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The European debt crisis: a brief discussion of its causes and possible solutions

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Abstract

The aim of the discussion paper is to define primary sources of European debt crisis and to identify the facts to be taken into account when providing solutions. The paper notes that heterogeneity of Eurozone countries, the lax fiscal policy and the application of different monetary policies have contributed to the emergence and spread of the crisis. The joint implementation of macro-prudential policy with the emphasis on prudential fiscal policy, the introduction of an effective system of fiscal transfers, or a compromise between interventionism and laissez-faire approach are some of the necessary solutions to the Eurozone crisis.

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1. Introduction

More effective allocation of resources in the worldwide economy and the growth of economic performance should be the results of globalization and financial integration. However, the accumulation of risks in the global financial system and the global economy along with their destabilization are the actual effects. (Popov, 2011) Moreover, consistent, politically promoted and economically incomplete European integration is also the cause of the systematic support of moral hazard in the financial sector and the source of economic agents' motivations to live on credit in Europe. The European sovereign debt crisis is, therefore, the result of systematic failures in the global economic and political order and serious structural defects in the Euro project. (Detlef, 2012) Consequently, the aim of the paper is

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to define the main sources of the crisis, theoretically and empirically, and identify the facts that must be taken into account when providing solutions.

The paper is organized as follows. The first section deals with a single monetary policy and the single currency in EMU. The second section discusses the consequences of the Euro Illusion. The third section provides an overview of selected empirical studies on the European debt crisis causes. The final section concludes and gives some facts to be taken into account when providing solutions to the current European sovereign debt crisis.

2. The single monetary policy and the single currency

The primary goal of European integration is to maintain peace and ensure freedom and prosperity in Europe. (European Commission, 2015) Also, the Treaty on the Functioning of the European Union is the confirmation as it emphasizes economic aspects of its formation to significantly limited extent. Moreover, the discrepancy in the opinions of political scientists and economists on the benefits of the single currency, i.e., euro for such a heterogeneous group of countries which constitute the EMU, argues for the goal. Outstanding confirmations are, of course, continually changing increasingly risky conditions and rules in EMU along with controversial politically promoted integration and harmonization of its members. Additionally, the ratification of the Maastricht treaty in 1992 cannot be considered as economically sufficient and reasonable decision due to lack of labour mobility and fiscal transfers, artificial suppression of German unit labour costs and the inflation policy benefiting mainly the surplus countries and a low level of diversification of the economies in EMU. (Detlef, 2012) The previous is documented in the empirical study of Ferreira, Dionisio & Zebende (2014). The authors stress that there are significant differences in the achieved levels of financial integration among selected Eurozone countries by applying the detrended cross-correlation analysis based on the CIP. Their results, based on data before the introduction of the Euro, show the problems of peripheral countries with asymmetric shocks that have prevented them from achieving the full degree of financial integration and gaining benefits from it. The example of such an asymmetric shock is the current debt crisis in the Eurozone. Furthermore, the significant source of problems in EMU is the disregard of fundamental principles for creation of an optimal and trouble-free functional currency area. For instance, according to the authors of Optimum Currency Area Theory, money is the essential tool for absorbing imbalances in an independent state with its own currency. Therefore, a country that decides to abandon its currency with adopting a single monetary policy to create a monetary union loses an important instrument to smooth internal and external imbalances emerging in a monetary union. (De Grauwe & Ji, 2013) Also, there exists a certain trade-off between the homogeneity of countries belonging to a monetary union and the existence of real adjustment mechanisms that would be present in it. Persistence of external imbalances in a monetary union is the main reason for its problems and the significant cause of the debt difficulties of its members. The current example is the European debt crisis in the Eurozone.

Fig. 1 shows major imbalances of the current account balance in EMU. The selected countries with higher and faster growing public debt show a deficit on a current account balance. (Sklias, Roukanas, & Maris, 2014; Guerreiro, 2014) Also, Ramos-Francia, García-Verdú, Aguilar-Argaez, & Cuadra-García (2014) showed that a large number of Eurozone countries developed large macroeconomic imbalances because of the expenditures higher than revenues. That led to their unstable imbalances of the current account. While the authors attributed problems in Greece to public sector, on the contrary, in Spain and Ireland they referred to the private sector that increased the asset prices. The authors stressed that the macroeconomic mismanagement together with the productivity differences were the primary causes of the imbalances in GIIPS countries because of higher production costs in these countries.

