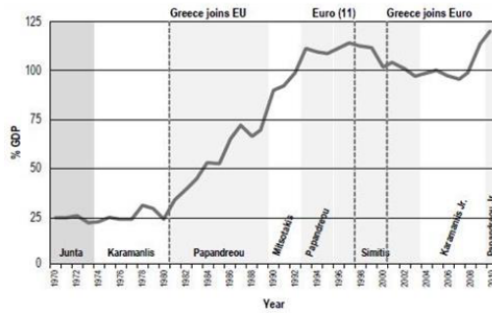
The first decade of the membership to EU, Greece was in a period struggling with its ruined macroeconomic performance because of the adoption of expansionary fiscal policies which was financed especially by domestic borrowing. Along with the local populist practices that efforts to prevent macroeconomic stability, the gap between Greece and the other countries increased more over time. In the second decade of the membership, with the first Convergence Program which aimed a reduction of inflation, budget deficits, and public debt, the Greek government advance a serious stabilization program (Oltheten, Pinteris and Sougiannis, 2004). By acting like an external mechanism to monetary policy the Convergence Criteria and the Maastricht Criterias provoked reforms in the fiscal and monetary policy regime that result in a lower inflation rate and this yields stabilization and economic growth. Although these positive developments helped her for economic convergence, it was not enough for Greece to prevent the crisis.

There are lots of determinants that have contributed to the crisis in Greece and can be classified into 2 groups: endogenous and exogenous (Kouretas and Vlamis, 2010). The endogenous factors consist of the dynamics of the Greek economy itself, especially macroeconomic imbalances along with the credibility of the policies and the policy makers. These factors can be classified in three main groups: Government debt and deficit, data credibility and tax evasion, and current account problems.

Makrydakís, Tzavalis, Balfoussias (1999) have examined the Greek economy for the period 1958-1995 and they found out that the Greek government failed to perform intertemporal budget constrain. So that in the long run the debt became larger and turned out to be unsustainable.

As figure 1 shows, up to 1980-81 the public debt seems to be cognizable. In 1981, Papandreou won the election. In order to increase per capita income of households, the government introduced an economic programme that relies on comprehensive borrowing from other markets (Kouretas and Vlamis, 2010). In addition to this policy, Greek economy was supported by the incoming capital flows from the EU in the way of agricultural subsidies. “Running consistently widening public deficits in conjunction with declining external competitiveness played a decisive role on the deteriorating fiscal stance of the Greek economy” (Kouretas and Vlamis, 2010: 394). The deficit became larger day by day. In the figure 1 below the evolution of the public debt can be seen more clearly.

Figure 1: Public Debt of Greece



Source: Kouretas and Vlamis (2010)

Although the economy is not well-doing, Greece had experienced high growth rates, but these growth rates were due to the false reporting of the data. In 2004, European commission found out that Greece hugely underreported the budget deficit data for the years 1997, 1998 and 1999 and warned Greece about the data corruption. This corruption in data actually helped Greece to join the Eurozone. In 2009, the newly elected government declared that the fiscal data were underreported. Furthermore, tax receipts in Greece were consistently lower than the expectations. Schneider and Buehn (2012) calculated the size of the black economy for the period 1999–2010 at approximately 27 percent of GDP, whereas OECD average is around 20 percent. Moreover, Artavanis, Morse and Tsoutsoura (2015) estimated that annually approximately €28 billion income is not reported. In such circumstances, one cannot say the credibility of the country.

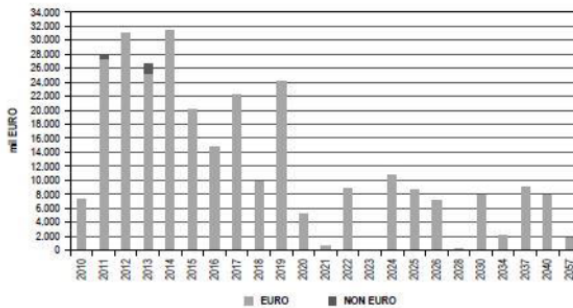
Figure 2: Current account to GDP ratio



Source: www.tradingeconomics.com

Besides, after entering the EMU, competitiveness of the Greece diminished and current account deficit increased. The figure above shows that, especially after 2004, current account to GDP ratio decreased significantly. “Increased “twin deficits” together with the lack of structural reforms in home regarding labor market flexibility, social security and market competition, obliged Greece to issue new bonds at short maturity periods and at higher interest rates compared to the “anchor” of the EMU, that is Germany” (Kouretas and Vlamis, 2010: 395). To attract the investors, higher interest rates were given and the maturity of the Greek public debt is given in figure 3 as of 2010 and it is densely in between 2011-2020.

