



## THE CHALLENGES OF MONETARY INTEGRATION IN THE EUROPEAN UNION: THE THEORY OF OPTIMUM CURRENCY AREAS AND CRISES<sup>1</sup>

*Avrupa Birliği'nde Parasal Bütünleşmenin Zorlukları: Optimum Para Alanları Teorisi ve Krizler*

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### ÖZ

1957 yılında Avrupa Ekonomik Topluluğu (AET) kurulurken temel hedef, içerisinde üretim faktörlerinin serbestçe dolaşabildiği bir ortak pazar oluşturarak, gümrük birliğini de aşacak olan ekonomik bütünleşmeyi gerçekleştirebilmek olmuştur. Böylece, o dönemin bütünleşme eğilimi her ne kadar parasal birlik hedefini merkeze almamış olsa da parasal bütünleşmeyi konu alan politik çalışmalar ve teorik yaklaşımlar hız kazanmıştır. 1961 yılında Mundell, ekonomik bütünleşmeyi hedefleyen ülkeler açısından optimum parasal alanların niteliklerini analiz ederken, ortak para birimi bulunmayan sabit kur alanları karşısında ortak paraya sahip parasal birliklerin avantajlı olup olmadığı sorusuna dikkati çekmiş ve yıllar sonra Ekonomik ve Parasal Birlik'te (EPB) somutlaşacak olan ortak para uygulamalarının, ortak pazarın istikrarlı ve dinamik biçimde sürdürülebilmesinin koşullarını yaratabileceğini öne sürmüştür. Bu bağlam dikkate alınarak bu çalışmada, EPB'nin -optimum koşulları sağlamaktan uzak bir sabit döviz kuru alanı olduğu sonucuna varılmak suretiyle- parasal bütünleşmenin tarihsel gelişimi ve Euro Alanı krizi ile birlikte daha da belirginleşen yapısal sorunları incelenmektedir.

### ABSTRACT

The main goal in the establishment of European Economic Community in 1957 was to be able to realize the economic integration, which will surpass customs union, by generating a common market in which the production factors can roam freely. Thus, although the monetary union was not at the core of the integration trend at the time, political efforts and theoretical approaches on monetary integration gained impetus. In 1961, when analyzing the characteristics of the optimum currency areas for countries aiming economic integration, Mundell draw attention to the question of whether monetary unions with common currency had advantage over the areas with fixed exchange rate system without any common currency, and argued that, common currency practices, which will materialize years later in Economic and Monetary Union (EMU), can create the circumstances to sustain the common market in a consistent and dynamic manner. In this context, in the present study, historical development of monetary integration and structural challenges which became evident further along with Euro Area crisis are investigated – thereby reaching the conclusion that EMU is an area of fixed exchange rate system that is far from providing the optimum conditions.

### 1. INTRODUCTION

Bretton Woods System, established in 1944 and made dependent on the economic superiority of the USA, which was then assumed permanent, has expired due to the regression of this superiority over time especially because of the USA's external deficit at the end of Vietnam War. In the later period, capital accumulation paradigm has lost its validity and the global interest of the capital was characterized by the flexibility of the exchange rate systems (Boratav, 2016: 30). Global hegemony of USD has started to be questioned and the efforts of the European Continent, home to the colonialist powers of the past centuries, toward acquiring the dominant position in the reshaped global affairs, has proceeded as far as the establishment of the common currency, Euro.

<sup>1</sup> 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.

The EU, which aimed to maximize the profit in the intra- and extra-union trade with the international competition perspective and toward this aim, managed the transition to a single currency after a partial and progressive process, now has an important weapon against the global hegemony of the US Dollar. The core that reveals the characteristics of this project of the Union on the monetary integration, lies in the concept of monetary integration and in "The Theory of Optimum Currency Areas", which is frequently cited by the scientific studies on monetary integration.

The aim of this study is to investigate historical development and characteristics of EMU within the context of OPA and notice that EMU is an area of fixed exchange rate system that is far from providing the optimum conditions. The discussion within this study is particularly pay attention and presents the challenges and contradictions of monetary integration which disclosed with the debt crisis, as the crisis revealed the economic structural problems of economic integration; the centralized structure of the monetary policy and the self-ordained structure in fiscal policy, the disadvantages of competition caused by the economic power gap between the countries and inevitably the asymmetrical effects of the large scale shocks.

