Applied Sciences and Business Economics
Volume 1, Issue 3, 57-64, 2014

ISSN: 2312-9832
www.bzujournal.org

Cost and Benefits of Adopting Euro

Vesna Georgieva Svrtinov[1], Olivera Georgieva-Trajkovska[2] & Riste Temjanovski[3]

[1]Department of Finance, Faculty of Economics, University "Goce Delcev", Shtip, Republic of Macedonia
[2]Department of Finance, Faculty of Economics, University "Goce Delcev", Shtip, Republic of Macedonia
Department of Management, Faculty of Economics, University "Goce Delcev", Shtip, Republic of Macedonia

Abstract

Euro zone is the largest economic integration of a currency area that the world had seen since the unification of the United States into a monetary union under the dollar, over two centuries earlier. This paper investigates the circumstances under which it is beneficial to participate in a currency area. We examine some key comparisons that can be made between Europe and the United States, particularly as it relates to the United States as a model for Europe, and also examines some key steps that policymakers could take to move Europe closer to fulfilling the criteria for being an optimal currency area. The aim of the paper is to examine both, costs and benefits associated with forming of European monetary union. The ultimate conclusion is that the euro zone is not an optimal currency area, albeit significant advancements towards it were made past the introduction of the euro, in terms of inflation convergence, financial integration and intra-trade intensification. Yet, the criteria of labor mobility, wage flexibility, fiscal and political integration, are far from being satisfied.

Keywords: Optimal Currency Area, Euro Zone, Financial Integration, Monetary Politics.

1. Introduction

Sharing a common currency was seen, by the architects of the Maastricht Treaty, as another step on the road toward fuller economic integration and the single market. With the two important stages in the introduction of a common currency, in 1999 and 2002, the nations of the Euro zone moved the closest yet to economic integration, tying their exchange rates together and agreeing to denominate all debts in euro's. It was the largest economic integration of a currency area that the world had seen since the unification of the United States into a monetary union under the dollar over two centuries earlier.

At the time of its introduction, 11 European countries gave up their national currencies to take part in a common currency area, known as the euro-zone. As of 2014, there were 18 European countries in the euro-zone. According to many economists, the creation of the euro was supposed to be another triumphant step in the European project, in which economic integration has been used to foster political integration and peace.

An optimal currency area is a region, or area, where the benefits of sharing a common currency outweigh the costs; an area where a single currency would create the greatest economic efficiency, or benefit. A currency theory based on geographical area that adopts a fixed exchange rate regime or a single currency within its boundaries (Koziara, 2013).

Often cited criteria for a successful currency union are the following:

- Openness with respect to trade in goods and services is the most obvious OCA criterion, since trade is affected most directly by elimination of transaction costs and exchange rate uncertainty. The higher the degree of intra-area trade, the greater the efficiency gains of adopting a single currency.
- Countries in currency area have to respond in similar ways to external economic shocks or policy changes i.e. participant countries have similar business cycles. Similarity of shocks and business cycles is an important determinant for the effectiveness of a homogeneous monetary policy. When one country experiences a boom or recession, other countries in the union are likely to follow. This allows the shared central bank to promote growth in downturns and to contain inflation in booms. Should countries in a currency union have idiosyncratic business cycles, then optimal monetary policy may diverge and union participants may be made worse off under a joint central bank.
- Another criteria for successful currency union is labor and intense capital mobility across the region. This includes physical ability to travel (lack of cultural barriers to free movement, such as different languages) and institutional arrangements (such as the ability to have pensions transferred throughout the region). In addition, market forces of supply and demand automatically distribute money and goods to where they are needed
- Furthermore, countries are prepared to use fiscal transfers to even out some of the regional economic imbalances within the European currency union. This refers to the manner in which certain areas or sectors that have been adversely affected by shocks or are sluggish in growth get compensated, for instance through taxation redistribution, guarantees on government debt or the provision of cheap funds. Theoretically, Europe has a no-bailout clause in the Stability and Growth Pact, meaning that fiscal transfers are not allowed.

