PROBLEMS IN THE EURO ZONE: DOES THE EURO ZONE COMPLY WITH THE OPTIMUM CURRENCY AREA CRITERIA?

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Abstract

The European Monetary Union (EMU or euro zone) is one of the few examples of a currency area in the world. In the 1960s Robert Mundell formulated the criteria for an optimum currency area and the euro zone has often been measured based on the principles of Mundell's theory of optimum currency areas. The global financial and economic crisis has highlighted the risks faced by the single currency area, if the member states react to events differently. Mundell considered the probability of asymmetric shocks as one of the downsides of the optimum currency area. This article aims to explain the characteristics of the euro zone crisis and to identify the problems that have arisen under the influence of asymmetric shocks to answer the question whether the euro zone corresponds to the optimum currency area criteria. The article particularly focuses on the newest Member State – Latvia, which joined the euro zone during the current crisis.

Key words: optimum currency area, euro zone, euro zone crisis, asymmetric shock

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Introduction

An optimum currency area (OCA) is an optimal geographic area where the main means of payment is a common currency. The term "optimal" – refers to the macroeconomic objective – to maintain an internal and external equilibrium. From the early days of the establishment of currency unions, there have been questions about achieving this overall balance and the national benefits of membership in such a union.

There are two main approaches determining the domain of the optimum currency area: the traditional approach, which tries to single out crucial criteria to delineate the appropriate domain and to form optimal currency areas, and cost-benefit approach, which believes that the participation in a currency area has both benefits and costs. (Sahin, 2006).

The global financial and economic crisis has detected a number of problems in currency area operations, particularly the euro zone. The question about the Union's failure to adapt to the external environment as well as the impact of individual Member States on the currency area as a whole has become a major issue for both researchers and European politicians. Several studies have examined the euro zone crisis and lessons from that (Issing, 2011; Mundell, 2012, 2013; Metiu, 2012; Glencross, 2013). In addition, the extension of the integration in the euro zone is getting more topical.

This article aims to explain the characteristics of the euro zone crisis and to identify the problems that have arisen under the influence of asymmetric shocks to answer the question whether the euro zone corresponds to the optimum currency area criteria. In the article particular attention is paid to the newest Member State Latvia, which has joined the euro zone during the current crisis. During the research the following challenges are addressed: to summarize the knowledge of the OCA theory about the criteria of the optimum currency area; evaluate the euro zone compliance with the OCA criteria using statistical analysis; identify problems in the euro zone in the global economic and financial crisis; analyze the compliance of Latvia with the OCA criteria and estimate Latvia's accession to the euro zone.

1 The optimum currency area theory and criteria of the optimum currency area

The theory of optimum currency areas was conceived and developed in three highly influential papers written by Mundell (1961), McKinnon (1963) and Kennen (1969). The authors identified characteristics (criteria) that potential members of a monetary union should possess in order to make it feasible to surrender a national monetary policy and exchange–rate adjustment of a national currency (Dellas and Tavlas, 2009).

The evolution of the OCA theory can be divided into 4 periods (Mongeli, 2012):

1. Pioneering period (1960 – 1970), when the main points of an optimal currency area were formulated along with the valued benefits and losses from monetary integration.
2. Reconciliation period (1970s) – studies mainly investigated OCA characteristics as a whole, examined the mutual links of the criteria and explained their relative importance. The existing OCA criteria were substantially supplemented by new ones.
3. Reassessment period (1980s, 1990s) – the central issue of the OCA theory was the creation of EMU and related benefits and losses. This period also involved consideration of the compliance of countries with the OCA criteria.

4. An empirical phase, which is continuing today – answers are searched to whether the OCA criteria of the past are still relevant and how the interpretation of the criteria has changed in the past 40 years.

However, the framework developed by Mundell, McKinnon, and Kenen was not internally consistent and was fragile (Dellas and Tavlas, 2009). The characteristics identified as crucial for judging whether it is optimal for two economies to form a currency union by those three authors are: the degree of labor mobility and/or wage and price flexibility, the incidence of asymmetric shocks, the degree of openness and/or trade integration, the size of an economy, the similarity of economic structures between two economies, the degree of product diversification, the level of fiscal integration.