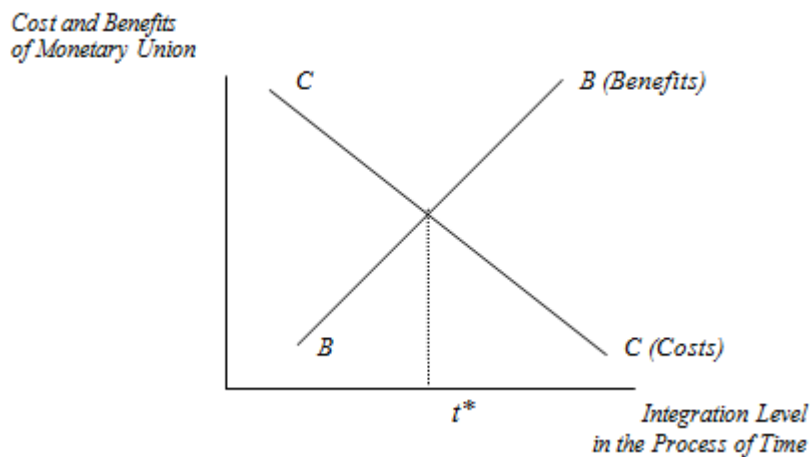
## 2. MONETARY INTEGRATION AND OPTIMUM CURRENCY AREAS

Monetary integration has two main components. The first one can be called "exchange-rate union", which represents the area established by the exchange rates that have a permanently fixed relationship. While the rate is fixed within the area encompassed by this union, there is an intra-union harmonization regarding the exchange rates for the money from outside the area. The second main component is the convertibility, which represents the process in which the controls over the exchange within the union are completely removed, regardless of the current accounts or capital accounts (Corden, 1972: 360). In order for the monetary union to operate in a healthy manner, absolute convertibility within the union is inevitable, otherwise the main mechanisms of the monetary union such as common foreign reserves fund and debt liquidation system cannot operate smoothly (Karluk, 2003: 360).

In order to ensure optimum allocation of resources within the monetary union, monetary integration is a prerequisite. Advanced level integration of the goods, service and production factor markets of the union members set the ground for monetary integration by increasing the mutual economic dependency. With the removed capital controls and increased competition in the financial sector in the expanding market, distribution of the savings and investments improve, interest rates decrease, capital costs for companies decrease and more robust opportunities of protection against the risks are created. However, with all these processes, a country joining to the monetary union leaves her independency in economic policy and gives up some of her rights of natural sovereignty. On the other hand, as the trade and factor mobility in the national economies that are members of the union become more and more open and interdependent, two unique problems may arise. First, monetary and financial measures adopted by one of the member countries in the union in order to continue their own financial activities can affect other member countries with the spillover effect. Second, the probability of the member country to cope with the country-specific economic problems that arise after becoming a member of the monetary union can decrease over time due to the waiver of the traditional instruments of the national economy. Thus, countries that form an economic union by fixing the exchange rates face the fact that adopting consistant monetary policies require restrictions in the use of certain other policies (financial policies such as taxing and expenditure) that also require harmonization between member countries. In summary, monetary integration has certain costs in addition to its benefits (Hitiris, 1998: 140-141).

When analysing the costs and benefits of the monetary union, Krugman systematized an upward and downward tendency parallel to the level of integration and revealed the equilibrium process between the benefits of monetary activity and economic costs within the context of a country that is the member of an area of fixed exchange rate system. Based on this, in the BB-CC diagram in Figure 1, BB line represents benefits, CC represents costs along horizontal and vertical lines in terms of their ratios with GDP (El-Agraa, 2007: 206).

As can be seen in the diagram, the level of integration of a member country with an area of fixed exchange rate system conditions the equilibrium between benefit and cost. If the economic integration exceeds the critical level ( $t^*$ ), this indicates that the benefits obtained from the relevant monetary integration (for instance, increase in the intra-union trade) exceeds the costs caused by integration (for instance, the costs that arise due to the waiver of independent exchange rate which would establish internal and external economic balance when faced with an external shock) (Löchel, 1998: 18-22).

**Figure 1.** Krugman Diagram: The Costs and Benefits of Monetary Union

Source: El-Agraa, 2007: 206.

In a monetary union, the level of integration and the upward and consequently, downward tendencies of the costs and benefits, become prominent with the extent of economic convergence between the member countries. Thus, convergence of the national fiscal policies and their coordination with the common fiscal policies become an important factor in the efficient operation of the monetary union. For instance, if the member countries continue to have government deficits and try to finance the relevant deficits by contracting debt in high interest rates, this interrupts the common monetary policies and leads to consequences that negatively affect the operation of the monetary union. Therefore, establishment of the financial harmonization between the member countries and auditing the budget deficits, that is, the level of fiscal convergence within the monetary union, becomes a determining factor in the stability of the monetary union (Türel, 2013: 397). Nevertheless, as will be discussed in the current study, problems regarding these issues and the practical limitations caused by these problems in the Euro Area, an example of the monetary union with common currency, play a determining role.

In 1961, when analyzing the characteristics of the optimum currency areas for countries aiming economic integration, Mundell draw attention to the question of whether monetary unions with common currency had advantage over the areas with fixed exchange rate system without any common currency (Mundell, 1961: 657), and argued that, common currency practices, which will materialize years later in Economic and Monetary Union (EMU), can create the circumstances to sustain the common market in a consistent and dynamic manner. In light of this, firstly, one must investigate the concept of Optimum Currency Area (OCA).

