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The Role of Euro in Global Economy and the Effects of The Eurozone Crisis*

Euro'nun Küresel Ekonomideki Yeri ve Euro Alanı Krizinin Etkileri

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Abstract

The Bretton Woods Treaty, which established the principles of international economic relations, has emerged as a function of the economic and thus the monetary superiority of the United States. In the period when these principles draw the framework of the international system, the integration dynamics in Europe have also accelerated. Taking into account the bipolar structure of the period, the economic integration, which started as an effort to increase the economic and political weight of Europe in global issues, has reached the level of monetary union through different stages. Thus, with its common currency and common central bank, the EU has not only improved the level of integration within the Union but has also

Öz

ABD'nin ekonomik ve dolayısıyla parasal üstünlüğünün bir fonksiyonu olan Bretton Woods Antlaşması ile belirlenen ilkelerin uluslararası sistemin çerçevesini çizdiği dönemde, Avrupa'daki bütünleşme dinamikleri de hız kazanmıştır. Dönemin çift kutuplu yapısı da dikkate alındığında, küresel konularda Avrupa'nın ekonomik ve politik ağırlığının artırılmasına yönelik bir çaba olarak başlayan ekonomik bütünleşme, farklı evrelerden geçerek parasal birlik düzeyine ulaşmıştır. Böylece oluşturduğu ortak para birimi ve ortak merkez bankasıyla AB, yalnızca birlik içi bütünleşme düzeyini geliştirmekle kalmamış, Amerikan Doları'nın mutlak egemenliğiyle şekillenen uluslararası parasal ilişkileri de dönüştürebilecek

* In this article, various parts of the author's book titled "Exchange Rates, Euro and Turkish Economy" and doctoral thesis titled "The Evaluation of Reflections of Changes in the Value of Euro on the Turkish Economy from the Perspective of European Union Membership" were used in updated and improved form.

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brought the potential that can transform the international monetary relations shaped by the absolute sovereignty of the US Dollar (USD) into action. From this point of view, the role and the effects of the Euro on the global scale have been examined in this study. This study has been carried out taking into consideration the impact of the global financial crisis in the Eurozone and the determination of the USD as the most effective means of exchange in the global scale and it has been embodied using statistical analyzes.

bir potansiyeli harekete geçirmiştir. Buradan hareketle bu çalışmada, Euro'nun küresel ölçekteki konumu ve etkileri incelenmiştir. Bu inceleme, küresel finans krizinin Euro Alanı'ndaki yansımaları ve küresel ölçekteki en etkin değişim aracı olan Amerikan Doları'nın belirleyiciliği de dikkate alınarak yapılmış ve istatistiksel analizlerle somutlaştırılmıştır.

Anahtar Kelimeler: *Euro, Dolar, Uluslararası Para, Euro Alanı Krizi*

Keywords: *Euro, Dollar, International Currency, Eurozone Crisis*

Introduction

The Bretton Woods Treaty, which established the principles of international economic relations, has emerged as a function of the economic and thus the monetary superiority of the United States. In the period when the principles set by Bretton Woods identified the framework of the international system under the supervision of IMF and World Bank (WB), the integration dynamics of Europe have also begun to accelerate. Thus, the process of economic integration in Europe has been largely influenced by the interests of the United States and its international supremacy. Considering the bipolar structure of the period and the international political conjuncture, the economic integration started as an effort to increase the economic and political weight of Europe in global affairs. In addition to allowing the free movement of persons, goods, services, and capital, it has brought about determining the irreversibly fixed exchange rates between the national currencies and then the common currency (Carchedi, 2009, p. 23-26). With its common currency, the European Union (EU), has not only improved the level of intra-union integration but also has shown its potential to transform international monetary relations shaped by the absolute sovereignty of the USD (Aglietta, 1987, p. 71).

With the rise of the Euro, a currency competing with the USD, which has been regarded as the international and reserve currency has emerged and a new actor has attended the global financial system (Boles et al., 2002, p. 119). Thus, with its common currency, the European integration has achieved its most effective means in the international arena. The Euro is an international currency with a strong presence beyond its monetary union, in other words, it is an effective currency at the

global level and it has become the second largest international currency after the USD which belongs to an earlier monetary union. Therefore, it has led to significant impacts across the EU and on a global scale particularly for the Eurozone, in which it is used as a common currency. The economic crisis in the Eurozone, which has been on the agenda for the recent years, and the consequences of this crisis have also triggered a process that makes the scope of Euro's role in the global economy and its impacts apparent (Cengiz, 2018, p. 113).

The International Role of the Euro

The major condition for any currency to be described as an “international currency” is to be accepted by the rest of the world, beyond its own citizens or by a group of countries. While the features of a currency are described as the “exchange instrument”, “accounting currency” and “savings instrument” in the standard classification, it can be defined with different characteristics in terms of its official use (intervention currency, anchor or exchange rate fixing currency, reserve currency) and special use (payment and invoicing currency, pricing currency, investment and financing currency) in the international context. However, the changes in the exchange rate and interest rates of a currency and its impacts on the similar values of the other currencies in the same direction and the extent of these impacts are also noteworthy as a significant issue on the international role of a currency. In fact, all these features for the international role of a currency arise in relation to each other and the more intensively a currency is used in foreign countries, the higher significance it has in the changes in the exchange rate and interest rate (Hartman and Issing, 2002, p. 316-317).

The Euro, which is the common currency used by the countries, companies, and individuals to exchange goods and services in the Eurozone, is also used as a means of creating value for the future through savings and investments. Moreover, the size, stability, and power of the Eurozone economy, which is the second largest economy after the US in the world, facilitate the demand for Euro even beyond its borders. The public and private sector units in the third countries use Euro for various purposes and needs, such as trading and holding foreign exchange reserves. In this context, the Euro is now widely used in the international financial and monetary system as the second most important currency after the USD and this reveals the global characteristics of the Euro (European Commission, 2016, p. Euro).

The global characteristics of the Euro is directly related to the economic structure and strength of the Eurozone in one hand and its volume in the global trade in the other. Besides being an important demographic force with its population which is more than that of the USA, the Eurozone comes third in terms of the ratio of its annual added value to the global production (11.7%) following People's Republic of China (17.7%) and the United States (15.5%) but it lags behind other major economies in terms of employment. However, the Eurozone is among the world's leading economies in terms of per capita GDP (Table 1) in spite of the negative impacts of the 2008 financial crisis on employment and the public finances. On the other hand, the leading global financial organizations such as the IMF and G7 have begun to consider the Eurozone as a single legal personality and an independent actor in the economic sense. In this respect, the Eurozone has been increasingly strengthening its competitiveness as a uniform force in global platforms and it has a say in the decision-making processes.

As can be understood from Table 1, the Eurozone, which is almost equal to the US in terms of production and trade volume, lags behind the US in terms of financial markets and the volume of USD in international financial asset markets seems to be more than twice of the Euro's volume (Table 2). Therefore, while the size of the real economy in the Eurozone is almost equal to that of the United States, the situation seems to be not true in terms of the financial dimension (De Grauwe, 2016, p. 247-248). However, it is noteworthy that the Euro-denominated financial assets in the US and Dollar-denominated financial assets in the Eurozone account for more than 60%. The density of the Dollar-denominated financial assets in the non-EU countries including the Balkan countries and Turkey and the density of the Euro-denominated assets in the EU member countries outside the Eurozone also reveals a remarkable situation.