Figure 3: The maturity of the Greek public debt (as of 2010)



Source: Public Debt Management Agency

The exogenous factors can be considered as the factors that are not depending on the Greek economy itself, especially depending on the Eurozone countries and the subprime mortgage crisis in the USA. After

globalization, every movement of a country can affect the other through financial markets. The sub-prime mortgage crisis started in the USA in 2007 affected Greece through complex financial institutions. Furthermore, the effects of relatively strong economies of Europe, such as Germany, also contributed to the crisis. For example, reducing labor costs within the borders of Germany hurt Greece. In addition, a high fraction of German GDP comes from exports, and the most important German export destinations are within the borders of Europe. Hence, to maintain the demand for their products, Germans have manipulated organizations and operations of the European Monetary Union. They jockeyed other governments to take out loans that are not suitable for their economic conditions. By doing so, they cleared the way for reckless lending practices throughout Europe by using European institutions. The reason behind this phenomenon was to sustain international demand for German products, since it is crucial for Germany's economic well-being. Thus, careless policies of Germany also contributed to Greek crisis.

Eurozone countries cannot establish their own monetary policy, e.g. cannot increase the money supply, print money or devalue money. There is only one central bank –ECB- that 'aims to ensure a proper functioning of the money market and to help credit institutions meet their liquidity needs in a smooth manner. It is the sole issuer of banknotes and bank reserves. Its objective is to maintain price stability in euro system and single monetary policy that it is in charge'.⁹ As member countries' cannot determine monetary issues by themselves, if they will be unsuccessful in following fiscal discipline, sooner or later, they will experience a sovereign debt crisis. For Greece, in years between 2000 and 2008 the debt stock increased and the growth rate of the country stayed at the average of 4%. Although there was a growth in the economy, fiscal instabilities rose year after year. The government expenditures were growing twice as much as nominal production and almost threefold of the tax incomes. Combining these factors with the current account deficit problem, the Greek economy experienced a deep recession in 2008. From the beginning of the depression, real GDP has fallen by 25%, which can be considered as a major recession.

The standard of living decreased, unemployment rate increased, especially number of the young unemployed rose. The measures taken by the government containing austerity policies like reducing the wages or increasing the tax rates etc. made the public unhappy and the Greeks protested the government.

⁹European central bank. (n.d.). Retrieved September 11, 2017, from <https://www.ecb.europa.eu/mopo/intro/objective/html/index.en.html>

In 2009, there was an election and the new government expressed that the financial data were all distorted. The data and the projections were revised soon after. In April 2010, Eurostat reported that the fiscal deficit was 32,4 billion euros. To lower the deficit in 2012, Greece government published a stability programme in January 2010. EU Commission also supported the new programme and suggested to reduce the wage payments. According to this suggestion the government announced that the monthly wages were frozen in such a way that did not exceed 2000 euros. And in March 2010, Greece government declared a new package which reduces wage payments and increases tax revenues. At the same time, Eurozone expressed that they will give financial support to Greece.

It is important to not to lose the confidence to euro as the other countries are also a part of the system, using euro as currency. Therefore, the Eurozone countries and IMF set up a financial support mechanism that ensured 30 billion euros. While Eurozone countries and IMF was studying on the package, Greece government imposed a tax reform law which tried to prevent tax evasion and burden the tax to high income individuals (Köse and Karabacak, 2011).

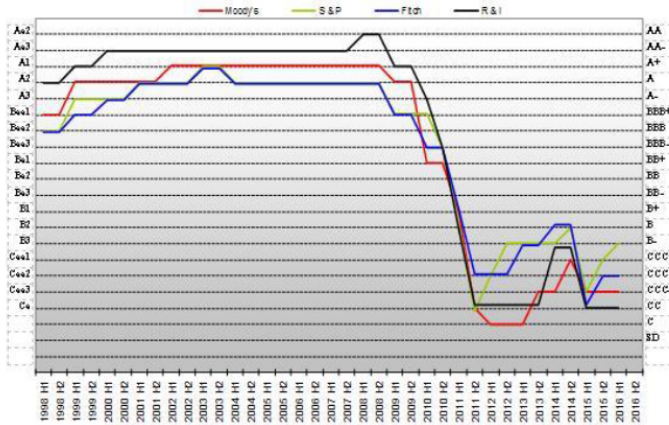
In April 2010, the international credit rating agencies (Moody's, S&P) decreased the Greece's credit rating. The rating agencies and their last credit ratings are shown in the table 1 and depicted in figure 4. Furthermore, share sells in Greek stock market was prohibited by the Greece Capital Market Commission. After all, the government asked to put the package to action from IMF and Eurozone countries.