A group of countries which score well in these categories should theoretically be able to successfully adopt a single currency, and expect to benefit from it.

2. Materials and Methods

The methodology included both, quantitative and qualitative methods, as well as method of historical analysis. Primary data derived from academic articles, journals and books. The conclusions are given on the base of descriptive and deductive statistics. Analyses and statistics shows both, costs and benefits associated with forming of European monetary union. Benefits of monetary union stem from reducing transaction costs and eliminating exchange-rate uncertainty. On the other side, a country that joins a currency union therefore gives up the opportunity to select a monetary policy that it regards as optimal for its own circumstances.

2.1. Benefits of Monetary Union

The most direct and immediate benefits of monetary union are reduced transaction costs and the elimination of exchange-rate uncertainty. This primarily refers to the costs incurred when doing business or conducting an economic transaction, with a different country with a different currency. Another benefit is enhanced efficiency and competitiveness of the European economy. There was a popular saying in Europe that if one traveled through all EU countries, changing money in each country but not actually spending it, he/she would return home with only half the original amount. A traveler in the euro zone does not have to carry a different currency for each county that he will visit. With countries using the same currency, transaction costs are reduced. Consumers will benefit, as increased price transparencies will promote Europe-wide competition . With a single currency, a shopper in one country can easily compare the price of a particular good in different places, thereby minimizing the cost of purchase and strengthening the efficiency of the market. But we have to take into account that, the importance of this is not large in today's world of credit cards and ATMs. Also, wholesale buyer has always been able to compare different prices with the help of a pocket calculator (Feldstein, 2008).

Furthermore, the elimination of exchange rate uncertainty will result in saved hedging costs for companies that previously hedged exchange rate risk. Reduced transaction costs and elimination of currency risk will promote cross border investment and trade. Each can invest in the other without worrying about the potential loss if the exchange rate changes adversely. This became particularly important in the latter half of the twentieth century, with an increased focus on foreign direct investment (FDI) both into and originating from Europe (Fishman, 2013).

One major achievement is the expansion of the European commercial bond market. The volume of international bonds denominated in euro's exceeded dollar-denominated issuance in 1999. The ability to borrow and lend in euro's, obviating the need to hedge exchange rate fluctuations, has facilitated substantial cross-border lending. It also makes it easier to finance cross-border mergers and acquisitions (Fishman, 2013).

In addition to capital mobility, labor mobility is also a key benefit for an optimal currency area. In an optimal currency area, labor, like capital, should be mostly mobile; that is, workers should be free and able to move from one part of the region to another depending on where employment is most available (Koziara, 2013)

In this context we have to underline that, before they joined the EMU, several countries had high inflation rates and correspondingly high rates of interest. The requirement to reduce inflation and interest rates as conditions of membership, gave these countries the political ability to make these healthy changes. Another positive effect is transition gains. The EMU membership criteria imposed on those who would join the EMU also included a reduction in the fiscal deficit and in the national debt. Although not all applicants satisfied these standards at the time of entry, their attempts to do so did initially help to reduce government spending and to limit fiscal deficits (Feldstein, 2013).

2.2. Costs of Monetary Union

The main cost of a monetary union is the loss of national monetary and exchange rate policy independence. The currency union implies a single monetary policy and a single exchange rate for all member countries. A country that joins a currency union therefore gives up the opportunity to select a monetary policy that it regards as optimal for its own circumstances.