Table 1: Key real economy characteristics of the Euro Area and other major economic areas

2016		Euro Area	United States	Japan	China
Population	Millions	340.2	323.4	127.0	1,382.7
GDP (share of world GDP in PPP)	%	11,7	15,5	4,4	17,7
GDP per capita	€ thousands	31.7	43.4	31.8	11.6
- Value added by economic activity					
Agriculture, fishing, forestry	% of total	1.6	1.0	1.2	8,6
Industry	% of total	25.1	19.5	29.5	39.9
Services	% of total	73,4	79.5	69.3	51.6
- Employment					
Unemployment rate	%	10.0	4.9	3,1	4.0
Labour force participation rate	%	72.8	73.0	77,0	-
Employment rate	%	65.4	68.1	72.8	-
- General government					
Surplus (+) or deficit (-)	% of GDP	-1.5	-4.9	-3.4	-2.8
Gross debt	% of GDP	89.0	98.6	225.3	41.1
Revenue	% of GDP	46.1	32.9	35.7	28.5
Expenditure	% of GDP	47.6	37.8	39.2	31.3
Exports of goods	% of GDP	19.7	7.8	12.8	19.3
Exports of goods and services	% of GDP	27.0	11.9	16.4	21.3
Import of goods	% of GDP	16.3	11.9	11.8	14.1
Import of goods and services	% of GDP	23.2	14.6	15.6	18.1
Exports (share of world exports, including intra-euro area trade)	%	25.2	9.2	3.8	13.9
Exports (share of world exports, excluding intra-euro area trade)	%	15.6	10.3	4.3	15.7
Current account balance	% of GDP	3.6	-2.3	3.9	2.7

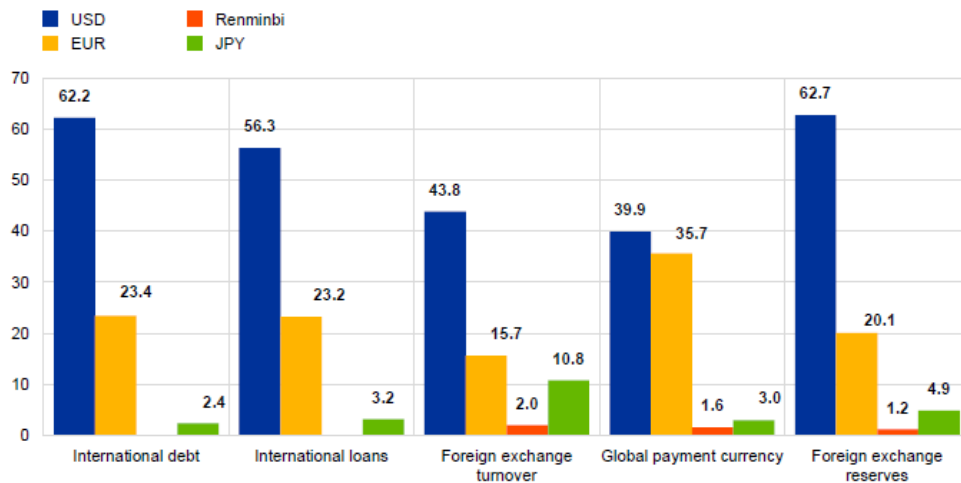
Source: ECB (2018). Structure of the Euro Area economy, <https://www.ecb.europa.eu/mopo/eaec/html/index.en.html>, (03.07.2018).

Table 2: Outstanding international bonds and notes in selected region by currency

2016	Total amounts outstanding (USD bln)	USD (%)	Euro (%)	Japanese yen (%)	Other Currencies (%)
Africa	116	87.9	7.8	2.3	1.9
Asia and Pacific	1,580	75.1	14.5	2.3	8.1
Japan	334	85.2	7.8	...	6.9
Europe	5,874	54.1	24.8	4.4	16.7
Euro area	2,737	64.8	...	5.5	29.6
Denmark, Sweden, United Kingdom	2,465	44.7	46.7	3.4	5.1
Other non-euro area EU Member States	211	28.3	61.5	2.1	8.1
EU28	5,404	54.2	23.9	4.5	17.4
Non-EU developed Europe	349	39.4	45.2	5.7	9.7
Non-EU developing Europe	122	88.1	6.6	0.0	5.3
International organisations	1,779	31.9	46.1	1.4	20.7
Latin America	835	85.1	10.9	1.2	2.8
Middle East	461	90.2	6.2	2.1	1.5
North America	1,749	35.3	43.5	3.3	18.0
Canada	848	72.7	18.5	0.4	8.4
United States	901	...	67.0	6.0	26.9
Offshore centres	2,372	85.2	4.9	4.0	5.9
Total	14,765	59.6	23.8	3.4	13.3

Source: ECB (2018). The international role of the Euro, Interim Report.

Although the Euro, as a reserve currency, constitutes approximately one-fifth of the global foreign exchange reserves, it ranks second after the USD, which has a big share as 62.7% on the global scale (Figure 1). This big difference in terms of foreign exchange reserves shows itself also in terms of the USD's use in international debt, credit, and foreign exchange transactions and it brings USD to a quite superior position against the Euro and other currencies. On the other hand, considering its history of 18 years, the Euro has achieved a very important level in this field.

Figure 1: Snapshot of the international monetary system

Source: ECB, Interim Report.

As the second largest currency traded in exchange rate markets, the Euro is the subject of financial exchange around 35% in the daily global transactions. This rate shows the characteristics of the Euro as a global payment instrument. However, the USD with a share of almost 40% seems to be leading currency in this field yet.

Table 3: Use of the Euro as a settlement/invoicing currency in extra-euro area exports and imports of goods and services by selected the Euro Area countries

Euro Area				
Year	Goods (%)		Services (%)	
	Export	Import	Export	Import
2006	59,5	48,8	51,0	53,8
2007	59,6	47,9	54,5	55,7
2008	63,6	47,5	55,5	57,7
2009	64,1	45,2	53,4	56,1
2010	63,4	49,4	52,7	56,9
2011	69,9	52,2	55,0	60,5
2012	66,7	51,3	49,6	55,9
2013	60,0	42,0	62,9	51,7
2014	59,6	45,9	63,2	52,6
2015	57,8	46,0	62,8	52,4
2016	57,0	46,2	63,9	52,8
2017	57,1	45,4	62,8	52,8

Source: ECB, Interim Report.

Table 4: The Euro's share in the exports and imports of selected non-Euro Area countries

2017	Goods (%)		Services (%)	
	Export	Import	Export	Import
Bulgaria	65.1	73.6	57.7	49.9
Czechia	78.0	69.0	67.3	75.9
Croatia	*80.0	*70.6	-	-
Poland	**66.1	**54.8	**66.1	**58.9
Romania	77.6	74.2	72.4	64.4
Sweden	16.8	20.8	-	-

* 2013; ** 2009 data.

Source: ECB, Interim Report.

Today, the banks carry out the global-scale transactions such as lending and depositing by means of various currencies which constitute the international credit and deposit market. The Euro has an important position in the debt transactions increasingly applied either by the countries or the international companies and in those markets. Especially, the Euro-denominated transactions have a fairly high share in the total transactions in the markets in the Central and Eastern European Countries (CEECs) and the candidates and the potential candidate countries in south-east Europe (Table 5).

Table 5: The use of the Euro-denominated bank loans and deposits in countries outside the Euro Area

2017 & (€ millions) & (%)	Bank Loans				Bank Deposits			
	Outstanding amounts of euro-denominated loans	As a percentage of total loans	As a percentage of foreign currency loans	Outstanding amounts of foreign currency denominated loans	Outstanding amounts of euro-denominated deposits	As a percentage of total deposits	As a percentage of foreign currency deposits	Outstanding amounts of foreign currency deposits
Non-euro area								
EU Members								
Bulgaria	10,025	36.8	97.1	10,324	11,238	30.4	80.1	14,035
Croatia	15,520	55.7	97.9	15,858	19,735	54.2	89.1	22,153
Czechia	13,716	12.6	95.2	14,402	8,455	5.8	75.6	11,184
Hungary	9,359	21.7	92.4	10,132	9,327	16.1	74.1	12,594
Poland	25,253	9.7	45.7	55,244	21,328	8.0	65.6	32,522
Romania	17,112	34.3	92.2	18,565	17,599	27.1	84.8	20,757
EU candidate and potential candidate countries								
Albania	1,882	47.0	92.0	2,046	3,527	43.5	85.3	4,134
Bosnia and Herzegovina	5,571	59.1	99.1	5,620	3,553	35.3	90.9	3,910
Macedonia	1,986	41.5	98.4	2,018	1,944	36.5	85.4	2,275
Serbia	10,614	62.7	93.4	11,359	10,514	62.9	90.2	11,655
Turkey	71,929	16.8	47.6	151,441	59,006	16.2	35.3	167,229

Source: ECB, Interim Report.

Euro-denominated credit and deposit transactions have a larger share in the markets of the countries that index their national currencies to the Euro by various regimes. Indeed, another competence of the Euro that proves its decisive role at the international level is that these countries, which accept the Euro as the reference currency, manage their currencies by associating them to the Euro. Table 6 shows that there are countries substitute the Euro unilaterally for their national currency, as well as the countries that fix their exchange rate regimes to the Euro or adjust it in line with the changes in the value of the Euro among those countries.