Table 1: Latest Ratings of Greece

Rating Agency	Rating	Outlook	Date
Moody's	Caa3	Stable	September 2015
Fitch	CCC	Stable	August 2015
Standard & Poor's	B-	Stable	January 2016
Rating And Investment	CC	Stable	June 2015

Source: Public Debt Management Agency

Figure 4: Latest Ratings of Greece



Source: Public Debt Management Agency

In May 2010, Eurozone countries and IMF declared a new 3 years long recovery package for 110 billion euros. It contained strict conditions and reforms to increase the competitiveness of the economy. The package contains austerity policies like reducing the wages or increasing the tax rates which made the public angry. The Greek government endeavored to satisfy the provisions of the agreement due to public pressure and aggravating economic recession (Harari, 2015).

In February 2012, another financial assistance package was agreed and the total amount became 240 billion euros. This bailout was also formed by eurozone and IMF that contained more regulations. “Greece’s private sector creditors taking losses (almost 100 billion euros) on their holdings of Greek sovereign debt: this followed from a belated recognition that no amount of austerity and loans on their own could put Greece’s debt burden at the time on a sustainable footing” (Harari, 2015: 4).

IMF estimated in 2014 that for 2013, the nonperforming loan ratio was about to 40% of all loans provided by Greek banks which showed that the economy was going worse in spite of all the austerity measures. Interbank lending market was closed to Greece which made the Greek banks obliged to find funds from ECB. Even though on February 2015 Greek bonds were not accepted by ECB as collateral funding, Emergency Liquidity Assistance (ELA) programme ensured additional liquidity to Greek banks (Harari, 2015). ELA funding is temporary and for the use of solvent banks. ECB

must provide this final lifeline because Eurozone countries will be also affected by the instability of the euro.

Although Greek government demanded for a higher increase in ELA funding, in February 2015, the ECB raised the funding to 68.3 billion euros from 3.3 billion euros.

At the beginning of 2015 while the negotiations were going on, the Greek government proposed an extension of six months for the assistance programme. And on 20th February, the Euro group declared that they extended the programme for four months, not six months.

The terms of this agreement are summarized as below (Harari, 2015: 9-10)

- Extension of the current programme
- Bank recapitalization fund moved to Eurozone bailout fund
- Possibility of a follow-up arrangement after this arrangement ends
- Budget surplus target lowered for 2015
- Reaction and analysis of the deal

According to 20 February agreement, Greece cannot make use of any distribution of bailout funds up to the end of June 2015. Along this restriction Greek economy has a large deficit and unemployment is high, how will they repay the upcoming debts?

In March 2015, Greece was required to pay 1.5 billion euros to the IMF and 4.5 billion euros in short-term government debt. Just after the financial assistance programme ends, Greece had to repay a total of 6.7 billion euros to the ECB in July and August for the expiration of the bonds they have.

In January 2015, the radical left-wing Syriza party won the elections. They formed a coalition with the right-wing independent Greeks. They were both supporting anti-austerity policies. Before the election, Syriza propagandized the anti-austerity policies; they declared that decreasing the large budget deficit, reducing the wages and public spending, increasing tax will affect the production adversely.

In June 4, Greek Prime Minister Tsipras stated that the installment to IMF will be paid in 5 June, but after that declaration the repayment was postponed. This is a good example that they are caught in a quagmire. Along with the false statement of Greek Prime Minister Tsipras, the doubts about repayments continued. One solution would be allowing Greek banks to purchase newly-issued government debt which would ease the payments of the government to the IMF.

In June 8, Greek Finance Minister Varoufakis stated that Greek government could convince the public and could ask for permission to make reforms. He also declared that, they are not the only country that effected by the crisis in Europe. A lot of countries affected from the crisis and it is not true that the North of the Eurozone is hardworking, and the South is not. The crisis must be solved jointly. Later, in the first week of June, European Commission President Jean-Claude Juncker stated that, Greece's exit from the euro zone is out of discussion, but if Greece will not make reforms to improve public finances, so they "cannot remove the rabbit from the hat".