OCA represents the optimum geographical area established by the irreversible fixation of multiple currencies to one another. Within the relevant area, the single established currency or currencies fixed to one another permanently -together- fluctuate against the currencies outside the area. The limits of OCA is determined by the geographies of the countries that chose to participate in the fixed exchange rate area. The term "optimum" in OCA is considered within the context of price and wage flexibility, mobility of the production factors including labor, integration of the financial markets, degree of economic openness, variation in production and consumption, proximity in inflation rates, fiscal integration and political integration (Mongelli, 2008: 2-3). The concept of OCA was developed to be able to analyze the relevant costs and benefits systematically. The approach suggested by Mundell in the 1960's determine the main characteristic of an optimal level currency area as the factor mobility (Ingham, 2004: 232-233).

The primary conditions theoretically assumed by OCA are the establishment of full employment and avoiding inflation. Nevertheless, the first literature on OCA suggest that, similar to Phillips Curve, there is a consistent interchange between inflation and employment in the long term. Every country can freely choose their employment-inflation combination based on their own economic conditions and can adjust the exchange rates in a way that can sustain their competitive power. However, if a country fixes their exchange rate within a monetary union, the country cannot use her monetary policy formed based on the desired interaction between employment and inflation any more. Thus, countries that are members of a monetary union might have to choose a common employment-inflation combination

that is far from their preferences and can face inflation or unemployment rates that are much higher than they aimed for. This shows that, the probability of success of a monetary union realized by countries with long term monetary stability, same priorities regarding inflation-employment, and similar economic goals is higher. In practice, most of the time, inflation-employment interaction does not develop consistently and in the long term, unemployment, regardless of the inflation, shows a tendency towards the “natural rate” proposed by Friedman. Since it is not possible to decrease the unemployment rate by increasing the inflation rate, the only benefit of monetary independence is to have the freedom to choose an inflation rate that is different from other countries. Therefore, a country with high inflation that joins a monetary union with low inflation, she can obtain more benefit than the cost she endured if she can adhere to the liability to reduce inflation in the long term. However, in the short term, the said country must be ready for the temporary costs due to low competitive power that can cause economic recession and unemployment. Countries that are members of the monetary union but have a rather underdeveloped fiscal system (countries that can finance their public expenditures via seignorage, in other words, with inflation tax) have to accept the common (low) inflation rate and can face options such as restricting public expenditures or condoning the increase in budget deficits (Hitiris, 1998: 144). However, before establishing the currency area where the exchange rates are permanently fixed, if the participating countries ensure that the relevant national rates that determine the characteristics of their economy converge in order to reduce these costs the monetary union causes in practice, it will form an important basis for the stability of the union (Molle, 1990: 161).

In order to fully evaluate Theory of OCA, one must consider the international financial conditions at the time when it was first proposed. In the beginning of the 1960's when the theory was unearthed, Bretton Woods System's fixed (but adjustable) exchange rate regime was being used. In those years when capital controls continued in many countries, European integration process was incipient. The priorities demonstrated by the studies on OCA have the characteristics of this period. 1960's represent a period in which, on one hand, discussions arising due to the comparison between fixed exchange rate systems and flexible exchange rate systems increased, while on the other hand, the specific characteristics of the USA economy and European economies were compared (Mongelli, 2008: 2). Therefore, the period when the Theory of OCA was proposed for the first time has different characteristics than the conditions of the period -after the collapse of Bretton Woods System- when the financial affairs were getting more and more influenced by the global dynamics.

With the collapse of Bretton Woods System and international oil crisis, the scope of the work toward OCA have expanded. While the early analyses summarized above were the starting point, new analyses focus on the nature of the similarities and interdependence between the participating countries. Thus, as stated by Mundell, as a belt of regions (states) affected symmetrically by the potential shocks (external turbulences), OCA represents an area where the capital and labor are fully mobile. Symmetrical shocks affect each member country to the same extent and by this way, relative prices between the regions are not disrupted and exchange rates can remain fixed. In the case of an asymmetrical shock, equilibrium between the regions can be restored by factor mobility. If these conditions are present, fixed exchange rate between the regions (incomplete monetary union) and the eventual common currency (complete monetary union) can start operating without any costs added by the member countries' loss of independency of their monetary policies, and the countries can benefit from the stability in the foreign exchange market and low transaction costs (Hitiris, 1998: 146-147).