Table 6: Countries and territories with exchange rate regimes linked to the Euro

Region	Exchange rate regimes	Countries	Monetary framework
EU (non-euro area)	ERM II	Denmark	Exchange rate anchor
	Euro-based currency boards	Bulgaria	Exchange rate anchor
	Tightly managed floating regime	Croatia	Exchange rate anchor
	(Managed) floating regimes	Czech Republic, Hungary, Poland, Romania	Inflation targeting framework
		Sweden, United Kingdom	Inflation targeting framework

	Pro memoria: free floating regimes with an inflation target		
EU candidate countries and potential candidates	Unilateral euroisation	Kosovo, Montenegro	Exchange rate anchor
	Euro-based currency boards	Bosnia and Herzegovina	Exchange rate anchor
	Stabilised arrangements with euro as a reference currency	FYR Macedonia	Exchange rate anchor
		Serbia	Inflation targeting framework
	Floating regimes	Albania, Turkey	Inflation targeting framework
Others	Euroisation	European microstates, some French overseas collectivities	Exchange rate anchor
	Pegs based on the euro	CFA franc zone, CFP franc zone, Cabo Verde, Comoros, São Tomé and Príncipe	Exchange rate anchor
	Stabilised arrangements with basket involving the Euro	Singapore	Exchange rate anchor
		China (CNY)	Monetary aggregate target
	Crawling pegs or crawl-like arrangements involving the euro	Botswana, Islamic Republic of Iran	Exchange rate anchor
	Pegs and managed floats based on the SDR or other currency baskets involving the euro	Algeria, Belarus	Monetary aggregate target
	Fiji, Kuwait, Libya, Morocco, Syria	Exchange rate anchor	
	Azerbaijan, Samoa, Vanuatu	Other	

Source: ECB, Interim Report; European Commission (2018). The Euro outside the Euro Area, https://ec.europa.eu/info/business-economy-euro/euro-area/euro/use-euro/euro-outside-euro-area_en, (03.07.2018).

The emergence of the Euro as a competing currency against the USD has been an important gain in terms of the international financial system, and it has offered a new opportunity to the countries and other economic units to diversify their international reserve portfolios. Thus, the Euro has led to providing a sound basis of competition for the markets exposed to the unilateral impact of the USD (Nandi, 2014, p. 239). The size of the Eurozone economy and its openness to international trade has been the major factor in the way the Euro has become the currency preferred by international financial markets. The prudent management of the Euro and the fact that the main objective of the ECB is clearly defined as the price stability has also been an important factor increasing the confidence in the Euro. The confidence in the Euro has also allowed the third countries to issue Euro-denominated government bonds and the finance providers to consider these bonds as low-risk investments. Although the Euro, which represents the largest trade block in the world, one of the most open economies and the second largest monetary union, is behind the USD as a "vehicle currency", it reduces the risks arising from the exchange rate fluctuations and contributes to global economic

stability as an alternative currency to the USD (European Commission, 2016, p. IFM). Thus, thanks to the Euro, despite the USD's dominant role in the global financial relationships, the international monetary system has left the unipolar structure and had a bipolar structure which is relatively more inclined towards global stability.

Despite the Euro's competence in the international arena, the crisis in the Eurozone reveals the dynamic nature of economies and shows that the conditions may change at any time. According to De Grauwe, the debt crisis, which is a reflection of the global financial crisis to the EU, is also considered as an important factor delaying the convergence of the Eurozone's financial feature to its real economic power. On the other hand, the profound effects of the crisis have once again proven that the EU and the Eurozone, in terms of a monetary union, has not yet overcome a mature financial and financial integration threshold (De Grauwe, 2016, p. 248).

A number of political and socioeconomic factors that accompany economic factors also determine the global position of the Euro. For example, the questioning the Eurozone due to the debt crisis that broke out in Greece and the socioeconomic turmoil caused by the crisis, and the questioning the future of the EU after the decision to leave the EU in the Great Britain's referendum have been the developments affecting the stability of the Euro in the negative direction. Similarly, with the constitutional amendment referendum and the subsequent government crisis in Italy in 2017, the political statements and rumours that Italy's future in the Eurozone could be questioned combined with the effects created by the fragility of the Italian banks in financial terms caused fluctuations in the value of the Euro (BBC, 2017). The conditions of the crisis and strict austerity policies play an important role in the rise of Euroscepticism towards European integration and anti-EU political parties and leaders have begun to get fans in the many of the member states (Ioannou et al., 2015, p. 2-5).

In addition to all these internal political factors, the critical external political processes and international developments which are still considered as current events have important consequences for the stability of the Euro. The external factors such as the conflicts, especially in the Middle East and North Africa, the increasing terrorism incidents, immigration and refugee crises, the rise of Russia's political and military weight, and the new dimension of EU-Russia relations are important in terms of being current (Archick, 2017, p. 1). On the other hand, the EU, which is a major force in global trade, does not have a similar impact capacity on the political and military area, and it has lagged behind the important forces this area, especially the US and Russia. It is inevitable that this situation will have an impact on the global competitiveness of the Union and thus the value of the Euro and its global position.

Eurozone Crisis and Its Effects

It can be claimed that the European integration has suffered two major economic crises, the ERM Crisis, which had taken effect in the first half of 1990s within EMS, and the Eurozone Crisis, whose effects have still been ongoing. The ERM Crisis, which affected the 1992-1993 period with an asymmetric shock that began with the union of Germany, led to the withdrawal of the UK and Italy from ERM and the expansion of fluctuation margin to $\pm 15\%$. Fifteen years after ERM Crisis which is the foreign currency crisis, the EU has entered a turbulent period in which budget deficits

and public debt stock have reached unsustainable proportions, this time with a more severe crisis in the foreground due to the nature of the debt crisis. Despite being triggered by different reasons, the common feature of these crises is the similarity of the factors that play the key role in the deepening of both of them. These key factors have come to the forefront as differences in the level of development and competitiveness of the economies of the member states, and the uncoordinated economic policies and their institutional deficiencies. But unlike the ERM Crisis, the Eurozone Crisis spread across the EMU and affected all member states, leading to downsizing of economies and rising unemployment rates. Moreover, although the countries affected by the ERM Crisis overcame the crisis in about a year, the crisis in the Eurozone has continued to have effects over many years. However, while some Member States left EMS due to ERM Crisis, there has been no concrete development that resulted in leaving from EMU yet, despite intense debate and rumours in the same direction after the Eurozone Crisis (Bayar, 2014, p. 228).

According to Ferguson, the widespread belief during the 1997-1998 Asian Crisis was that the financial crises were more likely to occur in peripheral economies such as those in East Asia and Latin America, which were called rising markets. However, contrary to this belief, the economies in the centre have caused the greatest threat to the global financial system of the 21st Century (Ferguson, 2008, p. 283). The financial crisis that began in the US in 2007, has become evident at a global level within a very short period of time and jumped to Europe and it has led to results that affect the EU countries one after another, especially those in the Eurozone. The crisis which has been compared with the Great Depression in 1929 by both academic and political actors, has brought the integration issues in the level of EU to discussion and it has deepened enough to question the future of EMU which is a young union. Suggesting a more democratic and transparent EU with effective institutional structuring and decision-making processes, Lisbon Treaty, which was signed in the pre-crisis period, when the apparent differences in opinion towards the future structure of the EU led to political congestion, has fallen into the shadow of the economic crisis just before entering into force. The concrete proofs of the crisis, which has shaken the intellectual basis of the European project, has been the decline and debt burden in the peripheral economies of the monetary union, especially in Greece, Spain, Italy, and Portugal. The measures proposed for these countries have rekindled the North-South axis debate and set the stage for the political crises at the Union level. The economic crisis, which broke out at a time when Europe was trying to cope with the new problems brought and the old problems deepened by the integration, has revealed the inadequacies of the financial and political integration in the Union. The austerity measures supported by Germany as a solution have been the reason for the social protests and political crises in the south (Bal and İzci, 2016, p. 1-7).