Alexis Tsipras government's bailout offer did not coincide with the insistent European leaders as they want Greece to carry out austerity policies. As leaders could not agree, in June 2015 the government decided to make a referendum in July 6. Greek people voted for selecting the rescue package to pay the debt to Troika¹⁰ about 1.6 billion euros. Voting for "yes" means austerity policies of the rescue package of the Europe leaders must be done, voting for "no" means, as Tsipras promised before the election, refusing the salary cuts and layoffs. Greek banks remained close until the referendum day. And the withdrawal limit from the banks was 60 Euros until 8 of July which made people attack to banks to withdraw their money. By this limit, the economic vitality that Greece need was harmed. According to the results announced by the Greek Ministry of Interior, 61.32 % said no and 38.68 % said yes (the participation ratio is 62.5 %). The results indicated that Greek people wanted the government to refuse the creditors' provision of the cash flows. Soon after the announcement of the results of the referendum and although the result was victory for Greek Finance Minister Yanis Varoufakis as he criticized the austerity policies severely, he resigned from his party. He expressed that, he heard, some of the Euro group meeting participants prefer his absence from the meetings. After his reassignment, bailout meetings and processes went issueless.

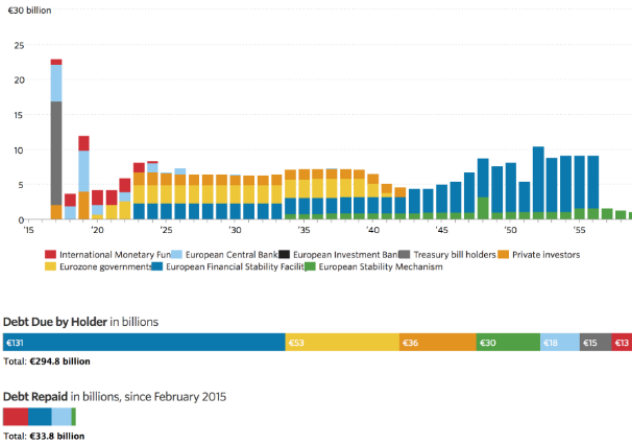
Although referendum results indicated that majority of Greek people did not want the austerity measures supported by Europe countries and also Tsipras promised not to implement austerity policies, Greek government confirmed the rescue package of 86 billion euros for three years in exchange for the austerity measures. With the help of the release of financial assistance, Greece could pay 3.2 billion euros of debt payments to ECB. German parliament also approved the third bailout with 439 yes and 119 no votes. But this time IMF is not involved to the financial aid package. Among the reforms demanded by creditors, as well as privatization, there are cuts in the pension's and defense budget, increase in revenue, structural reforms

¹⁰ The European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF) is called Troika.

about institutions and an increase in the wealth tax, and also the abolition of early retirement. In particular, the demand of the privatization of public enterprises makes Syriza worry about future. Under the agreement, ports, regional airports and the power transmission line operations will be open to privatization. In this regard, the Energy Minister Panos Skourletis expressed that they were looking for an alternative to the sale of energy companies.

There is no consensus about the method of payment but the debt repayments are in considerable amounts so that measures should be taken rapidly. The repayments that the government will have to do for years 2017-2059 are shown in figure 5 and almost all of the debt is in the form of euro.

Figure 5: Debt Repayments of Greece (2017-2059)



Source: Wall Street Journal, "Greece's Debt Due: What Greece Owes When"

The effects of the package are uncertain but one thing is clear that Greece cannot repay the debt without the help of Eurozone.

2. The Post Keynesian Perspective and the Remedies for the Crisis

Euro is designed for reducing transaction costs and to accelerate the trade between Europe countries. However, using a single currency might cause countries to lose their independence in not only monetary policy and also exchange rate policy. Countries cannot devalue money, issue money and change interest rates. As these functions are abandoned, there must be an authority that fulfills the functions at community level. Also, member countries' (can be classified as North and South countries) national income, industrialization ratio, rate of growth and growth models' are different and

this was not taken into account while building Eurozone. Germany for instance had been adopting export-led growth while Southern European periphery and Ireland had been adopting credit-led growth model (Stockhammer, 2011).

The common currency provides advantages to the countries, especially in the context of trade between the countries. However, unlike many national central banks (stand-alone countries issue sovereign bonds in national currencies and the central bank is a lender of last resort in the bond market), in ECB the lender of last resort function is absent and ECB could not give liquidity to the banks they need. But after crisis in the Euro area, ECB's liquidity providing in government bond market was discussed¹¹ and the Eurozone member states deputy a mechanism for temporary fiscal backstop named the European Financial Stability Facility (EFSF) and the future European Stability Mechanism (ESM). EFSF and ESM are not a direct substitute for ECB and it is not a full guarantee that the cash ensured will always be convenient to pay out sovereign bondholders but they are a safeguard financial stability in Europe by providing financial assistance to the Eurozone countries¹² (De Grauwe, 2016).

EMU has a monetary pole (monetary policy is centralized), but it does not have a political pole (fiscal policy should also be centralized). Although strict controls exist through Maastrich criterias, the fiscal policies mostly left in countries' authorities. Following common monetary policy across countries, but following individual fiscal policies across countries triggered the crisis in Greece.