In 1973, when Mundell brought financial integration shaped by offshore asset protection toward international risk sharing into question as a contribution to OCA, Bretton Woods Systems had come to an end and new quests for USD-indexed national currencies had already begun. Thus, studies that adapted OCA to the conditions of the period of globalization of the financial affairs have continued during the process where flexibility in the foreign exchange rates was becoming widespread and fixed exchange rate areas shaped by the regional integrations led by Europe and Eastern Asia were identified as the eventual goal. Nevertheless, in 2004, upon the analysis of financial integration arguments of Mundell, McKinnon stated that countries adopting single currency can reduce the effects of the asymmetrical shocks by diversifying their sources of income. McKinnon emphasized the protective effect of the measures with the characteristics of an annuity, which is established by protecting various assets from other countries, and argued that, against income fluctuations, citizens can regulate their own asset portfolios via asset purchases and sales from international markets and loan transactions. Similar to the studies emphasizing the integration of the financial markets, concepts such as monetary integration, political integration and degree of economic openness have been located at the center of the recent studies on OCA (McKinnon, 2004: 689-715; Mongelli, 2008: 2-4).

### 3. EUROPEAN MONETARY INTEGRATION DESPITE STRUCTURAL AND POLITICAL DIFFERENCES

According to Frankel and Rose, there are four common planes that all studies on OCA focus on. Based on this, the more advanced trade volume, similarity of the shocks and business cycles, degree of the mobility of the labor, and risk sharing system via fiscal transfers, namely, the four connecting elements between the members, are, the more healthier outcomes the common currency will give rise to (Frankel and Rose, 1996: 3). In light of this, theory of OCA, which studies the balancing costs that must be endured in order to eliminate the internal and external economic imbalances and benefits caused by common currency practice, which is a fixed exchange rate system, and the characteristics of the regions or countries in which the single currency will give the best outcome in terms of internal and external balance, has also played an important role in the integration attempts that begun in Europe in the 1950's and presented a theoretical frame for the monetary integration practice in Europe. Nevertheless, steps taken toward the establishment of an economic and monetary union in Europe have created a driving force for the scientific studies toward testing the theory of OCA, and European monetary integration and theory of OCA have been in a continuous interaction (Özer, 2007: 130-131).

As emphasized before, Krugman, who discussed OCA on the basis of European monetary integration, considered the example of Euro Area where a single currency is used. Upon the realization of common currency with Euro, an intense capital movement from the central countries of Europe to the periphery countries was noted. This process has created sudden increase in the periphery economies and caused high inflation rates, which will also be transferred to the core later on. According to Krugman, the point worth noting here is that, despite the controls on capital mobility being removed in the Europe in 1990's, capital mobility and consequent current account imbalances were limited; whereas after adopting single currency, increased capital mobility made the economic conditions more unstable instead of optimizing them. Thus, abolishment of financial borders with Euro Area made the countries face with more asymmetric shocks that they struggled to manage. This process caused more deeper impacts particularly in the periphery countries who had to resort to open market operations to cope with inflation but missed this opportunity since they waived their own monetary policies after adopting common currency. Despite this, according to Krugman, although not considered as an optimum area, the presence of an Economic and Monetary Union (EMU) area in Europe has registered OCA as a comprehensive theoretical approach (Krugman, 2013: 439-448).

When the money system established by Bretton Woods Agreement became unsustainable as a result of the more dynamic international mobility of the capital and spread of the oil shocks of the 1970's to the developed countries, in Rodrik's words, it became an obligation to establish a financial structure suitable for a global era that surpasses the globalization in the typical sense (hyper-globalization) and that eliminates ancient hierarchies by terminating nation-states. Thus, in 1980's and 1990's, a much more advanced economic liberalization and deep integration was put on the agenda. Trade agreements have transcended beyond the traditional point of view and surpassed local policies; controls over international capital markets were removed and developing countries were extensively forced into opening their markets to foreign trade and investment. By this way, economic globalization, in its typical sense, have transformed in itself and reached to a different dimension. According to Rodrik, the level of economic and monetary union that the European nations have reached has been a symbol of a local version of a deep integration and hyper globalization. Within the framework of a single market, elimination of transaction costs and harmonisation of the regulations have revealed an important institutional skill. Among the EU members, barriers in front of the production factors were eliminated, and rules were set based on a massive body of knowledge valid around the Union, which lists the common standards and expectations. Establishment of a common currency valid in 19 countries as of today has represented the most advanced and deep level of integration for the European nations (Rodrik, 2011a: 184-194; Rodrik, 2011b: 26).

In the Treaty of Rome which came into force on 1 January 1958 and established EEC, since Bretton Woods System was considered sufficient to ensure stability in the financial matters at the time, a main goal toward monetary union was not set. However, the second heading that includes the items on the economic policy of the Treaty, contains clauses toward the cooperation to be established in economic and monetary policies. The Treaty includes, along the lines of the goals regarding the operation of the common market, which is the main goal, items about the establishment of economic policies that take common interests into account, the measures to ensure internal and external economic balance, and establishment of a monetary committee as an advisory committee in order to realize the economic cooperation for all these. However, in the years following the Treaty, due to the balance of payments problems, it can be seen that there is a cycle in which the international tension regarding money and the question marks regarding the stability of USD increased. Therefore, suspicions on the overall

stability of the international monetary system established with Bretton Woods have increased (Delivorias, 2015: 2).