In the following we examine a hypothetical example. Suppose Finland, a nation dependent on paper industries, faces a sudden drop in world paper prices. This price drop could hurt the Finnish economy, causing unemployment while scarcely affecting other Euroland countries. Finland faces an "asymmetric shock." An asymmetric shock is more likely to affect a country whose economy is less diversified and more trade-dependent (high ratio of traded to non-traded goods). If Finland had maintained monetary independence, the economy could lower domestic interest rates to stimulate the weak economy as well as let its currency depreciate to increase foreigners' demand for Finnish products. Since Finland has joined the EMU, it no longer has these policy options available. Furthermore, since the rest of Euroland is not affected by the paper industry problem, the ECB probably will not use monetary policy to address asymmetric economic shocks that affect only a particular country; it will use the policy for Euroland wide shocks. Although Finland cannot use monetary policy to solve the asymmetric shock problem, if wage and price

levels in Finland are flexible, then lower wage and price levels in Finland would have economic effects similar to those of a depreciation of the markka. In addition, if capital flows freely across Euroland and workers are willing to relocate to where jobs are available, then much of the asymmetric shock can be absorbed without monetary adjustments. If there is not free movement of labor and capital and flexible prices, then the asymmetric shock can cause a severe recession. Unemployed workers in Finland may not wish to move to another euro zone countries for job opportunities because of linguistic, cultural or other barriers. The stability pact of EMU also constrains the Finnish government to restrict its budget deficit to 3 percent of GDP or less, preventing Finland from using fiscal stimulus to create domestic employment. Furthermore, Finland would not expect to receive a large transfer payment from another Euroland country since fiscal integration is low. These considerations suggest that EMU will involve economic costs (Fishman, 2013).

When a regional shock strikes one region of a currency area, such as a drop in demand for a region-specific commodity, and unemployment rises in that region, all else remaining equal in other regions of the currency area, what are policymakers, or the central banking authority to do? Increasing the money supply would stem unemployment in the affected region, but would cause inflation in other regions, where no comparable economic shock was felt.

While the Eurozone was seen by many, as the ideal candidate area for testing optimal currency area theory in the years leading up to the global financial crisis of 2007-08, there is now considerable doubt as to whether or not the Eurozone sustains – or is even capable of sustaining – the criteria necessary to be labeled as an optimal currency area, as evidenced by the substantial economic divergence among member states (Koziara, 2013).

3. Results: Is Europe an optimal currency area?

The extend of intra-regional trade is the first OCA criteria to illuminate. In 1999 EU intern trade amounted among 10 and 20% of the EU member states total trade. This is fairly high number, but still smaller than the amount of trade between regions of the USA. So, the volume of intra EU commerce has not been high enough to have a clear argument for forming the EMU in 1999 (Flam and Nordström, 2006).

Another criteria for evaluating whether or not a group of regions, or countries, comprises an optimal currency area is whether or not they have similar business cycles; that is, whether or not they move relatively in sync and experience similar shocks and growth rates. In the case of euro zone, on one hand we have the industrial and export-oriented countries like Germany, the Netherlands, and Austria; and on the other, the import-led, service-based economies of Greece, Italy, and the other countries on the periphery of the Continent (Koziara 2013).

Table 1: Current account balances, in $ bn USD (2000-2013)

	2000	2002	2004	2006	2008	2010	2012	2013
Austria	1.4	5.6	6.4	9.2	20.3	11.4	8.8	10.6
France	19.3	17.4	10.5	-12.9	-50	-45.2	-51.0	-46.2
Germany	-34.3	40.6	124.6	180.9	226.96	196.2	187.5	199.5
Greece	-9.9	-9.7	-13.3	-29.8	-51.2	-30.6	-20.4	-17.2
Italy	-5.7	-9.8	-16.4	-48.1	-65.4	-71.7	-45.5	-35.3
Portugal	-12.2	-10.9	-15.5	-21.5	-31.9	-22.8	-8.7	-4.9
Spain	-23.0	-22.5	-54.9	-111.1	-154.6	62.8	-12.2	2.0

Source Koziara (2013).

If all of the countries in the currency union had the same industrial composition and were subject to the same shocks to technology and demand, the lack of individualized monetary policy and differential exchange rate movements would be irrelevant. A country that considers joining should evaluate the extent to which a monetary policy designed for the currency union as a whole, would be the best one for itself. We see in the EMU substantial differences among countries in the distribution of industries that are reflected in differences in unemployment rates and in trade balances (Krugman and Obstfeld, 2009).