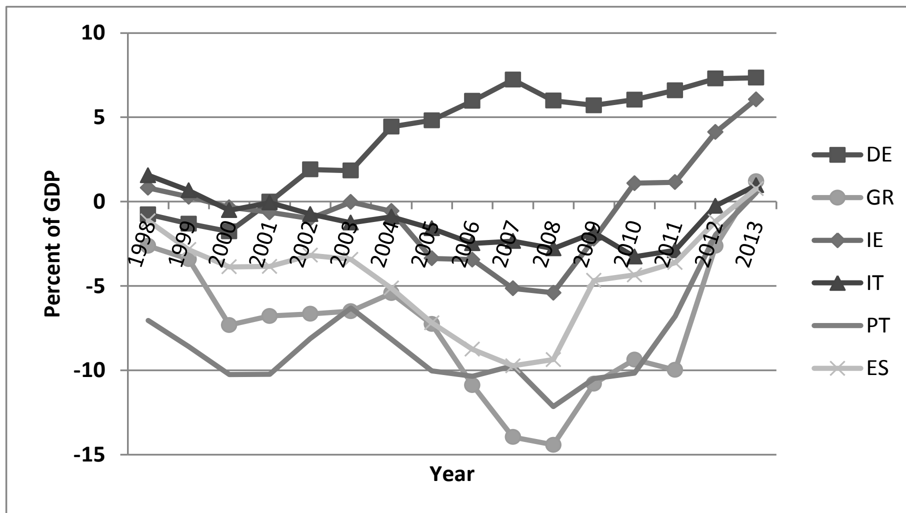

Fig. 1. Current account balance as a % of GDP (1998–2013). Source: OECD (2015)

In the study of Martin & Philippon (2014), the authors analysed the effectiveness of the policies based on counterfactual experiments of the selected countries during the boom years of the crisis. Their results showed that countries having the biggest problems, i.e., the GIIPS countries, should have adopted the combination of macro-prudential policy for the limit of private leverage leading to the stabilization of employment together with the prudential fiscal policy. The authors' opinion is that implementation of only one of these policies leads to the worsening of the current problems. Therefore, it is important to consider the policies as complements. Grahl (2011) recommends the EMU to create an adjustment mechanism to absorb the imbalances arising between the members. Sklias, Roukanas, & Maris (2014) appeal to the need for the introduction of the mechanism for fiscal transfers. Eichengreen (1991) agrees with the previous statement and recommends creating a system of fiscal transfers in the form of liquidity injections in EMU and establishing central fiscal authority. (Dibooglu & Horváth, 1997) Varoufakis (2012) assumes that a necessary system of fiscal transfers can have either the form of money transfers among countries or the form of international investments in production in deficit countries. Moreover, a need to set certain limits on internal trade in EMU is required. (Sklias, Roukanas, & Maris, 2014) Concerning this issue, Brancaccio (2012) recommends the EMU to introduce a European wage standard. The aim would be to help the EMU and its members in absorbing asymmetric shocks attacking their economies through the greater flexibility of wages.

3. The Euro Illusion and indebtedness growth of the countries in EMU

Eurozone countries have accepted the commitment to fulfil the criteria of nominal convergence and the rules of fiscal discipline by introducing the common currency, which have proved to be rather harmful administrative measures as a real tool to achieve economic unity of its members. A uniform one-size-fits-all monetary policy was applied to all members, and one central bank with one interest rate was established regardless of their economic level and competitiveness. (Gibson, Hall, & Tavlas, 2012) The system of implicit guarantees was created to protect weaker Eurozone countries by stronger ones together with a dangerous illusion of prosperity in the Eurozone. Therefore, while countries borrowed for a premium corresponding to the level of their economies in financial markets before joining the Eurozone, the introduction of the euro reconciled development with their interest rates on government loans.

Fig. 2 shows that since the idea of the single currency and single monetary policy have been adopted, long-term interest rates of GIIPS countries have been stabilized and moved to the similar level of interest rates in Germany.