Starting from the second half of the 1960's, steps toward the monetary union were quickened. In this period, the devaluation in the French francs, and payment surplus and revaluation in Germany, increasing need toward cooperation due to the new countries which were about to join the Community, the fact that approximately half of the trade volumes of the member countries were within the Community, and above all, monetary instability due to the shock faced by Bretton Woods System as a result of the rapid increase in the balance of payments deficit of the USA and decreased trust in the USD, have been the major factors that caused the monetary union attempts to gain impetus (Balkir, 2010: 265). Customs union, which was one of the major goals set at the Treaty of Rome was realized in 1968. Hague Summit in 1969 has formalized the goal of monetary union on the basis of the previous works, Barre Report and Schiller Plan, which was presented to the Commission immediately after the Summit. Barre Report suggested a much tighter integration between European economies and emphasized the need to firstly increase the coordination in economic policies and monetary cooperation. The first goal of the Plan has been the convergence of the medium-term economic policies particularly toward the balance of production, employment, prices and wages. In order for these medium-term goals to be realized, short-term coordination measures were emphasized. While Barre Plan mostly includes monetarist measures proposed by the French, Schiller Plan has been an example of Germany's approach with financial dimension. Instead of fixing the exchange rates, the said Plan argues that the coordination must be established between the economy policies of the member countries and proposes recommendations that would create control on the budgets of the member countries and narrow the fluctuation margins between the national currencies. With these measures, it was found that countries such as Germany who have surplus in the balance of payments do not have to finance the balance deficits in other countries. Differences in the political opinion of the era have prevented both reports to be put into effect. The plan which established an agreement between the recommendations of these two reports has been the Werner Report (Kruse, 1980: 54-75; Balkir, 2010: 265-266).

In the Werner Report, which presented the economic and monetary integration plan incrementally over a period of 10 years until 1980, important decisions such as establishing a single currency or establishing a foreign exchange union to prevent the fluctuations between national currencies and adopting full convertibility; removing the restrictions on capital movements; establishing a central bank and a common reserves fund; establishing a new organ that will manage the economic policies to be performed in a way that it is accountable to the European Parliament (EP), were made (Alganer and Çetin, 2008: 355). In an incremental transition process summarized in the final part of the Report, it was emphasized that the process starting from the establishment of narrowed fluctuation margins that act harmonious against USD, toward the establishment of a common fund, can be realized using harmonized economic policies (The Council and the Commission of the European Communities, 1970: 61-62).

While the first term measures involving the narrowing of the fluctuation margins of the national currencies suggested by the Werner Report for 1971-1973 term were taken, predicted process was not completed. However, all of the member countries adopted the realization of EMU in three stages in principle. Collapse of Bretton Woods System in August 1971 and the decision of the USA Government to fluctuate USD have created a global wave of instability. Therefore, sustaining the parities identified between the European currencies became harder and EMU project came to a standstill. However, with the establishment of "snake in the tunnel" regime in the early 1972, attempts of monetary integration gained impetus once more (Günay and Özen, 2002: 69).

When the conditions of the period in which the Snake in the Tunnel regime emerged are considered, primarily, a cycle with the international crisis of the USD is noted. Gold-USD relationship has come to an end as of August 1971; in December 1971 and February 1973, USD was devalued twice (Karluk, 2003: 366-367). In this period, in this regime which has been a foreshadow of the European Monetary System (EMS), "tunnel" represents the relative fluctuations of the European currencies against USD; whereas "snake" represents the fluctuations of the European currencies with respect to each other within a narrow limit. In this system, national currencies were kept within the determined limits via the interventions to foreign exchange market when required, and at the structural level, the operation was supported by the national economic policies. However, this regime, which was unsuccessful despite all these efforts, proved that the exchange rates were far from being constant, and was abandoned shortly by some countries (United Kingdom, Ireland and Italy). Some countries (Denmark and France) went back to the system they have left and tried to maintain it, and most of the other

countries changed their central rates by regulating the value of their currency. Failure of the national economies to establish coordination has made the failure of the said system inevitable (Carchedi, 2009: 225-226).

The primary factor behind the failure of the Snake in the Tunnel regime to achieve the projected success was the international conditions of the current period. This system has been one of the last minute efforts to save the USD standard (Levi, 2005: 496). Nevertheless, snake in the tunnel regime had lost most of its complementary pieces as a result of the effect of the oil crisis in 1973, political differences, and devaluation of the USD for a second time, and transformed into a German Mark area that includes Germany, Denmark and Benelux countries (European Commission, 2016). According to Karluk, this practice has been an important experience which shows that it is impossible to determine foreign exchange rates within a narrow band for countries with different economic structures, political preferences, goals and driving forces behind participating in the foreign rate area (Karluk, 2003: 369).