The process triggered by high public spending due to cheap and abundant capital in Europe before the 2008 Global Financial Crisis has transformed the financial crisis into a massive production crisis. Although the conditions that triggered the crisis have matured in the United States, the global nature of the financial relationships has led to the rapid spread of the crisis. The demand for increased credit and high-risk derivatives due to the low interest rate policy to overcome the emerging economic crisis of the Nasdaq balloon in the early 2000s especially in the US has led to a new balloon in the American real estate sector and this real estate balloon has also been transferred to international markets through securitization. The banks that took the risk with the increasing financial integration

and financialization level in European countries, that began to use Euro in this period, became more vulnerable to the crises. The ratio of financial assets to GDP both in the Eurozone and across the Union has been around 600% before the crisis as can be seen in Table 7 (Eser and Ela, 2015, p. 209-210).

Table 7: Size of the capital markets: bonds, equities and bank assets before the global financial crisis 2007 (in percent of GDP)

	(%)
World Average	439,6
Euro Area	557,6
EU	580,7
USA	690,2
Belgium	824,1
France	668,5
Greece	436,7
Ireland	900,4
Italy	453,9
Luxembourg	3.234,4
Netherlands	830,8
Portugal	389,5
Spain	550,2
United Kingdom	690,2

Source: IMF. (2009). Responding to the financial crisis and measuring systemic risk, Global Financial Stability Report / World Economic and Financial Surveys.

While the growth recorded in financial markets in Europe has reached significant extents, the toxic bonds, which originated from the US real estate market and were owned by many European banks, have accelerated the infection of the crisis in Europe. Thus, the banks which had weak balance sheets against the risks due to the mentioned assets suffered great losses, and loaning has become difficult for them due to the uncertainty about the value of assets they had. Many European banks, which did not have toxic bonds in their balance sheets, were about to go bankrupt since the repayment conditions of the extreme amount of credit given to the housing sector became harder. The crisis, which deepened with the bankruptcy of Lehman Brothers, the US's fourth-largest investment bank, in 2008, has inflicted the functions of the market between the banks. The cross-border financial flows have decreased, credit facilities have been reduced and the investors have begun looking for safe havens for their capital. This process has increased the tendency of the capital to return to its limits. The sudden decline in the demand due to avoiding risk and the decrease in the investments and expenditures after the crisis has had an impact on the growth rates of the countries as can be seen in Table 8 (Eser and Ela, 2015, p. 211-212).

Table 8: GDP growth rates in Europe and the USA

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average 2006-15
Euro Area	3,2	3,0	0,4	-4,5	2,1	1,6	-0,9	-0,3	1,2	2,1	0,8
USA	2,7	1,8	-0,3	-2,8	2,5	1,6	2,2	1,7	2,4	2,6	1,4
EU 28	3,3	3,1	0,4	-4,4	2,1	1,7	-0,5	0,2	1,6	2,2	1,0
Belgium	2,5	3,4	0,7	-2,3	2,7	1,8	0,1	-0,7	2,3	1,5	1,2
Bulgaria	6,9	7,3	6,0	-3,6	1,3	1,9	0,0	0,9	1,3	3,6	2,6
Czechia	6,9	5,5	2,7	-4,8	2,3	2,0	-0,8	-0,5	2,7	4,5	2,1
Denmark	3,9	0,9	-0,5	-4,9	1,9	1,3	0,2	0,9	1,7	1,6	0,7
Germany	3,7	3,3	1,1	-5,6	4,1	3,7	0,5	0,5	1,6	1,7	1,5
Estonia	10,3	7,7	-5,4	-14,7	2,3	7,6	4,3	1,4	2,8	1,4	1,8
Ireland	5,9	3,8	-4,4	-4,6	2,0	0,0	-1,1	1,1	8,5	26,3	3,8
Greece	5,7	3,3	-0,3	-4,3	-5,5	-9,1	-7,3	-3,2	0,4	-0,2	-2,1
Spain	4,2	3,8	1,1	-3,6	0,0	-1,0	-2,9	-1,7	1,4	3,2	0,5
France	2,4	2,4	0,2	-3,0	2,0	2,1	0,2	0,6	0,7	1,3	0,9
Croatia	4,8	5,2	2,1	-7,4	-1,7	-0,3	-2,2	-1,1	-0,5	1,6	0,0
Italy	2,0	1,5	-1,1	-5,5	1,7	0,6	-2,8	-1,7	0,1	0,7	-0,5
Cyprus	4,5	4,8	3,9	-1,8	1,3	0,3	-3,2	-6,0	-1,5	1,7	0,4
Latvia	11,9	9,9	-3,6	-14,3	-3,8	6,4	4,0	2,6	2,1	2,7	1,8
Lithuania	7,4	11,1	2,6	-14,8	1,6	6,0	3,8	3,5	3,5	1,8	2,7
Luxembourg	5,1	8,4	-0,8	-5,4	5,8	2,0	0,0	4,2	4,7	3,5	2,8
Hungary	3,9	0,4	0,9	-6,6	0,7	1,7	-1,6	2,1	4,0	3,1	1,7
Malta	1,8	4,0	3,3	-2,5	3,5	1,4	2,6	4,5	8,3	7,4	3,4
Netherlands	3,5	3,7	1,7	-3,8	1,4	1,7	-1,1	-0,2	1,4	2,0	1,0
Austria	3,4	3,6	1,5	-3,8	1,9	2,8	0,7	0,1	0,6	1,0	1,2
Poland	6,2	7,2	4,2	2,8	3,6	5,0	1,6	1,4	3,3	3,8	3,9
Portugal	1,6	2,5	0,2	-3,0	1,9	-1,8	-4,0	-1,1	0,9	1,6	-0,1
Romania	8,1	6,9	8,5	-7,1	-0,8	1,1	0,6	3,5	3,1	3,9	2,8
Slovenia	5,7	6,9	3,3	-7,8	1,2	0,6	-2,7	-1,1	3,1	2,3	1,2
Slovakia	8,5	10,8	5,6	-5,4	5,0	2,8	1,7	1,5	2,6	3,8	3,7
Finland	4,1	5,2	0,7	-8,3	3,0	2,6	-1,4	-0,8	-0,7	0,2	0,5
Sweden	4,7	3,4	-0,6	-5,2	6,0	2,7	-0,3	1,2	2,6	4,1	1,9
U.Kingdom	2,5	2,6	-0,6	-4,3	1,9	1,5	1,3	1,9	3,1	2,2	1,2

Source: Eurostat (2018). Economy and finance, http://ec.europa.eu/eurostat/statistics-explained/index.php/Economy_and_finance, (03.07.2018) (Economy and Finance); IMF (2017). World Economic Outlook Report, (WEO Database 2017).

While the crisis gave an equal impression on both sides of the Atlantic in terms of its initial impact, a relatively gradual recovery in the growth rates of the US has been observed over time, however, the production losses have spread over a longer period in Europe (Figure 2). In 2008, when the bottom of the crisis was experienced in the US, the contraction in the EU was relatively low. This led to an optimistic view that the recession in the EU was the result of the short-term post-effects and that it would be easy to overcome. But the depth of the crisis in the EU was understood at the end of 2009 (Ersin, 2016, p. 60-61).

With the decline in the production and investments, some of the employed people lost their jobs and the unemployment rates, particularly for the young people, have reached high levels. As can

be seen in Table 9, the unemployment rate in the Eurozone, and particularly the unemployment rate among the young people, was worse than that across the Union and that of the US.

Figure 2: GDP Growth Trends in Europe and the USA



Source: Eurostat (2018). Real GDP growth, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=National_accounts_and_GDP, (03.07.2018).