In the context of optimal currency area is important to examine the divergence amongst countries' current account balances. One of the most important indicators of whether or not a country is living within its means is its balance of trade, which comprises a large, crucial component of a country's current account, or the surplus or deficit of trade in goods and services exported from and imported into a country each year. In assessing the divergence amongst Euro zone countries, one finds that the more industrial, export-leading "core" countries of the Euro zone, particularly Germany, but also including the Netherlands, Austria, and France, have on the whole improved their current account positions substantially over the lifespan of the Euro zone thus far. Whereas the current account positions of these countries improved over the period leading from Maastricht (and the implementation of the Euro zone in 1999-2002) until recently, during the beginning of the sovereign debt crisis, the current account positions of some of the Euro zone's peripheral members, such as Greece, Ireland, Italy, Portugal, and Spain, have fallen, as is evidenced in the chart below. (Koziara,2013).

It is also important to note changes in gross domestic product (GDP). As GDP is viewed both as an indicator of a country's standard of living and as a measure of the goods and services produced by a country, examining changes in GDP per capita for the member states of the Eurozone permits an analysis of growth patterns or divergences in these metrics. Indeed, a look at growth or decline in GDP per capita, assuming constant prices, demonstrates tangible and significant divergences in growth amongst Euro member states; in the case of the difference between Germany and Italy, this gap is nearly 17 percentage points over the 2002-2011 period (Koziara, 2013; see Table No.2).

Table 2: Change in GDP per capita (in %)

Country	2002	2011	% change
Austria	32306.477	36131.136	11.84%
France	28668.214	29938.053	4.43%
Germany	30658.694	34580.83	12.79%
Greece	21757.745	22287.413	2.43%
Ireland	35758.035	37210.02	4.06%
Italy	28253.97	27081.473	-4.15%
Portugal	21438.681	21414.419	-0.11%
Spain	26095.389	26981.212	3.39%

Source: Koziara (2013).

A labor mobility is another OCA criteria. Since the formation of EU single market, whit freedom of movements of goods, capital, services and people in 1993, national border controls have not been a major barriers to labor mobility any more. Still labor is by far not moving as freely as US however. Differences in cultures are discouraging EU resident in their labor movement. Because of these cultural differences, which include language, work customs, length of the workweek, differences in punctuality, family life and its relation to professional life, different forms and institutions of government, and many others, labor mobility between countries is unsurprisingly lower in Europe and the Eurozone than it is in an optimal currency area such as the United States.

Table 3: Inflation change from previous year, percent, 2002-12 (using HICP)

	2002	2004	2006	2008	2010	2012
Austria	1.6998	1.9501	1.6858	3.2243	1.6921	2.5723
France	1.9378	2.3421	1.9125	3.1587	1.7355	2.2203
Germany	1.3547	1.7899	1.7836	2.7542	1.1505	2.1372
Greece	3.9176	3.0271	3.3134	4.2325	4.7005	1.0369
Italy	2.6098	2.2735	2.2167	3.4995	1.6395	3.3035
Netherland	3.8664	1.3798	1.6508	2.2105	0.9297	2.8223
Portugal	3.678	2.5091	3.0433	2.6514	1.3894	2.7774
Spain	3.589	3.0532	3.5625	4.1296	2.0426	2.436

Source: Koziara (2013).

Organization for Economic Cooperation and Development (OECD) concludes that labor mobility within the United States was two to three times higher than labor mobility in Europe. We have to take into account that a fall in

demand in a particular country or region will lead to less unemployment if the labor force is geographically mobile and can shift to other areas where demand is stronger.

Another metric can be utilized to demonstrate that the economies of the Eurozone are not achieving the convergence required to form an optimal currency area will be rates of inflation. Theoretically, one would assume that across a currency area of some level of homogeneity, or an optimal currency area, the degree of inflation year-to-year would be relatively homogeneous between member states. However, an analysis of the following sets of data demonstrates otherwise for the Eurozone.