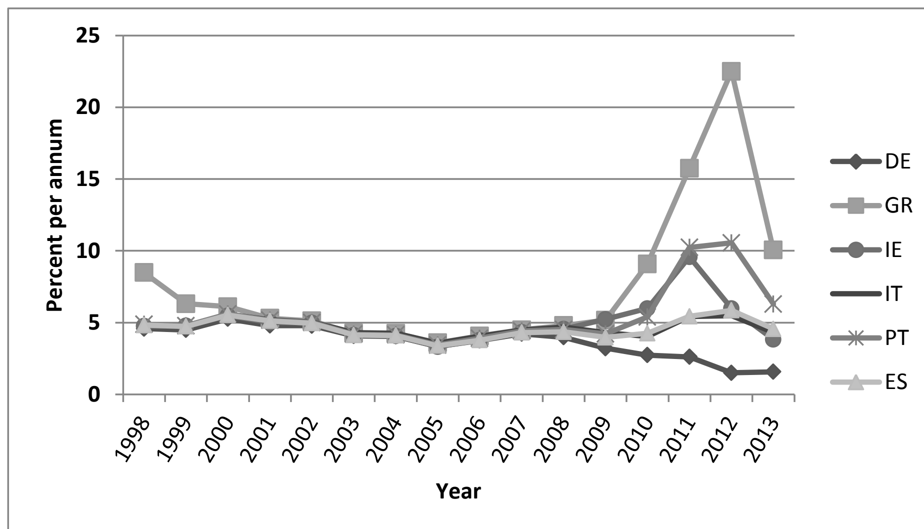

Fig. 2. Long-term interest rates (total, % per annum, 1998–2013). Source: OECD (2015)

Low-interest rates hugely reduced borrowing costs in the private and also public sector in many Eurozone countries. That led to formation of bubbles, whether in the real estate markets – Spain, Ireland, or in the public sector – Greece, which resulted in deepening of the economic recession and moral hazard of the ECB and Eurozone governments. They decided to "gamble for redemption" under the influence of low borrowing costs and the newly established guarantee of salvation in the case of difficulties caused by external impacts, or its economic performance. That led to the creation of a self-fulfilling sovereign debt crisis in EMU caused in some countries by serious external shocks or endogenous, i.e., self-fulfilling panic in the financial markets, or as a result of a reckless behaviour of the Panglossian debtors. (Cohen & Villemot, 2014) Also, the single monetary policy in EMU applied before and during the current crisis was not equally suitable for all its members. Seemingly, it was suitable only for the core countries while for the GIIPS countries it was too expansive. (Lothian, 2014)

Moreover, Arellano, Conesa, & Kehoe (2012) described the anti-crisis policies and measures of the EU and the IMF as detrimental and supporting further indebtedness of its members. This issue of governments' or institutions' measures has been a controversial theme in the empirical literature. In the study of Ureche-Rangau & Burietz (2013), the authors analysed the impact of the implementation of rescue packages to the level of government debt based on the GMM panel data approach. Their results confirm the negative impact of capital injections on the level of government debt, indicating that guarantees and the behaviour of the stock markets that contribute to public debt's increase. Other empirical studies confirm the results and particularly stressed the short-term effect of rescue measures, which also result in increased market volatility and a higher probability of contagion to other countries. (Archarya, Drechsler, & Schnabl, 2011; Van Riet, 2010; De Santis, 2012) That is also related with the factor of the level of government debt. The previous is the essential element of government decision on the implementation of policies or going into deeper debt, i.e., whether it is worth to gamble for survival, or not. (Arellano, Conesa, & Kehoe, 2012) Therefore, it is more than appropriate to revise the rules of fiscal discipline included in the Stability and Growth Pact and the Fiscal Compact. Significant capital inflows in many Eurozone countries reflecting the investors' faith in the newly discovered apparent prosperity of its members were also the result of the Euro Illusion. A substantial reduction in long-term bond yields, a large increase in the growth rate of money supply and loans, a relatively fast pace of price growth and a deterioration of competitiveness that accompanied these capital inflows, have been discouraging Eurozone governments to implement reforms and comply with their budgetary constraints. (Lothian, 2014)

4. Overview of empirical approaches to the causes of the European debt crisis

The following section provides a brief overview of empirical studies dealing with causes of the European debt crisis taking into account different approaches, e.g. monetary, fiscal or banking.