Table 9: Unemployment rates in Europe and selected economies

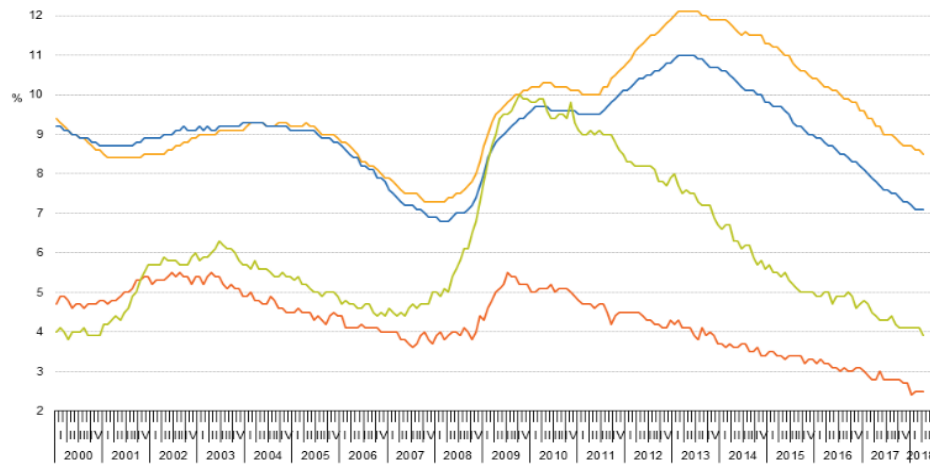
	Male		Female		Under 25	25-74
	2007	2015	2007	2015	2015	2015
Euro Area	6,7	10,7	8,5	11,0	22,4	9,8
USA	4,7	5,4	4,5	5,2	11,6	4,3
EU 28	6,6	9,3	7,9	9,5	20,3	8,3
Belgium	6,7	9,1	8,5	7,8	22,1	7,3
Bulgaria	6,5	9,8	7,4	8,4	21,6	8,4
Czechia	4,2	4,2	6,7	6,1	12,6	4,5
Denmark	3,4	5,9	4,2	6,4	10,8	5,3
Germany	8,4	5,0	8,7	4,2	7,2	4,4
Estonia	5,4	6,2	3,8	6,1	13,1	5,6
Ireland	5,0	10,9	4,3	7,7	20,9	8,4
Greece	5,3	21,8	12,9	28,9	49,8	23,4
Spain	6,4	20,8	10,7	23,6	48,3	20,2
France	7,6	10,8	8,5	9,9	24,7	8,9
Croatia	8,8	15,7	11,4	17,0	43,0	13,8
Italy	4,9	11,3	7,8	12,7	40,3	10,0
Cyprus	3,4	15,1	4,6	14,8	32,8	13,2
Latvia	6,5	11,1	5,6	8,6	16,3	9,3
Lithuania	4,2	10,1	4,3	8,2	16,3	8,5
Luxembourg	3,4	5,9	5,1	7,2	16,6	5,5
Hungary	7,1	6,6	7,7	7,0	17,3	6,0
Malta	5,8	5,5	7,9	5,2	11,8	4,4
Netherlands	3,3	6,5	5,2	7,3	11,3	6,1
Austria	4,5	6,1	5,3	5,3	10,6	5,0
Poland	9,0	7,3	10,3	7,7	20,8	6,4
Portugal	8,7	12,4	9,6	12,9	32,0	11,1
Romania	7,2	7,5	5,2	5,8	21,7	5,6
Slovenia	4,0	8,1	5,9	10,1	16,3	8,4

Slovakia	10,0	10,3	12,8	12,9	26,5	10,2
Finland	6,5	9,9	7,2	8,8	22,4	7,6
Sweden	5,9	7,5	6,5	7,3	20,4	5,6
U. Kingdom	5,5	5,5	5,0	5,1	14,6	3,8
Iceland	2,3	3,9	2,3	4,1	8,8	3,0
Norway	2,6	4,7	2,5	4,0	9,9	3,5
Japan	3,9	3,6	3,7	3,1	5,6	3,2

Source: Eurostat, Economy and Finance.

Figure 3 shows how large the effects of the crisis on employment are in terms of the economies in the EU and Eurozone and its persistence compared to that on the US.

Figure 3: The development of unemployment rates in selected economies



Source: Eurostat (2018). Unemployment statistics, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Unemployment_rates_EU-28_EA-19_US_and_Japan_seasonally_adjusted_January_2000_April_2018.png, (01.07.2018).

Table 10: Euro exchange rates (2007-2017)

1€	2007	2009	2011	2013	2015	2017
US Dollar	1,3705	1,3948	1,3920	1,3281	1,1095	1,1297
GBP Sterling	0,6843	0,8909	0,8679	0,8493	0,7258	0,8767
Chinese Yuan	10,4178	9,5277	8,9960	8,1646	6,9733	7,6290
Japanese Yen	161,25	130,34	110,96	129,66	134,31	126,71
Russian Rouble	35,0183	44,1376	40,8846	42,3370	68,0720	70,0781
Canadian Dollar	1,4678	1,5850	1,3761	1,3684	1,4186	1,4647
Indian Rupee	56,3972	67,3611	64,8859	77,9300	71,1960	73,5324
Brazilian Real	2,6619	2,7674	2,3265	2,8686	3,7004	3,6054
Turkish Lira	1,7865	2,1631	2,3378	2,5335	3,0255	4,1206
Bulgarian Lev	1,9558	1,9558	1,9558	1,9558	1,9558	1,9558
Czech Koruna	27,766	26,435	24,590	25,980	27,279	26,326
Danish Krone	7,4506	7,4462	7,4506	7,4579	7,4587	7,4386
Croatian Kuna	7,3376	7,3400	7,4390	7,5786	7,6137	7,4637
Hungarian Forint	251,35	280,33	279,37	296,87	310,00	309,19
Polish Zloty	3,7837	4,3276	4,1206	4,1975	4,1841	4,2570

Romanian Lei	3,3353	4,2399	4,2391	4,4190	4,4454	4,5688
Swedish Krona	9,2501	10,6191	9,0298	8,6515	9,3535	9,6351
Swiss Frank	1,6427	1,5100	1,2326	1,2311	1,0679	1,1117
Norwegian Krone	8,0165	8,7278	7,7934	7,8067	8,9496	9,3270

Source: Eurostat, Economy and Finance; ECB (2018). Euro exchange rates, <https://www.ecb.europa.eu/stats/exchange>, (03.07.2018).

The effects of the crisis, especially those spread after the debt crisis in Greece threatened Eurozone in the first place. When the concerns that other peripheral economies, called PIIGS, would not be able to overcome debt spiral to these effects, were added to these effects, significant reductions in the value of the Euro against the USD were recorded (Figure 4 and Table 10).

Being the origin of the crisis and the first to experience its effects, the US was on a recovery trend after the second half of 2008 and the Euro, which reached its highest historical value against the USD in early 2008, experienced significant depreciation against the USD with the spread of the crisis in Europe. The Euro's depreciation also against the Yen and the Yuan compared to the data of the pre-crisis period draws attention (Table 10).

Figure 4: Euro - Dollar parity trend after the crisis



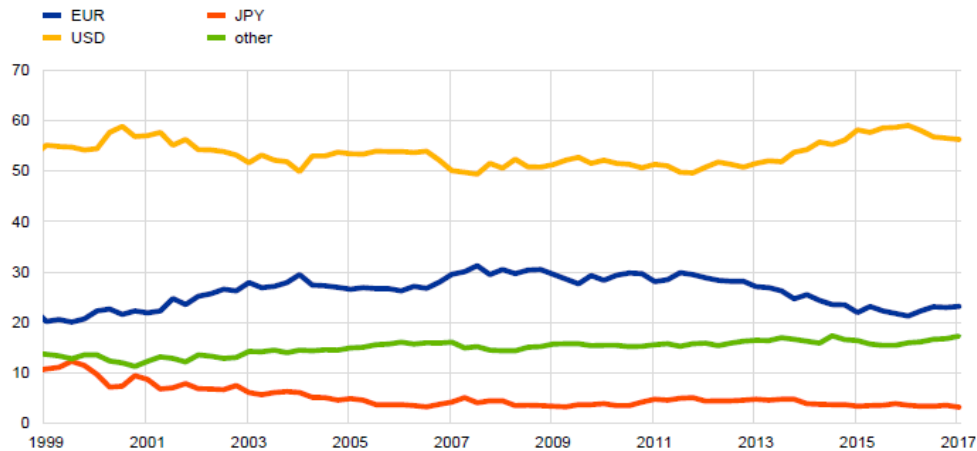
Source: ECB (2018). Euro foreign exchange reference rates, <https://www.ecb.europa.eu/stats/exchange>, (03.07.2018); Trading Economics (2018). Euro - Dollar exchange rate, <http://www.tradingeconomics.com/euro-area/currency>, (03.07.2018).