Fiscal federalism is the last OCA criterion to evaluate. Fiscal federalism is EU ability to transfer economic resources from members whit healthy economies to those suffering economic setbacks. When an US federal state is having economic problems in contrast to the rest of the nations it automatically receives support from public authorities in Washington. EU has limited fiscal power. It has only very small taxation capabilities. There is no EU budget to carry out fiscal federalism or to rescue a member state in economic difficulties (Fürrutter, 2012; Bordo, 2010).

In essence, the creation of the euro led to a perception on the part of many investors that the big risks associated with cross-border investment within Europe had been eliminated. In the 1990s, despite the absence of formal capital controls, capital movements and hence current-account imbalances within Europe were limited. After the creation of the euro, however, there was massive capital movement from Europe's core – mainly Germany, but also the Netherlands – to its periphery, leading to an economic boom in the periphery and significantly higher inflation rates in Spain, Greece, etc. than in Germany. When private capital flows from the core to the periphery came to a sudden stop, leaving the peripheral economies with prices and unit labor costs that were well out of line with those in the core. Suddenly the euro faced a major adjustment problem. This was the kind of problem optimum currency area theory warned would be very difficult to handle without currency devaluation. Internal devaluation" – restoring competitiveness through wage cuts as opposed to devaluation – has proved extremely hard (Krugman, 2012).

4. Discussion

The creation of the euro was supposed to be another triumphant step in the European project, in which economic integration has been used to foster political integration and peace. The last years have witnessed an increased interest in the debate on whether the EU constitutes an optimal currency area, both on theoretical and on empirical grounds.

This paper examines both, costs and benefits associated with forming any monetary union. Benefits of monetary union stem from reducing transaction costs and eliminating exchange-rate uncertainty, greater transparency and possibly greater competition because prices are easier to compare. Falling transaction costs mean fewer barriers to trade, which should increase competition and reduce prices. Eliminating exchange-rate uncertainty will spur still more trade; it may also lower interest rates, therefore making it cheaper to borrow to finance new investment. In the European case, the benefits may be greater still because when each country had its own currency, speculative pressures heightened the risk of costly exchange-rate movements. On the other hand, member countries face two kinds of costs of entering the monetary union. One arises from the fact that shocks requiring relative price changes (permanent shocks) may be more difficult to accommodate for once these countries are in a monetary union. The second source of costs arises from the fact that these countries will not be able to use monetary policies to stabilize the business cycle.

The question that has been addressed in this paper was whether the Euro zone is an optimal currency area, i.e. whether the welfare of the countries participating in the EMU increased after their monetary unification under a common currency that is the euro.

Financial integration, mainly measured through the money market and bond market indications, and in an extent, and the trade intensification among Euro area refers that eurozone is an optimal currency area.

But, labor mobility is low; wages are rigid, whereas on the field of fiscal integration is done almost nothing. The fiscal policy is still a national policy and not a common one. A common currency requires coordination in both monetary and fiscal policy. The European Central Bank (ECB) has worked to achieve monetary policy coordination,

but it seems that there is no supranational authority in the European Union (EU) similar to the ECB to coordinate fiscal policies. The lack of fiscal policy coordination has led to some of the euro-zone countries having high levels of debt. If financial markets view these countries' debt as excessive, they may expect that highly-indebted Euro-zone countries may not be able to make payments on their debt, which means that these countries may default on their debt. Therefore, higher levels of debt in some of the euro-zone countries may threaten the Euro's credibility.

Our conclusion for the future of euro zone is that monetary union will do much to integrate Europe's commodity, factor and capital markets. It will increase Europe-wide competition and revolutionize financial markets. It will spur rationalization, mergers and takeovers in the European banking industry and commercial firms. Perhaps most important of all, EMU will change the way Europeans think about themselves and about a multi-regional continental market that has become the largest in the world.

Also we can conclude that the EU economies are open to trade and that capital is highly mobile. Likewise however, we must agree that labor is largely immobile for linguistic and cultural reasons, as well as for personal and social costs of migration There is evidence that national financial markets have become better integrated with each other as a result of the Euro, and that the Euro has promoted intra EU trade. As we have seen the volume of intra European trade is fairly high, but still away from American quantities.