In conclusion, EMS was established with the participation of eight member countries (Germany, Belgium, Denmark, France, Netherlands, Ireland, Italy, and Luxembourg), with the aim of creating an area of monetary stability in Europe. In EMS, which is a fixed but adjustable exchange rate system, all monetary transactions are based on the unit of account called European Currency Unit (ECU). In the beginning of the system which also considers the specific conditions of the member countries, full participation of Italy and Ireland were also discussed and their entrance into the system with certain privileges was approved (Chang, 2009: 26-27).

#### **4. TESTS IN THE CONTEXT OF OCA: ASYMMETRIC EFFECTS OF THE CRISES**

If EMS should be evaluated within the context of three periods, the first period is the trial period between March 1979 and March 1983. Operation of the system in this period resembles the snake in the tunnel system, which was the previous regime practice. Strong fluctuations in the world economy after the second oil crisis, which occurred at the early stages of its implementation, prevented the regime from operating efficiently. Between March 1983 and January 1987, stable monetary policy of Bundesbank in Germany made German Mark a nominal anchor within the Exchange Rate Mechanism (ERM). This enabled mark to be an alternative reserve currency, and created a process in which the rate between the ERM member countries and USD is determined by Bundesbank. Between January 1987 and August 1993, which is the final period of EMS, a convergence between the member countries in terms of the percentage of inflation rates, interest rates, budget deficits and public debts in GNP was observed. However, high interest rates and tight monetary policy Germany has implemented by putting forward the costs of reconstruction of Eastern Germany have triggered the crises experienced in 1992 and 1993. Gulf War between 1990-1991 has also caused increased energy prices and increased inflation. United Kingdom and Italy's decision to float their currencies in November 1992 was followed by a series of devaluations that begun in Spain and fluctuation margins were expanded (Balkir, 2010: 273-274).

The most notable economic event that occurred around the same period of Maastricht Treaty which formalized EMU has been the foreign currency crisis (ERM Crisis) that begun in 1992. The process that includes the low interest policy followed by the USA to cope with economic recession and the depreciation of the USD against German Mark, increased interest rates by Bundesbank based on the probability that the high public expenditure after the unification of Germany will cause high inflation, together with the hesitation regarding increasing the national interest rates due to the unemployment problem most of the European countries experienced at the time, created a speculative environment toward the expectation of devaluation in other European countries. The crisis that caused the United Kingdom and Italy to leave ERM was tackled using devaluation in other countries. As a result, fluctuation margins around ERM were extended  $\pm 15\%$  (Ungerer, 1997: 260-269).

According to Türel, the main reason behind this instability that almost became a crisis in the ERM has been the fact that, in front of the relative constancy of the national rates, the obligation to remove all restrictions in the capital movements have created an environment that is very profitable and suitable for speculation. Germany, who wants to suppress the inflationary effects caused by the union, has kept the interest rates high, creating an asymmetrical shock that feeds the crisis-prone environment. Thus, all other Community members wishing to maintain the value of their national currency had to raise interest rates and suffer from its economic stagnation effects. When the crisis wave was settled in mid-1995, the Union's influential actors came to the conclusion that the EMS had expired and it was necessary to quicken the steps toward the monetary union. On the other hand, with its increasing political and economic power, Germany becomes increasingly more inclined to be attached to the institutional structure of the Community in order not to give rise to an impression that Germany has

increased its hegemony in Europe, whereas other countries, especially France, started to find a "Union" Project -which will limit the power of Germany- favorable. Maastricht Treaty, as a product of such a conjuncture, has been a historical step which carries the economic and political integration to a higher level (Türel, 2013: 405-406).

With Maastricht Treaty that revealed the new constitution of the Union, the Community became European Union; and European Monetary System has begun the process of becoming an actual Economic and Monetary Union. Based on Delors Report, the Union held to the calendar that begun on 1st July 1990. Again, as determined in the Delors Report, the second stage begun on 1st January 1994 and the third stage begun on 1st January 1999. Moreover, upon the acceptance of the report from the EU Commission dating 31st May 1995 on "Transition to a Single Currency" on 14th November 1995, the application calendar of the "Euro" during EMU process has become clear (Mercül, 2001: 164). By this way, EMU, in real sense, was realized in 1th February 1999. At this stage, Euro was introduced as a unit of account to global finance markets and has replaced ECU as deposit money. Finally, in 1st January 2002, transition to Euro was completed. The process of transition to Euro was intentionally kept short so that double pricing will not have any adverse effects on the customers and economic units, and Euro replaced national currencies in the form of banknotes and coins. By this way, Community countries which are members of EMU, adopted single currency system, which had been planned for decades, for all their real and financial transactions (Fontaine, 2009: 438).