Already in the 2005 Mundell himself, when writing about the world currency idea and evaluating the creation of the euro zone, noted that the formation of a monetary union for members of a either a closed economy or an open economy with flexible exchange rates requires five conditions: consensus on an inflation target, construction of a common index for measuring inflation, locking of exchange rates, establishment of the central bank to determine monetary policy and the mechanism for distributing seigniorage (Mundell, 2005).

One of the major barriers in the creation of an optimal currency area are asymmetric shocks, the incidence of shocks is also one of the OCA criteria. An asymmetric shock is an economic event (e.g. crisis) that differently affects countries. This is a result of the differences in the level of the economic development between countries. The operation of the currency area will be successful, and asymmetric shocks will be a regulated fact, when countries with the mutually similar economies – having similar cycles and structure – join together. The global crisis has demonstrated one more possible solution: asymmetric shocks are perhaps the most salient risk to the political functioning of EMU. The risk of an asymmetric shock within an OCA is that they may be acutely regional, implying a need for greater acknowledgement for the role of subnational governments within the fiscal framework (Snaith, 2014).

Already in the late 1980s many empirical and theoretical studies aimed to establish whether countries meet the OCA criteria before or after joining the currency union. As it was later shown (Akiba and Iida, 2009), there is a greater probability that countries fulfill these criteria directly after joining a monetary union, further it would serve as an additional motivator. In Latvia's case, it may be noted that some criteria (degree of openness and / or trade integration, degree of labor mobility and / or wage and price flexibility, Maastricht criteria) were met or performed before joining EMU, but the similarity of economic structures and development certainly will serve as a motivator for further development.

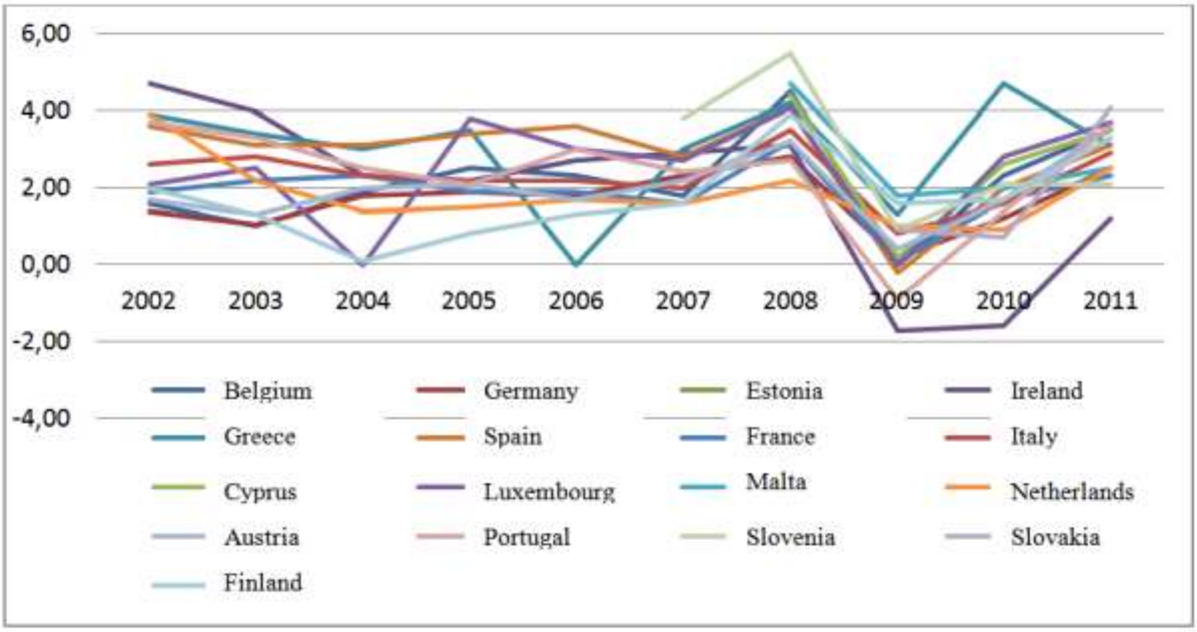
2 The euro zone conformity with the criteria of the optimum currency area and convergence criteria

It is impossible to examine all the criteria of the OCA theory, so attention will be paid to the degree of openness and / or trade integration, inflation criterion, size of an economy, level of fiscal integration as well as Maastricht criteria.