Regarding the banking approach, the study of Reinhart & Rogoff (2010) can be considered as a breakthrough when investigating a possible link between banking and debt crises. The authors developed long historical time series comprising two centuries on public debt and external debts. The findings supported a significant link between banking crises and sovereign default across advanced and emerging economies around the world. Moreover, they argued that banking crises could behave as predictors of sovereign debt crises. A similar study of Candelon & Palm (2010) based on the balance sheet approach showed a possible mutation of the subprime crisis into a sovereign debt crisis. The authors concluded that the possibility of default in the Eurozone at the end of 2009 was less significant than six months earlier. Also, they stressed the importance of the relationship between banking and sovereign debt crises based on the graphical approach. The studies of De Bruyckere, Gerhardt, Shepens, & Vander Vennet (2013), Angeloni & Wolff (2012) support the previous conclusions fairly well. In the recent study of Calabrese, Elkink, & Giudici (2014), the authors pointed to the importance of contagion effects of bank failures that had a significant impact on the development of the recent European sovereign debt crisis. They applied the spatial autocorrelation parameter of a binary spatial autoregressive model for Eurozone countries that showed high levels of systemic risk due to contagion. The previous analysis has its root in the fact based on the debts decomposition, the GIIPS countries held their debts by each other. A high level of debts composition may easily spread from one peripheral country to another or even core country too.

Another approach to examining the causes of the debt crisis is a so-called monetary approach. The study of Lane (2012) pointed out that the causes of the European sovereign debt crisis were necessary to examine the original design of the euro. The author argued that there was a lack of understanding of the fragility of a monetary union related to crisis conditions, especially in the absence of banking union and other European-level buffer mechanisms. Furthermore, the inherent confusion and indecision related to proposing and implementing incremental multi country crisis management responses on the fly were major destabilizing factors throughout the crisis. Also, Gajewski (2014) with the application of the forward-looking Taylor-type monetary policy reaction function pointed to an increased risks which the economies were facing due to the introduction of low-interest rates. These were most evident in countries such as Greece, Ireland and Spain before 2009. The results also showed that lax fiscal policies of some economies, including applying a different monetary policy were the main causes of the current debt crisis. Moreover, Crowley & Lee (2009) came to the conclusion by applying the same approach as Gajewski (2014) that countries such as Greece and Spain along with the Benelux countries were in the group that suffered most from the loss of independent monetary policy. Their findings also supported the fact that ECB monetary policy was predominantly suitable for Germany with other similar countries.

Some authors considered the European debt crisis to be a hidden currency crisis or, at least, they believed that there existed a causal link between the currency and debt crises. Dreher, Herz, & Karb (2006) concluded that currency crises have a negative but lagged impact on debt crises and often occur simultaneously based on a panel data of 80 countries during 1975-2000. The study of Arghyrou & Kontonikas (2012) supported the previous finding. Moreover, the authors added that the reason was the absence of currency markets as a systemic risk is diverted into the government bond market. Also, the authors argued that the major factors having impact on the debt crisis were the international risk, macro fundamentals and contagion, too.

Barrios, Iversen, Lewandowska, & Setzer (2009) examined the determinants of government bond yield spreads in the Eurozone countries. The authors concluded that international factors like general risk perception were key drivers in explaining governments´ bond yields spreads. Moreover, they added that domestic factors such as liquidity and sovereign risk played a smaller role. However, their impact increased during the crisis as international investors started to pay more attention to different factors across countries. Similar results were presented in the study of De Grauwe & Ji (2013) and Croci Angelini, Farina, & Valentini (2015) too. Moreover, the study of Attinasi, Checherita, & Nickel (2009) pointed out that the main sources of increasing government debts were predominantly international risk aversion and a deterioration of fiscal fundamentals since the end of 2007.

One of the other sources triggering the sovereign debt crisis in Europe are sovereign rating news on European financial markets examined in the study of Arezki, Candelon, & Sy (2011). The authors analysed the spill over effects

during the period of 2007–2010. The main conclusion was that sovereign rating downgrades had statistically and economically significant spill over effects across the countries and financial markets, too. The previous implies that rating agencies announcements could have spurred financial stability of economies.