Along with the crisis, there has also been a considerable decline in the rate of use in international real and financial exchanges in parallel with the value of the Euro. The rate of use of the Euro in payments subject to international real-trade gradually decreased (Figure 5). Similarly, the share of Euro-denominated international financial assets in the global composition, including other currencies decreased (Figure 6). Thus, the global share of Euro-denominated financial assets, which were on a par with the USD before the crisis, began to decline rapidly with the crisis and it was far behind the USD.

It seems that the USD has become the most common currency with a share of 39.9% in the global payments as of 2016, the declining share of the Euro till 2015 has been under 30%, and thus

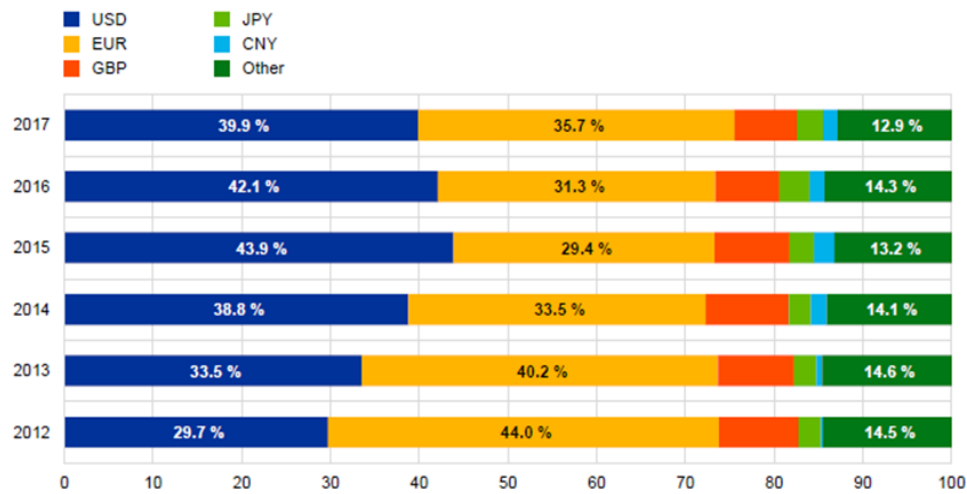
the USD, which experienced losses after the crisis, has recovered rapidly and taken over the global share of the Euro. But very this trend seems to be retreat after 2015. On the other hand, it draws attention that the use of Renminbi (Yuan), the currency of the People's Republic of China (PRC), in the global payments has continued to increase in line with the consistently increasing role of the PRC economy on a global scale, particularly in Asia and it follows the Japanese Yen.

Figure 5: Currency composition of outstanding amounts of cross-border loans



Source: ECB (2015). The international role of the Euro, *14th Annual Review Report of the International Role of the Euro*.

Figure 6: Currency composition of global payments



Source: ECB, Interim Report.

According to Balkır, this first major crisis experienced by the EMU is due to the global effects as well as the internal political problems and the inadequate convergence of the economic structures and the greatest challenge to the future of the Union has been revealed to be the “joint governance”. In the EU 2020 Strategy announced by Barroso, the President of the European Commission, in March

2010, the prerequisite to overcome the economic crisis in a stronger way was stated to create a productive, smart, sustainable and inclusive economy with high social compliance shaped by a social model that takes into account the aging population and strengthened by employment at a high level that will provide global competitive advantage (Balkır, 2010, p. 289-290).

However, the fact that the approaches that provide detections and solutions on the axis of the traditional discourses and strategies of the Union could not explain the effects and depth of the crisis in the first years of the crisis has shown itself in practice. As can be understood from Table 11 and Figure 7, the debt crisis, which had the most severe effects on the southern economies, especially Greece, and the subsequent political turmoil have deepened to a debate called Grexit that has brought the scenario of Greece's exit from the monetary union to the agenda. While Grexit became a scenario that has not been realized, then the Brexit process, which caused Great Britain to decide to leave from the EU, under the lead of England as of June 2016, was staged as an action against the European integration. While all these processes were determined by the economic imbalances and political factors accumulated by the Union from past to present, the ultimate effect of the economic recession introduced by the 2008 crisis, has become the main factor that motivated the regressive dynamics of both political and monetary integration.

As can be seen in Table 11, it is noteworthy that many countries in the monetary union, particularly the PIIGS countries, failed to meet the Maastricht Convergence Criteria for public financing. While there was a relative downward trend in the budget deficits of countries except for Greece as of 2015, the unstable nature of the public finance across the EU, particularly in the countries of the monetary union, was striking.

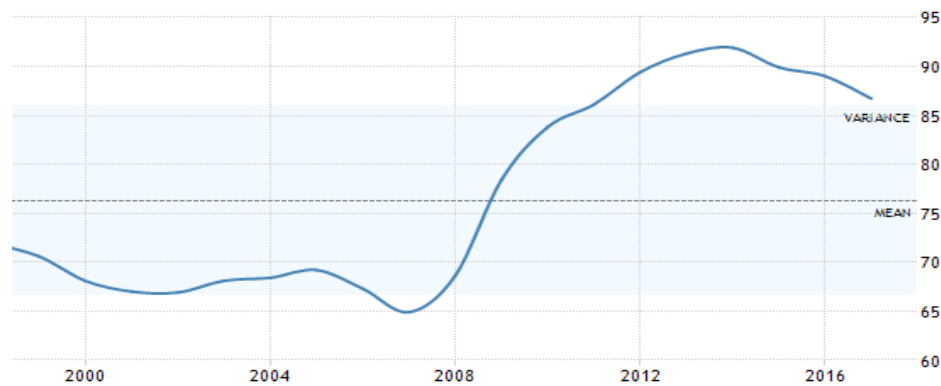
Table 11: Budget balance and public debts to GDP in European countries

(%)	Budget Balance (-% 3)				Government Debt (%60)			
	2012	2013	2014	2015	2012	2013	2014	2015
Euro area	-3,7	-3,0	-2,6	-2,1	89,3	91,1	92,0	90,7
EU 28	-4,3	-3,3	-3,0	-2,4	83,8	85,5	86,8	85,2
Belgium	-4,2	-3,0	-3,1	-2,6	104,1	105,2	106,5	106,0
Bulgaria	-0,3	-0,4	-5,4	-2,1	16,8	17,1	27,0	26,7
Czechia	-3,9	-1,3	-1,9	-0,4	44,7	45,1	42,7	41,1
Denmark	-3,5	-1,1	1,5	-2,1	45,2	44,7	44,8	40,2
Germany	-0,1	-0,1	0,3	0,7	79,6	77,2	74,7	71,2
Estonia	-0,3	-0,2	0,8	0,4	9,5	9,9	10,4	9,7
Ireland	-8,0	-5,7	-3,8	-2,3	120,1	120,0	107,5	93,8
Greece	-8,8	-13,0	-3,6	-7,2	159,6	177,7	180,1	176,9
Spain	-10,4	-6,9	-5,9	-5,1	85,4	93,7	99,3	99,2
France	-4,8	-4,0	-4,0	-3,5	89,6	92,4	95,4	95,8
Croatia	-5,3	-5,3	-5,5	-3,2	70,7	82,2	86,5	86,7
Italy	-2,9	-2,9	-3,0	-2,6	123,3	129,0	132,5	132,7
Cyprus	-5,8	-4,9	-8,9	-1,0	79,3	102,5	108,2	108,9
Latvia	-0,8	-0,9	-1,6	-1,3	41,4	39,1	40,8	36,4
Lithuania	-3,5	-2,6	-0,7	-0,2	39,8	38,8	40,7	42,7
Luxembourg	0,3	0,8	1,7	1,2	22,0	23,3	22,9	21,4
Hungary	-2,3	-2,6	-2,3	-2,0	78,3	76,8	76,2	75,3
Malta	-3,5	-2,6	-2,0	-1,5	67,5	68,6	67,1	63,9

Netherlands	-3,9	-2,4	-2,4	-1,8	66,4	67,9	68,2	65,1
Austria	-2,2	-1,3	-2,7	-1,2	81,6	80,8	84,3	86,2
Poland	-3,7	-4,0	-3,3	-2,6	54,0	56,0	50,5	51,3
Portugal	-5,7	-4,8	-7,2	-4,4	126,2	129,0	130,2	129,0
Romania	-3,7	-2,1	-0,9	-0,7	37,4	38,0	39,8	38,4
Slovenia	-4,1	-15,0	-5,0	-2,9	53,9	71,0	81,0	83,2
Slovakia	-4,3	-2,7	-2,7	-3,0	52,4	55,0	53,9	52,9
Finland	-2,2	-2,6	-3,2	-2,7	52,9	55,5	59,3	63,1
Sweden	-0,9	-1,4	-1,6	0,0	37,2	39,8	44,8	43,4
U.Kingdom	-8,3	-5,6	-5,6	-4,4	85,3	86,2	88,2	89,2
Norway	13,8	10,8	8,7	5,7	29,1	29,7	27,3	31,6

Source: Eurostat, Economy and Finance.