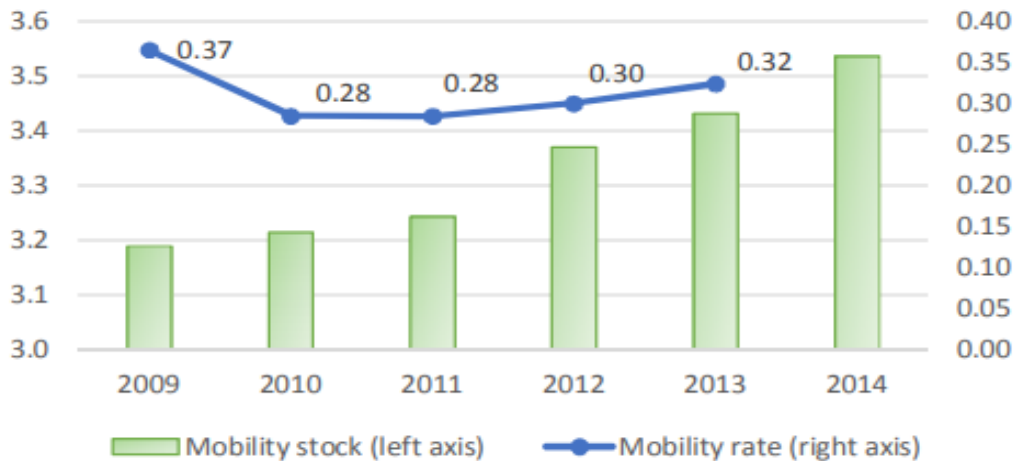
Transition to Euro has, similar to the establishment of the Federal Reserve System in the USA in 1914, taken its place in the history as one of the most prominent financial attempts of the modern times. When the period after the transition to Euro is separated into two periods based on their development until now, it is seen that between January 1999 and August 2007, it was without any complications and was successful beyond the predictions in the preparatory period in the 1990s. The second period from August 2007 until present, which characterize the effects of the financial crisis at the global level as well as at the Union level, has been a period which includes new experiences that were not previously encountered and measures taken by surpassing traditional monetary policies. Moreover, considering the fact that its main objective is to maintain the price stability, it can be said that the Euro System worked successfully in both periods (Mercier and Papadia, 2011: 1). However, the second period where the crisis occurred, has presented important negative findings to perform an evaluation within the context of OCA.

The most prominent outcome of the 2008 Global Financial Crisis -and the budget crisis which was the reflection of this crisis in the Euro Area- has been a long term economic depression that affected employment, income level, and other macroeconomic indicators as well as the narrowing of the real production and narrowing of the trade. The existence of high public spending, enabled by the cheap and abundant capital in Europe before the global crisis, played an important role in the transformation of the financial crisis to a big production crisis. Thus, 15 years after the EMU Crisis (which was an exchange rate originated one), Euro Area Crisis that came to the fore with its characteristic of being a debt crisis, was deepened upon the budget deficits and public debt stock reaching unsustainable dimensions, and it was understood once again that the extent to which the conditions stipulated by the OCA were hard and distant for EMU.

Economic stagnancy that emerged upon the crisis in the Euro Area and all over the Union, has revealed that member countries have different capacities to resist aysmmetrical and symmetrical shocks. Loss of competitive power in the "periphery" economies that experience relatively high wage and price inflations, has become chronic due to the insufficient coordination of the common currency and fiscal policies. Deflationist processes that can recover the competitive power, as mentioned when investigating the Theory of OCA, considering the low level of the inland labor mobility within the Union in general (Figure 2 and 3) which can act as a defense mechanism against asymmetrical shocks, have forced the periphery economies into enduring the low growth rate and high unemployment rate, which can last for years (Türel, 2013: 415).

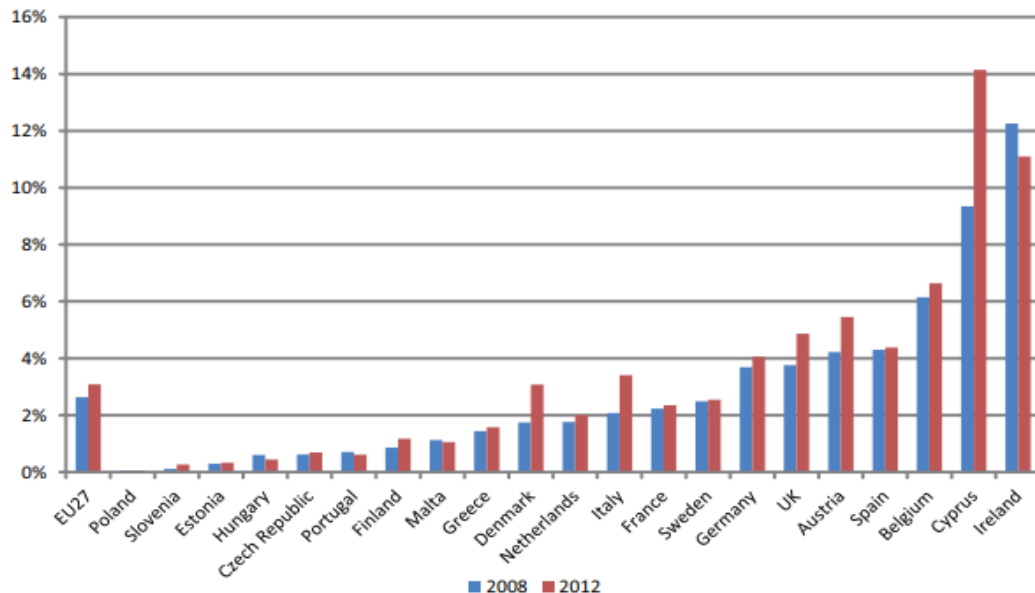


**Figure 2.** Intra-Union Population Mobility within the EU After Crisis



Source: Barslund and Busse, 2016: 3.