The degree of economic openness is one of the essential OCA criteria – price changes in international trade will impact on domestic prices, especially in the smaller countries, which would not be able to protect themselves against currency fluctuations. In the mutually more open countries the asynchronous response to external demand shocks could be lesser. The openness of economy is measured as the share of exports and imports (%) of gross domestic product (GDP). At the same time, it can be said that such openness refers to the integration among countries. The more the area member states are integrated with each other, the more the benefits of the membership increase and losses decrease.

When making calculations based on the information provided by the World Bank, we can conclude that most of the euro zone countries are economically open – in 2011 the proportion of exports and imports in GDP for nine of the 17 members of the EMU was more than 50%, while the euro zone average was 65%. It can be argued that the OCA openness criterion is fulfilled.

Fig. 1: Changes in the level of inflation in EMU Member States (2002 - 2011)

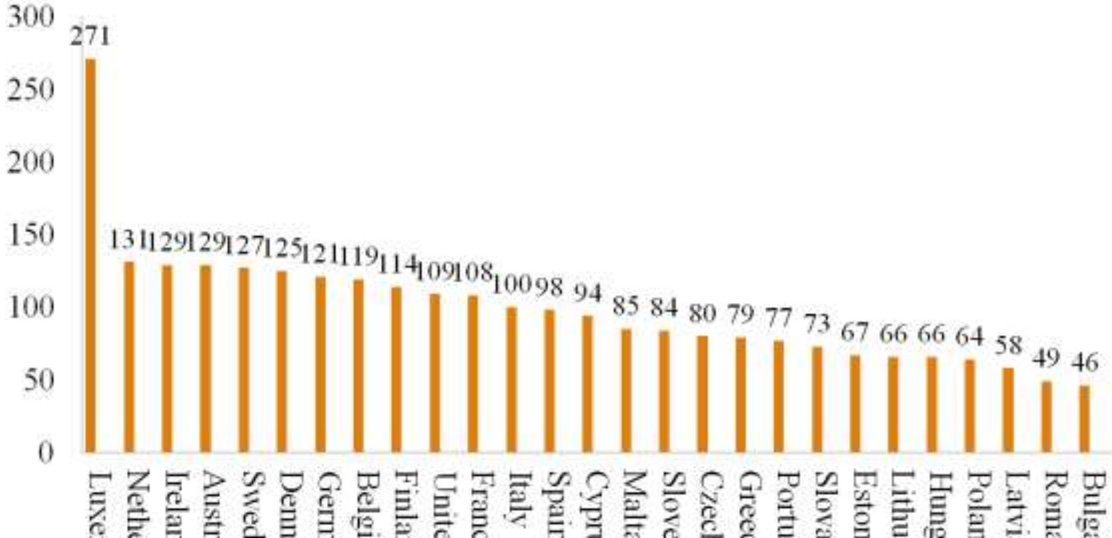


Source: Eurostat

Another important condition of the compliance with the OCA theory is the similarity of national inflation rates. The similarity of inflation levels helps the central bank to implement effective monetary policy that would successfully function in all EMU Member States, thus eliminating the effects of asymmetric shocks in different countries.

When studying the EMU (Figure 1), it can be seen that the rate of the overall inflation in the euro zone remained low in the period from 2002 to 2011, a relatively stable inflation rate was ensured and the differences among Member States were not so critical. It should be noted that there was a significant inflation difference among the EU Member States before the introduction of the euro. Due to the financial crisis, the differences were extended even further, which partially accounted for the different reaction of the countries and later recovery from the financial crisis. However, it can be assumed that on the whole the EMU Member States meet the inflation criterion of the OCA theory.

Fig. 2: EU Member States GDP per capita in PPS in 2011 (index - EU27 = 100)



Source: Eurostat

If you look at the OCA criteria such as size of an economy, it must be concluded that the euro zone (and the EU) countries significantly differ from one another. This is shown not only by the differences in absolute indicators, but also the differences of GDP per capita (Figure 2), which refers to the different level of development and standard of living.

There is also the opposite view: the euro area economies are at similar levels of economic development (Dellas and Tavlas, 2009). Such a perspective may arise if the European countries are compared with the rest of the world. However, the countries functioning within the EMU (EU) are different by their economic development. The economically weakest countries in the euro zone are Greece, Ireland, Italy, Portugal and Spain (PIIGS). These "irresponsible" countries who borrowed too much, taking advantage of the low interest rates available to all euro member nations are often blamed for causing crisis (Glencross, 2013).