In 1997, Milton Friedman expressed that the United States is a good example of a common currency. Fiscal policies are different between states but there are minor differences. But according to him, in Europe, trade cannot be free like in US; policies cannot be that much close between the countries. This currency union is not an economic union; it is exactly a political union without a political pole.

ECB targets a sole interest rate for all countries but one size does not fit all. "Common interest rate, which for many countries was too low for domestic conditions, exacerbated problems and led to financing of governments with rising deficits by banks from countries with falling deficits. The result was growing differences in government debt, growth, and tax yields, which were a major cause of the sovereign debt crisis that is threatening the survival of the euro" (Kregel, 2012: 3). The euro system is established on the base of price stability. The prices and inflation rates

¹¹Many arguments formulated for being lender of last resort: risk of inflation, fiscal consequences, moral hazard, etc. For further information see De Grauwe (2016).

¹² For detailed information see <https://www.esm.europa.eu/efsf-overview>

converged but labor costs did not converge. When the members of a union are not economically homogeneous, there is a high possibility of experiencing imbalances across the union. To prevent the growing imbalances as in the Eurozone, union should have a clearing mechanism (Perez-Caldentey and Vernengo, 2012). Clearing mechanism implies reprocessing the balances from surplus to deficit countries in order to sustain the factors that drive aggregate demand. In this system, the creditor country involves into the system in a way such that it acts as a part of equilibrium mechanism and the burden should have shared between countries (Perez-Caldentey and Vernengo, 2012). This clearing mechanism could act like a stabilizer, as it proposes more balanced external accounts across the union, and enlarge the capacity of fiscal expansion. In this context, Bancor Money, proposed by Keynes, could be suitable for the European Monetary Union. The idea behind bancor money is simple. Countries hold accounts that act like reserves, namely gold in 20th century or possibly any foreign exchange reserves today. But they can borrow/lend from the International Clearing Union depending on their import/export performances. Keynes also argued that a self-correcting mechanism could be beneficial in the long run in order to avoid accumulation of credits or debits. (Klaffenböch, 2008)

In European Union the characteristics between countries are admissible. Sometimes the total foreign trade balance for the union gives deficit or surplus, but these are not chronic. Up to 2007, it did not take attendance that much but after the US subprime crisis as Germany and Austria had a higher current account surpluses, Spain and Greece experienced further deficits (Ireland experienced deficit although she had a surplus before the crisis.).

Germany is the most criticized country since she implemented mercantilist policies. After accepting euro as its currency, Germany cannot control the value of its currency either; she could not sterilize the US dollar which comes from trade. Therefore, exchange rate increased and exports were affected. The increase in the value of the euro pushed Germans to implement neo-mercantilist policies and assignment of wage (Lucarelli, 2011). German government aimed to reduce labor costs by threatening the employees, facilitating firing, decreasing the severance pay. As a result, labor costs in Germany decreased¹³. This is an important advantage for the

¹³ Germany's export performance cannot explained only by mercantilist policies. Sondermann(2014) showed overall productivity trend is mainly driven by manufacturing sector. Since 1970s, Germany has a strong and growing manufacturing sector that causes Germany's exports to increase, whereas countries like Greece and Portugal experienced a rapid decline in their productivity since 1970s, which is one of the important reasons behind the crisis in Greece (Sondermann, 2014).

country. By adopting wage restraint, large current account surpluses occurred. For this reason, an active coordination of wage policy was necessary for the zone. In the beginning of the monetary union, the design of the union was criticized by Keynesian economists. For instance, there was reliance on labor market flexibility but labor markets were complex and wages were not acting flexible as Keynes said. Wage adjustment can be seen a way to calm down the economic crisis. “Wage policy has to ensure that wages grow with productivity growth, that wage growth is consistent with price stability and with sustainable current account positions within the Eurozone” (Stockhammer, 2011: 5). This wage policy means wages must grow at higher rates in Germany than the countries which struggle with their deficits. Relatively lower wages in Germany yield an increase in international competitiveness and rising profitability, and caused higher net exports for Germany and hurt Greece (Goda et.al, 2017). If German wage policy does not change, similar crisis can be seen in the future.

“According to Mundell’s (1961) contribution to the optimal currency area (OCA)¹⁴ theory, focusing on “asymmetric shocks” and how either market mechanisms and/or policy responses might help to rebalance economies.” (Bibow, 2012, 14). Exchange rate arrangement is the simplest way to respond the shock. But this way is invalid in Eurozone so, wage and price flexibility can be used with an internal devaluation. Euroland’s external competitiveness is related to the euro exchange rate while internal competitiveness of EMU partners’ is related to the balancing positions through unit labor costs (Bibow, 2012).