Table 1. Overview of selected empirical studies

Author(s)	Method(s)	Number of variables	Sample	Conclusion
Dreher, Herz & Karb (2006)	OLS	13	80 world economies	Currency crises have a negative lagged impact on debt crises and often behave simultaneously.
Attinasi, Checherita & Nickel (2009)	The FGLS estimator	4	Eurozone	Primary sources of widening spreads were an international risk aversion and fiscal fundamentals.
Barrios, Iversen, Lewandowska, & Setzer (2009)	OLS	5	Eurozone	General risk aversion is an important determinant of macro fundamental values while domestic factors are important by explaining yield differentials.
Reinhart & Rogoff (2010)	VAR, OLS	4	70 world economies	Banking crises are essentially preceded by fast rising private indebtedness but directly increase the probability of a sovereign default.
Arezki, Candelon & Sy (2011)	VAR, JJ cointegration test	4	World economies	Rating agencies' announcements could be considered as the one of the drivers of sovereign debt crisis.
De Grauwe & Ji (2013)	OLS	5	Eurozone, others	The important determinant of increasing governments´ spreads was the negative self-fulfilling market sentiment.
Ureche-Rangau & Burietz (2013)	GMM panel data approach	4	EU countries	Rescue packages introduced by governments have an adverse effect on the level of government debt.
Calabrese, Elkink & Giudici (2014)	Binary spatial regression model	15	Eurozone	The existence of high levels of systemic risk because of contagion.
Gajewski (2014)	Taylor-rule approach	4	Eurozone	Lax fiscal policies and the application of different monetary policies across countries were basic causes of the debt crisis.

Source: Autors' processing

5. Conclusion

As mentioned above, we conclude that local and regional market sentiment accompanied by worsening values of macro fundamental variables and contagion had predominantly significant effect on the origin of the European sovereign debt crisis. The analysis of opinions of several leading economists also highlighted some other factors that strongly affected the development of the debt crisis in Eurozone, especially the high international risk, the negative impact of rescue activities, news about sovereign rating downgrades, etc. We also point out to the existence of a significant link between banking crises, currency crises and debt crises that could shed some light on the process of the debt crisis origin. Overall, we state that the current Eurozone crisis is mainly the crisis of confidence. Therefore, the solutions must be systemic and highly consistent. However, as highlighted by many of mentioned authors (e. g. Detlef, 2012), the results of previous actions have indicated a large lack of efficiency and do not solve its nature. They worsen it and move it into the future. Moreover, they have created a dangerous precedent of certain eligibility for salvation for all market agents that fall into similar problems with the fulfilment of their debt obligations in the future. Forms of assistance to indebted Eurozone countries and strict austerity measures underlying this aid depend on the sentiment in the financial market and not on the arguments based on the economic theory and reality. (De Grauwe & Ji, 2013) Relying on the OCA theory, which considers the Eurozone as non-optimal currency area, and the Keynes´s arguments, we assume that well-functioning mechanism for fiscal transfers is particularly appropriate tool for balancing the Eurozone. (Sklias, Roukanas, & Maris, 2014) However, we are aware that this solution would require the creation of a fiscal union, despite the fact that it is the centralization and regulation at the supranational level as one of its main problems. A possible solution to the current debt crisis is thus the creation of a form of European

(federal) State based on a good compromise between interventionism and laissez-faire approach to a country´s government. Indeed, Keynes insisted on the necessity of state intervention in the economy due to the uncertainty that arose in it when relying only on the invisible hand. However, we also agree that excessive centralization, regulation, and government intervention led mainly to the growth in costs and inefficiencies. Moreover, we do believe it is also necessary to provide the expansive effect of the new system of fiscal transfers in EMU based on the rationalization of government spending in the years of recession and crisis. (Sklias, Roukanas, & Maris, 2014) According to Baimbridge, Burkitt & Whyman (2012), a common European tax system as a complement to national tax systems should be created, and big European investment projects should be carried in GIIPS countries leading to more efficiency in EMU resources and their development. Also, a European wage standard and restrictions on trade within EMU should be introduced due to significant current account imbalances rising from the intraregional trade in the Eurozone. However, in our opinion, the creation of the European Superstate is the last and not very realistic solution. It is politically unfeasible and would cause waves of nationalism and resistance as more disciplined countries would pay for less disciplined. Therefore, there are some other solutions, e.g., its controlled or uncontrolled decay or a creation of a multispeed monetary union. However, changes in EMU regardless of the implementation of any concepts of solving its serious problems should necessarily include reforms and structural policies. These should be focused on employment and a labour market, to promote flexibility in prices and wages, to minimize bureaucracy and large regulatory burden on businesses and the elimination of patents that are an important drawback to progress in EMU. Despite the serious shortcomings and failures of the project EMU and the euro, it is necessary to make an effort to keep it. We are convinced that only the united Europe is competitive enough to its competitors on world markets.

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