The European Monetary Union (EMU) was established by Maastricht Treaty in February, 1992. The Treaty established the criteria (Maastricht or convergence criteria) that should be met by the Member States before joining EMU. When those criteria are fulfilled, it is ensured that Member States have a low and stable inflation, strong fiscal condition and stable national currency before their accession to the EMU. As it was written by Snaith, the fudging of the convergence criteria (whether the criteria are deemed substantively valuable or not) might sound alarm bells from an OCA perspective. The core value of the theory once a currency area has been established is as a means of determining how an OCA might be managed and deepened (Snaith, 2014).

The Stability and Growth Pact has been designed to prevent governments from running unsustainable debts. It aims to coordinate national fiscal policies and ensure fiscal discipline of the EU Monetary system. This, in turn, would allow moving closer to the OCA fiscal integration criterion. But since 1999s before the crisis European countries had accumulated external debt, both public and private. A lot of countries did not meet the criterion of government debt. And the situation during the crisis significantly deteriorated.

The criterion of price stability is designed to maintain monetary and exchange rate stability. While the inflation rate equal to the OCA criterion is met in the euro zone as a whole, only a few countries regularly fulfill the inflation convergence criterion. However, it should be noted that the real economic convergence may require the exact situation. In addition the requirement regarding the long term observance of the inflation criteria is criticized as an obstacle for the less developed Member States to develop their economy and to converge with the development level of other member states (Paleta, 2012).

The key question is how it is possible that the countries which definitely did not meet the criteria were allowed to join the euro zone. The answer can be found in the political background of the whole project of the monetary union. In the 1990s, most countries had a political will to continue with monetary integration. And as the date of founding EMU was coming in, it was obvious that a lot of countries would not meet the criteria. Only few "marginal" countries would succeed and the whole project would have to be cancelled (Paleta, 2012). According to Snaith, the problem is that economic integration has acutely political consequences – as predicted by the OCA theory (Snaith, 2014). The fact that at the time of joining EMU only a part of the Member States fulfilled Maastricht criteria, was probably one of the reasons why later, during the crisis, asymmetric shocks distinctively manifested themselves and caused problems for both the part of the Member States and the euro zone as a whole.

3 The crisis of euro zone – escalation of problems

As noted at the beginning of 2011 by Issing, the European Monetary Union is without doubt in deep crisis, the euro zone reminds the Titanic. He also stressed that EMU in no way met the criteria for an optimum currency area. Particularly, the criterion that a member state's debt may not exceed 60% of GDP has obviously never been taken seriously (Issing, 2011). Issing links the euro zone crisis with 3 areas: 1) fiscal policy measures, 2) the growth of unit labor costs, 3) serious economic problems in individual countries (collapse of the construction sector, a rapid rise in unemployment, problems in the banking sector). The last one directly points at the action of the asymmetric shocks. Larger problems were experienced not that much by the economically weaker countries, but rather those who regularly failed to comply with the convergence criteria, firstly the PIIGS countries. To exemplify this, we could consider the employment situation. In 2013 unemployment rates were still very high in the crisis-hit countries – Greece (27.2%) and Spain (26.7%), the euro zone rate – 12.1%. Youth unemployment was even double high in Greece (57.3% in July 2013). Greece is followed by Spain (56.5%), Cyprus (43.9%), Italy (40.4%), and Portugal (36.9%), 24.1% in the euro area (Eurostat).

Mundell also stresses that the crisis in Europe has been and still is referred to as a euro crisis. Strictly speaking it is a European Debt Crisis. The European debt problem could have implications for the composition of the euro area but it is important to emphasize that the euro was not the main cause. The problem has been fiscal profligacy and that did not start with the creation of the euro. The major problem of the euro area was that the fiscal rules stipulated by the Maastricht Treaty were not enforced (Mundell, 2012).

Eurostat data shows that in the first quarter of 2013 Greek debt is 160.5 percent the size of its economy, followed by Italy (130.3%), Portugal (127.2 %) and Ireland (125.1%). The lowest debt is in Estonia (10.0%), Bulgaria (18.0%) and Luxembourg (22.4%).