Additionally, the European Union because of its limited fiscal powers is not able to support a European country in economic difficulties. The Union has no budgetary capabilities to transfer support payments from tax-earnings to the single member state.

In summary, optimum currency area theory suggested two big things to look at – labor mobility and fiscal integration. And on both counts it was obvious that Europe fell far short of the U.S. example, with limited labor mobility and virtually no fiscal integration.

References

Artis, M. J., (2002). Reflections on the optimal currency area (OCA) criteria in the light of EMU. (Working Paper of Central Bank of Chile No. 193). Retrieved from http://www.bcentral.cl/estudios/documentos-trabajo/pdf/dtbc193.pdf.

Bordo, M.D. (2010). The Euro Needs a Fiscal Union: Some Lessons from History. (Paper presented SOMC Symposium October, 12 New York City) Retrieved from http://web.xrh.unipi.gr/attachments/1551_somc_Oct_Bordo.pdf.

European Central Bank (2012, February). Euro area cross-border financial flows. Monthly Bulletin. Retrieved from http://www.ecb.europa.eu/pub/pdf/mobu/mb201202en.pdf.

Feldstein, M. (2008). Optimal Currency Areas. (Paper presented at Fifth Central Banking Conference in Frankfurt) Retrieved from http://www.nber.org/feldstein/Optimal%20Currency%20Areas.pdf.

Ferry, J., & Merler, S. (2012, April 2). Sudden stops in the Eurozone. (Working Paper of VoxEU) Retrieved from http://www.voxeu.org/article/public-capital-flows-replacing-private-flows-eurozone-what-it-means-policy.

Fishman, K. E. (2013). Optimum currency area: Euro as a practical paradigm? (Working Paper of Rutgers, the State University of New Jersey). Retrieved from http://www.learningace.com/doc/1645836/3ce0d9a731fe8989d9dc48faae9908fe/oca-euro-pdf.

Flam, H. & Nordström, H. (2006). Euro Effects on the Intensive and Extensive Margins of Trade. (Working Paper Series No. 1881. Munich: CESifo). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=956274.

Fürrutter , M. (2012). The Eurozone: An Optimal Currency Area? IFIER Paper, February Retrieved from http://igeuropeanresearch.files.wordpress.com/2012/02/paper_ifier_martina_fuerrutter_feb2012.pdf.

Georgieva, S. V. (2013). Financial Liberalization and Financial Stability. Monograph. University Goce Delcev, Stip, Republic of Macedonia.

Justin, Y.L., & Volker, T. (2012). The crisis in the Euro zone: Did the euro contribute to the evolution of the crisis?.The World Financial Review. Retrieved from http://www.worldfinancialreview.com.

Koziara, B. (2013). The Eurozone: an Optimal Currency Area? The University of Michigan, Retrieved from http://deepblue.lib.umich.edu/bitstream/handle/2027.42/98925/bkoziara.pdf?sequence=1&isAllowed=y.

Krugman, P. & Obstfeld M. (2009). Case Study: Is European Optimum Currency Area? (Working paper published In International economics theory & policy, Boston, pp.582-587).

Mansori, K. (2011 September). What really caused the Euro zone crisis? The Street Light. Retrieved from http://streetlightblog.blogspot.com/2011/09/what-really-caused-eurozone-crisis-part.html.

Micco, A., Stein, E. & Ordoñez, G. (2003). The Currency Union Effect on Trade: Early Evidence from EMU. Retrieved from http://ideas.repec.org/p/idb/wpaper/4339.html.

Petreski, M. (2007). Is the Euro Zone an Optimal Currency Area? Euro College – University Studies in Kumanovo Macedonia, Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=986483.

Sinn, H. (2012). The European balance of payment crisis. CESifo Forum, Retrieved from http://ideas.repec.org/a/ces/ifofor/v13y2012ispecialissuejanuary2012p03-10.html.