Figure 7: Euro Area government debt to GDP after the crisis



Source: ECB (2018). Government debt to GDP, <https://sdw.ecb.europa.eu>, (03.07.2018); Trading Economics (2018). Euro Area government debt to GDP, <http://tradingeconomics.com/euro-area/government-debt-to-gdp>, (03.07.2018).

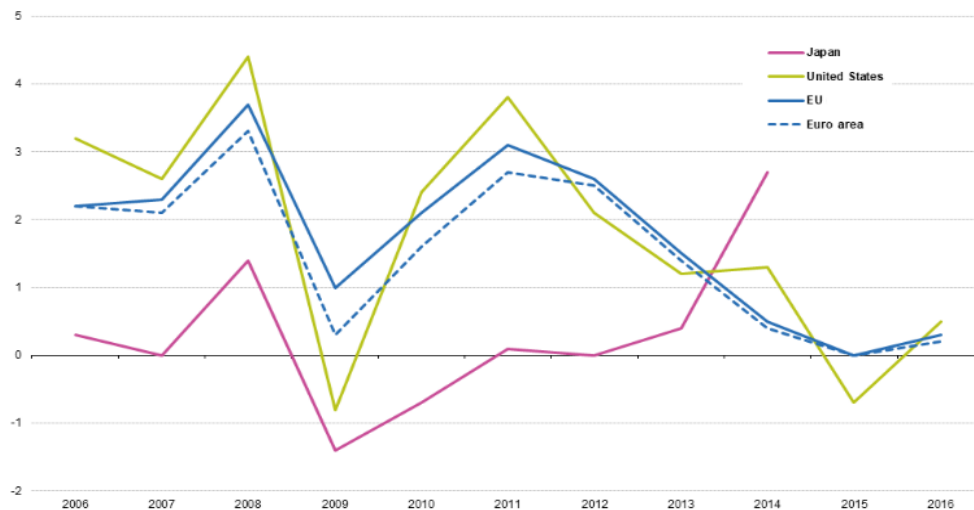
According to Türel, the economic stagnation caused by the crisis in the Eurozone and the whole Union has revealed that the capacities of the member states to resist asymmetric and symmetrical shocks were different from each other. The loss of competitiveness in the “peripheral” economies experiencing relatively high wages and price inflation has become chronic due to insufficient coordination of the common monetary and financial policies. Given that the inter-country and intra-country labour mobility, which can serve as a defence mechanism against asymmetric shocks, are at low levels throughout the Union, the deflationary processes, which can restore competitiveness, have forced the peripheral economies to endure years of lower growth rate and higher unemployment rates (Türel, 2013, p. 415).

According to Krugman, Obstfeld, and Melitz, although many barriers have been lifted before the integration of the markets in Europe since the 1980s and significant progress has been made in economic integration, many EU countries still have not met the convergence criteria set out in Maastricht and the Eurozone has not met the basic criteria required to be an Optimum Currency Area. The first of these two weaknesses specific to European integration stems from the fact that the EU could not achieve the level of fiscal federalism that would enhance it against turbulent economic processes. The second one was due to the fact that the labour force mobility in the whole monetary

union occurred at a level considerably lower than other major monetary unions like the United States¹ (Krugman et al., 2013, p. 583).

The debt crisis, which shook Europe, has disclosed the economic structural problems of the EU integration. The single-headed structure of the monetary policy and the multi-headed structure in fiscal policy, the disadvantages of competition caused by the economic power gap between the countries, high budget deficits, high current account deficits, and finally, the fact that the Maastricht Criteria have not been attached the required importance have been the major structural problems (Erarslan and Timurtaş, 2015, p. 30-49). It has also been proven that the Union lacks preventive mechanisms against crises. Various mechanisms have been developed to support debtor countries and measures have been taken to reduce imbalances between the countries and to ensure convergence after the debt crisis had deepened. However, the inadequacy, as well as delay of such measures, caused the acceleration and the spread of the debt crisis (Eser and Ela, 2015, p. 228-229).

Figure 8: Inflation trends in Euro Area, USA and Japan



Source: Eurostat (2018). Development of the annual average inflation rates, <http://ec.europa.eu/eurostat/statistics-explained>, (03.07.2018).

The Eurozone countries, once again proven to be the economies with a very different nature from each other, have imposed themselves on the necessity of establishing a common monetary program against the effects of the crisis despite Germany, which was against the depreciation of the Euro did not want to compromise its financial discipline, on one hand, and the countries which were relatively more affected by the crisis and which wanted to realize economic growing and increase in

¹The inter-state population mobility/total population ratio, which is 3% per year in the United States, this figure seems to be 0.3% between the EU member states annually and it is 10 times lower than that of the US. As can be understood from this comparison, intra-Union mobility is quite low. However, considering the differences in language, culture, and labor legislation among EU countries, some academic studies suggest that intra-country mobility data in the EU members is more appropriate than the mobility recorded between the member countries. However, the figure is much lower than the inter-regional mobility rate in the United States even when the inter-regional geographical mobility in the EU member states is taken into account (Eurofound, 2014).

exports as soon as possible on the other hand. In this process, in which the Union focused on joint measures to reduce the damage caused by the crisis and prevent possible new crises, the liquidity shortage that has arisen together with negative developments in production, employment, public finance and financial sense, made ECB's leaving from the traditional monetary policies inevitable. While FED, the Bank of England and the Bank of Japan quickly put into place the measures for monetary expansion, the different priorities of the Eurozone countries have delayed the adoption of comprehensive monetary measures. However, the concern that negative developments brought the Union economies into deflation rapidly (Figure 8) obliged to take measures to decrease the interest rates (Figure 9) and to stimulate economic activity by creating liquidity.

Figure 9: Change in the benchmark interest rate of ECB after the crisis



Source: ECB (2018). Benchmark interest rate, <http://www.ecb.europa.eu/> (03.07.2018); Trading Economics (2018). Euro Area interest rate, <http://www.tradingeconomics.com/euro-area/interest-rate>, (03.07.2018).

In order to raise the inflation rate and the employment rate and to get the Union's economy out of its vicious cycle, the ECB reduced the deposit interest rates to the level of -0.4%, lower than "zero" as of June 2014 and implemented the "negative interest" application which is an unusual measure in monetary policy. The negative interest rate aiming at increasing loan demand by marginally reducing the borrowing costs was expected to boost up the Union's economy and to provide the competitive advantage in foreign trade despite the depreciation in the Euro. With these measures taken after the crisis, the ECB and the countries of the monetary union abandoned traditional monetary policies and monetary strategies completely.

Assistance to save the banks in the PIIGS countries further increased the government debts which were already at a high level, as a result of the ongoing uncertainty environment and rating policies of credit rating agencies, borrowing has become more costly for those countries. The conditional support packages provided by IMF² and ECB were also insufficient to solve the problem of the countries that had difficulties in debt rollover (Eser and Ela, 2015, p. 210).

²Since IMF programs and exchange rate adjustments (devaluation) for the crisis in the Eurozone are off the agenda, it caused much harsher results compared to the traditional stability programs. The economic shrinkage, which was limited for one year or two years at maximum in the peripheral economies that implemented similar programs, lasted many years such as in Greece.

According to De Grauwe, the 2008 Crisis has created a suitable environment for testing whether the Euro System has the qualification of being a lender of last resort. In the first two years of the crisis, the ECB tried to prevent a major bank crisis by injecting intense liquidity into the market on time. However, it was not involved in the crisis, which escalated in terms of the public debts as of 2010, taking a passive position until 2012. With the Bond Buying Program put into practice afterward, the ECB, together with national central banks included in the Euro System, aimed to stimulate demand by providing monetary expansion and it has made a significant change in the institutional sense with the decision to become the lender of last resort. Nevertheless, the discourse of ECB that such buying programs would be temporary has prevented the full establishment of a trusting environment in the market and in the eyes of the investors (De Grauwe, 2016, p. 213).