As North countries of the Eurozone (for instance Germany) implemented mercantilist policies, South countries’ current account deteriorated. Current account balance can be simply written as:

$$\text{Private sector balance} + \text{Public sector balance} = \text{Current account balance} \quad (1)$$

As in equation (1), current account balance is divided into two parts: private and public sector. In the previous section, we have analyzed the problems of the public sector in detailedly. Now, through Kaleckian profit function and a Post Keynesian perspective, we will analyze the problems about private sector. Recall the Kalecki (2013) profit function:

$$\text{Profit} = I + C_k + (G - T) + NX + S_w \quad (2)$$

where I is investment, C_k is capitalist’s consumption, G is government spending, T is taxes, NX is net exports and S_w is worker’s savings. With no government, closed economy and assuming S_w is equal to zero, we get,

¹⁴ The optimal currency area theory claims that common wage arrangements and bargaining are needed to compete with asymmetric shocks.

$$\text{Profit} = I + Ck \quad (3)$$

It is clear from the above equations that, there is a direct relationship between investment and profits. Thus, when investment goes up, profits go up. In order to increase profits, investors would like to invest as much as they can, where investment decisions are made on the basis of expectations. Over a run of good times, safety margins decrease and this implies lower risks. Therefore, investors will continue to invest more and more. Profits and output will increase, but at the same time, the amount of debt will also increase. There is no instability at the beginning of this process, but eventually, tranquil times have to come to an end. At this point, individuals and firms realize that the economy is slowing down; therefore, they lower their investment level. The demand for capital assets will decline, profits and/or expected profits will decrease and, there will be a process of debt deflation, with the high level of indebtedness in the economy (Minsky, 1992).

If we look back to open economy Kaleckian profit function again, we can easily see that the government can increase profits by increasing government spending or decreasing taxes. Moreover, if net exports is positive and increasing in an economy, this would also help the economy to fix the debt problem, but if net exports is negative and if government does not intervene in the economy quickly this would increase the instability in the economy.

Furthermore, financial system and institutions play an important role in the overall economy. Especially today and in the 2000's, with more and more involvement of households, governments and international units, the system becomes a lot more complicated and integrated. By the help of financial innovations, the rules and regulations among European banking/financial system are bypassed. Even though the system is a lot more complex, investment continues to play the key role since the way to increase profits is to invest. As we explained above, higher investment yields higher debts. This profit-debt or income-debt process brings us to the three different economic units; hedge, speculative and Ponzi.

These three units are the Minsky's (1992, 6-7) categorization of financial positions. A hedge unit can fulfill all payment obligations by the income flow, a speculative unit can pay the interest but not the principal, and a Ponzi unit cannot even pay the interest rate. On tranquil times, the economy is usually on hedge units, but after some time, when something happens like an unexpected increase in the interest rates, a change in the monetary policy, or an external shock, the expectations turn into pessimistic and the economy starts to move from hedge to speculative to Ponzi finance. Most of the banks do not lend to Ponzi units since the debt level constantly

increases at this point. When the firms do not get any more loans, they either go default or sell their assets and the Ponzi units collapse, which yields a debt deflation and a crisis. This process is called as financial instability hypothesis.

We can also argue that another reason for the financial instability is the relationship between asset prices and bank credit. An increase in the profits or expected profits increases asset prices, which in turn increases the firm's capacity to borrow and invest. When investment increases, output and income increases too and profits go up. This process yields a boost in the amount of credit given because the firms want to invest more and banks face a lower risk and do not want to miss this opportunity. Thus, during the stable and tranquil times, banks start to create an unstable economy by lowering their safety margins. Therefore, when something disturbs the economy, this expansion stops and with the lower safety margins, the economy goes into crisis.

“Since the government cannot create euros but merely generate them by taxing the private sector, it must run a surplus sufficient to cover debt service and amortization if its guarantee to meet debt service is to be credible” (Kregel, 2012: 3). As long as they cannot borrow money from the ECB, fiscal surpluses in euros became important for repaying the debts. According to Kregel (2012), the current crisis is not a crisis of the euro; it is a crisis of Eurozone members' ability to fulfill the conditions for financing debt using fiscal policy tools.

While explaining financial instability hypothesis, Minsky considers the private sector. That is, there are borrowing firms and lending financial institutions. In the case of Eurozone, countries such as Germany and France acted like lending institutions, due to their developed economies and advanced financial markets, whereas countries like Greece and Spain acted as borrowing firms. Applying Minsky's view for EMU, member-states should be engaged in “Hedge” finance, but if it cannot do it, additional debt to the private sector should be supplied, since ECB cannot lend money. In the last case, the government would be experiencing “Ponzi” finance means that the country must be borrow to meet debt service.