**Figure 3.** Development of the Ratio Between the Number of EU Citizens Working at Another Member Country Other than Their Own and Total Population After the Crisis



Source: Eurofound, 2014: 18.

Although many barriers to market integration in Europe have been removed since the 1980s and significant progress has been made in economic integration, while on the one hand many EU countries still can not fulfil the convergence criteria set out in Maastricht; on the other hand the Euro Area does not meet the basic criteria required to be an OPA. One of the two weaknesses inherent in European integration is the fact that the EU can not achieve a level of fiscal federalism that is stronger in turbulent economic processes; and the second is that labor force mobility across monetary union is relatively low compared to other major monetary unions like the United States<sup>2</sup> (Krugman et al., 2012: 583).

The major structural problems in the ECU were the single headed structure in the monetary policy and multi-headed structure in the fiscal policy, competition disadvantages caused by the economic power differences between the countries, high budget deficits, high current deficits and eventually, not giving

<sup>2</sup> The 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).

due consideration to Maastricht Criteria (Erarslan and Timurtaş, 2015: 30-49). The crisis has, in particular, shown that an economic integration practice without common fiscal policies and common banking regulation and supervision authorities prevents the smooth operation of the single central bank - single currency - single monetary policy mechanism (Özatay, 2016: 181). By this way, it was proven by the effects of the budget crisis that ECU -which was put on the fast track by the political will without yet reaching a fiscal union or at least without realizing a fiscal convergence in real terms- did not represent a fiscal union which can meet "optimum" conditions. As it also lacks the automatic balancing mechanisms that can be activated by the periphery economies in the EMU resulted in forcing the countries into austerity measures.

In short, while the level EMU reached is a significant progress, it contains important internal conflicts as it is seen. First of all, this *sui generis* integration practice is very far from representing an OCA. For a sustainable monetary union, coordination of the monetary and fiscal policies and financial integration must be established. Considering that there is a continuing expansion process, to prevent its negative effects and against the asymmetrical effects of the large scale shocks, adaptive mechanisms must be operated and be efficient. Results of the ampirical studies in the literature also indicate that EMU is not an OCA and thus there are suspicions regarding its sustainability. Heterogeneous nature of the EMU and core-periphery relationship confirm these statements. In summary, the discussion initiated with the Theory of OCA by Mundell has found its application ground with Euro, and Theory of OCA is evolving and continuing to develop to find the answers to the problems in today's expanding EMU (Utkulu, 2005: 238).

## 5. EVALUATION AND CONCLUSION

In conclusion, EMU does not represent a fully integrated optimal area in which production factors such as capital and labor can be easily replaced, production, knowledge and technical levels are established homogenously, and economic cycles and the level of being affected from the shocks are similar. In addition to this, the asymmetrical characteristic of EMU, which was accelerated by the political will before its fiscal integration reached to the level that an OCA must have, its inability to represent in practice a fiscal union that can meet the optimum conditions in theory were proven firstly by the disputes that arise in various stages of the integration and then by the deep effects of the budget crisis. It is noteworthy that labor mobility in the EU is significantly lower than the USA; there are differences in the unemployment rates despite the success in the price stability and the inflation rates are relatively similar; price/wage flexibility could not be established and the increased unemployment rates are becoming permanent. These causes, structural differences between the economies and the lack of mechanisms toward overcoming these differences make it impossible for the Euro Area to be defined as an OCA. Unless steps such as fiscal integration, factor mobility and price/wage flexibility which will fully ensure economic integration, it will continue to be defined like so.

In case of need to make a remark for the future of monetary integration, we may take structural disparities between the member countries into consideration, which cause an asymmetric structure that give the aysmetric shocks a ground. By taking into account the production infrastructures and development levels of the potential members, it is quite rational to expect this mentioned asymmetry may deepen by the enlargement process too. Thus, within the perspective of expanding monetary union, it is possible to be an OPA just in case of completing economic integration even with its all dimensions. Considering the fact that, Euro is an economic phenomenon, but also represents a strong political will. In this way, the political dynamics are inevitably the primary factor, which must be accerelated and deepened into an ultimate form. Thus, according to Stiglitz (2016) as well, 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 and *evolve into an OPA*. 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 low possibilities.

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