According to Boratav, the process, which ended in the debt crisis in Eurozone, began with the entrance of the peripheral countries -which have fragile and less competitive economic structures compared to central countries like Germany and France- into the Eurozone which made the Euro an international currency. Due to the new liabilities of the West German economy, which had large amounts of foreign trade surplus and capital outflow in the 1980s, following the union with East Germany in the 1990s, the German economy has become withdrawn, thus, the net capital outflow and the current account surpluses have ceased. On the other hand, the monetary union has launched a large-scale capital outflow from the central economies -particularly from Germany, which had a new opportunity to compensate for the burden of its union- to weaker economies. The demonetizing of the national currencies has eliminated exchange rate risk due to devaluation for the investors, and the current account deficits have turned into surpluses they could grow by the capital outflow from central economies to peripheral economies. Thus, the growth in Germany, which could turn its current account deficits into the surpluses, has begun to base on the exports again.³ Considering the periods of eight years before and after using the Euro, the annual averages of the rate of the current account deficits to GDP of Germany and monetary union's four countries which were most affected by the crisis and total inflation rates of the same countries in the period between 2000-2007 before the crisis can be seen in Table 12. The current account balance of Germany, in the first two rows of the table, shows the divergence between the two periods (Boratav, 2011).

Table 12: Current account balance to GDP rates in Germany and crisis-hit countries before and after the monetary union

	Germany	Greece	Ireland	Portugal	Spain
Current Account Balance/GDP (1992-1999)	-1.0	-2.5	2.4	-3.5	-1.3
Current Account Balance/GDP (2000-2007)	3.2	-8.4	-1.9	-9.4	-5.8
Inflation (2000-2007)	12.8	26.4	28.0	24.0	25.6

Source: Boratav, 2011.

³In the 1990s, there were considerable reservations and debates on the creation of the EMU. However, especially the German medium and large capital owners' trend that the barriers against the export would be lifted after the elimination of the exchange rate risk has accelerated the last steps towards the monetary union. In the end, Germany increased its exports and has become the leading country that gained the most benefit from the monetary union.

The countries such as Greece, Ireland, Portugal and Spain, which associated their currencies to the ECU, whose value was determined using the German Mark as nominal anchor currency, have agreed to overvalue the exchange rates by 25-30 percent, thus, the unit labour costs of such countries in the domestic production (taking into account labour productivity) have become more expensive than in Germany after the use of Euro. This situation, which pointed out an important difference in terms of competitiveness, has made foreign trade deficits inevitable in the peripheral economies. Since the devaluation, which is the shortest way of increasing competitive power, has not been an option anymore, the capital outflow from Germany has been the source of finance for the deficit. As seen in Table 12, the situation has completely reversed in the crisis countries, which had a current account deficit of around 1-3% relative to GDP in the 1990s compared to GDP (Ireland had a surplus) since the transition to the Euro. The share of current account deficits in GDP in Greece, Portugal, and Spain has increased rapidly to the rates of 6% and 9%, however, the evaporating foreign surplus turns into chronic deficits in Ireland. Considering the inflation rates (24-28%) recorded in the period between the transition to Euro and before the crisis in the mentioned countries, the rates of twice that of Germany is striking. The competition power gap between the peripheral economies and Germany increased and thus the dense capital outflows to peripheral economies have led to the results such as borrowing of the private sector and domestic banks and financing the balloon experienced in real estate sector. The bankrupted banks were recovered by the budget expenditures, the private debts have turned into government debts, and the public deficits have become chronic when the balloon burst (Boratav, 2011).

According to Stiglitz, the structural and managerial problems that the monetary union has had since its inception have been important factors in the widespread and deepening of the economic crisis as much as the asymmetry of the EMU countries' current account balances. In the period from accepting Euro as the common currency by establishing the fiscal convergence criteria until today, there has been no economic convergence between the member countries, the imbalance between the central and peripheral economies has become even more significant, and the financial instability and economic inequality within the Union have increased. Thus, the EU, as a form of economic integration lacking political consensus and financial element, has also failed to establish a financial solidarity and risk-sharing process that would create resistance to crises. This has been a barrier to the adoption of coordinated measures, which would increase the demand by enhancing the production infrastructure and be an alternative to the measures laid down by the austerity policies. As a result, the crisis countries that implement restrictive fiscal measures forced by the troika of ECB, the European Commission, and the IMF could not record a stable economic recovery. This situation has revealed the need for a deeper political unity across the Union, fiscal convergence and alternative policies to increase the competitiveness of crisis countries to sustain the Euro System. Otherwise, the dissolution of the monetary union or using another fixed exchange rate zone which is more flexible than the Eurozone are not seem to be remote possibilities (Stiglitz, 2016, p. 296-305).

Conclusion

The Euro has also demonstrated a global potential to limit the absolute hegemony of the USD as well as the regional effects it created by bringing EU integration to the next level. In addition to being a successful result of the economic and monetary integration project lasting for dozens of years, considering the role and effects of its transnational structure on the global economy, it is clear that the Euro has more complex qualities than an ordinary currency. In this respect, the factors determining the value and global character of the Euro are also dynamic and although there is a long history of integration in the background, EMU, which is still quite young, appears to be intertwined with the effects of the financial crisis it experiences.

One of the most important factors affecting the role and value of the Euro in the global economy is the economic size of the Eurozone and its macroeconomic stability. The data we showed in this study draws attention that the Eurozone which is almost equal to the US in terms of production level and trade volume is remarkably behind the US in terms of financial markets. This suggests that there is a discrepancy and inconsistency between the Eurozone's real economy and financial size. Moreover, the value of Euro and its decisiveness in the international area are closely related to its characteristics as a reserve money. Creating about one-fifth of global foreign exchange reserves, Euro ranks second after the USD, which has a large ratio of 64% and it is far behind the competition in this field. On the other hand, as the second largest currency traded in exchange rate markets, the Euro is the subject of financial exchange around 35% in the daily global transactions. This rate, although lagging behind the USD, indicates the characteristics of the Euro as a global payment instrument. And also, as an alternative currency to the USD, the Euro, which represents the largest trade block, one of the most open economies and the second largest monetary union in the world, reduces the risks arising from exchange rate fluctuations and also contributes to global economic stability with this characteristics.

As a result of the decline in production and investment since the 2008 crisis, the increase in the unemployment in the Eurozone has occurred more than that in the whole Union and in the USA. The effects of the crisis which spread together with the debt crisis in Greece threatened the Eurozone in the first place and adding the concern that other peripheral economies, called the PIIGS, could not get out of the debt spiral caused depreciation of Euro against the USD. Thus, the United States, the origin of the crisis, has entered a recovery trend after the second half of 2008. Having reached its highest historic values against the USD in early 2008, the Euro has suffered significant losses during the spread of the crisis in Europe. The global share of Euro-denominated financial assets, which were on a par with the USD before the crisis, began to decline rapidly with the crisis and lagged far behind the USD. The similar situation has been true in terms of Euro-denominated global payments.

The reasons why the crisis can have a profound impact at this level in the EU and especially in the Eurozone economies become even clearer when the historical background of the monetary union is examined. Along with the transition to the Euro, the start of an intensive capital outflow from the central European countries to peripheral countries has created a periodic revival in the peripheral economies and this flow of capital, which also influenced the central economies as inflation later, made the economic conditions in the Union even more unstable rather than optimizing. The competition power gap between the peripheral economies and Germany increased and thus the dense

capital outflows to peripheral economies have led to the results such as borrowing of the private sector and domestic banks and financing the balloon experienced in the real estate sector. The bankrupted banks were recovered by the budget expenditures, the private debts have turned into government debts, and the public deficits have become chronic when the balloon burst. This situation led especially the peripheral countries -that needed to resort to open market operations to combat high inflation but lost this opportunity by waiving their monetary independence with the transition to the common currency- to face the crisis which was hard to handle for them. This challenge continues today and influences the Euro's role in the global economy.

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