As mentioned in the previous section, there have been lots of bailouts for Greece recovery but austerity policies were really expostulated by Greek people. In June 2015, the prime minister of Greece announced the referendum about the bailout conditions. The people were asked if they approve the conditions proposed by Juncker Commission, the ECB and the IMF. As a result of the referendum, the Greek people choose to reject the bailout conditions. After the referendum, the leftist government tried to end austerity, implement a development program, and actually believed that it

can modify the Eurozone system (Papadimitriou, 2016). However, the negotiations after the referendum between Greece and the Troika ended against the leftist government and they had to abandon the plan to end the austerity and accept the conditions determined by the Troika. The main proposals agreed by the two sides include more liberalization, more structural reforms, higher taxes and privatization of some public enterprises.

Minsky(1992) argues that, to control the economy in general, or to overcome an economic crisis, government must step in and pursue a policy such that boosts aggregate demand to increase consumption and make the technology more labor intensive. He suggests that developments in technology such as telecommunications or Internet caused heavy financial innovation and increase the vulnerability of economies (Beshenov and Rozmainsky, 2015). This developments and financial innovation made firms to take higher risks and unnecessary loans and eventually, they become insolvent. The result of this process is the crisis. Therefore, the reason of the crisis was the advanced capitalist structure of the economy, and thus, to prevent the crisis, these capitalist institutions must be improved.

Keynesian view argues that unemployment occurs in capitalist economies due to the lack of demand. Keynes suggests that wages and prices are not flexible and the system cannot fix itself, thus to solve the unemployment problem, government must step in and increase government expenditures to boost aggregate demand. Hyman Minsky goes a step further and proposes an employment of the last resort (ELR) program (Işık, 2009, 2012). In a Minskyian perspective, government plays an active role, performs as an organization which regulates the economic system (Vasconcelos, 2014). Minsky argued that there are different forms of big government, and he suggests that big government does not promote moral hazard. On the contrary, it limits bureaucratic discretion in social and political environment, and also encourages individual inventiveness and stimulates job practices (Tymoigne, 2008). The purpose of the program is to take anyone willing to work and provide a job to everyone independent of their skill levels. But one of the main problems of the Greek economy is the high unemployment rates. By November 2016, the unemployment rate in Greece is around 23% and moreover, the youth unemployment rate is around 45%. Implementing an ELR program would definitely decrease the unemployment rate and also help to increase aggregate demand. An ELR program can be considered as a direct job creation program that can be implemented by government and it can be considered as a complement to private sector employment. The program also offers a base wage to anyone to whom willing to work.

According to Post Keynesians, there are a lot of benefits of an ELR program. First of all, government can create jobs independent of workers'

location; hence many jobs can be created in rural areas, improving the conditions of these areas and lowers urban migration. Second, with this program, unemployment will be eliminated by direct job creation, not by boosting aggregate demand (Tcherneva, 2012). Solving the unemployment problem through direct job creation would both be faster and more feasible. Thirdly, as Tcherneva (2012) argues, this program acts like a buffer stock. When economy goes into recession, workers that lost their jobs could work according to this program and when economy recovers, they can go back to work for a private firm with a higher wage. In addition, this program offers jobs to the people with the lowest skills and lowest education among a society. Giving them a job through an ELR program helps to lower inequality among individuals and provide these workers with plausible life standards. Furthermore, employer of the last resort program does not compete with private sector and an ELR worker can be hired by private sector at a wage that is above the ELR wage. In this sense, ELR wage can act as a minimum wage. Since ELR program stabilizes wages at the bottom, it also helps stabilize prices (Tcherneva, 2012). Moreover, people who work in the ELR program could gain some useful skills that one can use in their future career (at higher paying private jobs). Therefore, ELR program is not only economically beneficial, but also socially valuable.

We have argued that an ELR program can be useful in many ways, but what about implementation and affordability of the program? Is it possible for governments to fund all these unemployed workers? Wray (2000) and Tcherneva (2012) suggest that the program can easily be affordable in sovereign currency nations. Wray (2000) argues that although an ELR type program might do a little harm on budget balance, there will not be much damage. He simply claims that government does not need any tax revenue or borrowing to spend its own money. Thus, by issuing money, the government can hire additional labor without having difficulty in its financment. Historically, a direct example of an ELR program cannot be found but Argentina implemented a program similar to ELR, called 'Jefes' in the year 2002. Total spending for the program was only about 1% of their GDP and approximately 5% of the total budget was assigned for the program (Kostzer, 2008).

As we all know, Greece does not have a sovereign currency and cannot print money whenever they want. They are highly dependent on ECB and they cannot implement their own monetary policy. As we discussed in previous chapters, this is actually one of the most important causes of the crisis. So, since they cannot print their own currency and since they are having one of the worst crises ever, how do we expect Greece to fund this program?

To implement the program, we would like to use the concept of geuro, first mentioned by Deutsche Bank's head of research, Thomas Mayer. Mayer argued that geuro could act as a collateral currency and help Greece for the shortage of Euro cash. Geuros should bear no interest and to prevent speculative attacks, should be convertible from euro to geuro only (Papadimitriou et.al, 2016). They can only be used in the domestic market, and furthermore, they cannot be used in private transactions. Since geuros cannot be used in private transactions, government can accept geuros as a tax payment from individuals and the private sector. Issuing geuros would be a fiscal decision; hence it would not interfere with the ECB monetary policy (Papadimitriou et.al, 2016). Basic purpose of issuing geuros is to provide more liquidity to government to stimulate the economy (create jobs) and build more confidence for private sector investments. Thus, the government can issue geuros to boost the aggregate demand through direct job creation and it also generates extra cash to implement the ELR program. Although the main problem in Greek economy is to create jobs and increase aggregate demand as soon as possible, the amount of geuro issued should be decided very carefully to avoid the risk of inflation.

Cost of an ELR program depends on the number of workers employed by the government. According to calculations of Antonopoulos, Adam, Kim, Masterson and Papadimitriou (2014) if Greece chooses to employ 550.000 workers through an ELR program, that would cost annually 7.5 billion euros. Papadimitriou et.al (2015) suggests that Greek government could pay 50% of beneficiaries of these jobs as geuro. Moreover, they also argue that government can also pay some part of the public worker's wages and social benefits as geuros. These geuros paid by government to individuals, would turn back into government as tax payments from individuals and private firms. The total tax revenue of Greek government is around 65 billion euros in 2015 according to the OECD (2016) report. Assuming that all forms of taxes can be paid in geuros and assuming that the government accepts 20% of all payments as geuros, a total of 13 billion geuros could be issued. It has been argued that the half of the cost of an ELR program could be paid by geuros, which equals to 3.75 billion. Depending on economic conditions, the government can also choose to issue 9.25 billion more geuros. If total income stays the same throughout the year, the geuros issued by government would disappear at the end of the year, and government would lose a maximum of 13 billion tax revenue. However, it is highly unlikely for income to stay the same as total employment increased by 550.000 workers. Therefore, we would expect an increase in the tax revenue compared to previous year. Thus, the loss of the government from tax revenue would be less than 13 billion, depending on the rate of increase in total income. Whereas losing some part of tax revenue would hurt government, an ELR program funded by geuros would

boost aggregate demand, help to decrease unemployment, stimulate the economy and helps private firms to increase their investment by providing extra liquidity to the non-financial sector. We also have to remind that ELR programme might not be a permanent program, when economy recovers (growth rates reach sufficient levels), the government can choose to turn back to previous economic policies.

Conclusion

There are a lot of determinants that have contributed to the crisis in Greece both endogenous and exogenous. The endogenous factors include the dynamics of the Greek economy itself, especially macroeconomic imbalances along with the credibility of the policies and the policy makers. The exogenous factors can be considered as the factors that depend on the Eurozone countries and the US subprime mortgage crisis. In this study, we tried to analyze these factors and argued that endogenous factors that include structural problems in Greece, such as fiscal deficits, government debt, current account balance and data inconsistency caused many problems and when they triggered with an exogenous factor, namely the subprime mortgage crisis that started in the USA, Greece experienced a severe debt crisis.

In this paper, we examined the reasons behind the Greek crisis and analyzed the crisis based on Minsky's financial instability hypothesis. Since Greece entered the union, due to the structural differences in member states economies, Greek economy heavily borrowed from other countries and for a long period of time, Greek economy has experienced a speculative finance, where the borrowers can only pay the interest on the bonds back. Then, when the subprime mortgage crisis spread Europe via banking system, both Greek government and firms went into a Ponzi scheme, and they could not even be able to pay the interest on bonds.

After the crisis, the austerity policies the Troika imposed on Greek economy provoked Greek society, and caused heavy social incidents, such as riots. The negotiations between Greece and creditors went on for a long time and in the end, Greece accepted the heavy conditions imposed by creditors. In this paper, we tried to show that, austerity policies are not the only solution to ongoing crisis in Greece. Instead of following these policies, Greek government can apply employer of the last resort program and can fix the economy in a faster and a healthier way.

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