At the end of the first quarter of 2013, the government debt to GDP ratio in the euro area (EA 17) stood at 92.2%. It has increased compared with the end of the fourth quarter of 2012. Eurostat data shows that compared with the fourth quarter of 2012, majority (21 of 27) of EU Member States have increased their debt. The largest increase is in Ireland (+7.7%), followed by Belgium (4.7%) and Spain (4.0%). Only six countries have decreased their debt. The largest decrease was recorded in Latvia (-1.5%), Denmark (-0.8%) and Germany (-0.7%).

As noted by Glencross solutions for the euro zone crisis were initiated by national leaders, European Commission and European Parliament had secondary roles. However, measures taken to solve sovereign debt crisis enhanced the power of the European Central Bank and moved the euro zone countries towards a banking union (Glencross, 2013). But Mundell concludes: resolution of the crisis requires bailouts to avert insolvency, correction of budget deficits and a method of imposing discipline over deficits on deficit countries in the future. The problem of preventing a recurrence of the crisis with future deficits involves a question of sovereignty. (Mundell, 2012) The monetary union was perfectly correct. What was causing problems in the monetary union was the fiscal system. There is no fiscal discipline. You have to go forward toward sharing sovereignty, not transfer. … It will just go on for decades (Mundell, 2013). We have to agree with the "father" of the OCA theory that the solving of many problems will be possible if there is also a fiscal union, but such a political decision, obviously, would be a matter of a distant future. At the same time, the Banking union is already a reality.

4 Latvia's joining to the euro zone - costs and benefits

According to Sahin, one of the two main approaches in determining the domain of the optimum currency area is the cost-benefit approach, which believes that the participation in a currency area has both benefits and costs. Before participation, a country has to evaluate carefully the costs and benefits of joining currency areas. Each individual country should properly weigh the benefits and costs to understand if the currency union will be profitable for it (Sahin, 2006). Or, as noted by Mundell, regarding the situation in Poland: the question remains, for the countries outside the euro zone, whether and under what conditions they should join. Like all questions of normative economics this is a matter of benefits and costs (Mundell, 2012).

For Latvia this issue became topical after joining the European Union in 2004. As a continuation the integration processes, the Latvia's currency was pegged to the Exchange Rate Mechanism ERM II on 2 May 2005. The first plan to join the euro zone in 2008 failed because of the crisis, which hit Latvia particularly hard – the country lost approximately 17% of GDP and had to face fiscal problems. Having overcome the crisis, involving severe fiscal consolidation, the national authorities continued to aim to join the EMU. Many critics frightened the country by the danger of "climbing on board of the Titanic" at the time when the euro zone was in crisis and Latvia's citizens were quite sceptical about the new currency. However, the preparation process was not stopped and after the positive Convergence Report in 2013, Latvia adopted the euro on 1 January 2014 and joined the euro zone.

The key benefits of the membership in a monetary union quoted by various authors are as follows: macroeconomic stability and growth (price stability, monetary policy stability, enhanced status, prestige, reputation, power in the European Union); macroeconomic efficiency and growth (advantages attributed to money in general, price "transparency"); as well as positive external effects (reduced transaction costs, saving on exchange reserves).

Mundell suggests sixteen benefits for Poland from joining the euro zone, including political security and notes some valid arguments against joining the euro zone: losses of discretion over the exchange rate, of control on the inflation rate, of the ability to inflate away real wages, of the ability to inflate away the public debt as well as national patrimony, irrevocability and sense of independence (Mundell, 2012). According to Sahin, among other costs, one of the main costs of participating is the loss of autonomy in the monetary and exchange policy of the individual members. However, eliminating speculative capital flows among the partner countries is one of the benefits of joining a currency area (Sahin, 2006).

Everything mentioned above applies to a full extent to the economy of Latvia. By joining the euro zone Latvia expects to enjoy a greater monetary stability, reduced transaction costs, decreased exchange rate volatility and lower interest rates (Vaidere, 2013). There are also serious concerns regarding the euro zone crisis and individual Member States' ability to fulfill their own commitments. But the key benefit is political security and the geopolitical aspect. The assessment of the compliance with the OCA criteria suggests that in a number of positions Latvia's performance is above the average euro zone level, particularly in the fiscal indicators. The degree of the openness of the economy is very high – around 100% of GDP (World Bank). Since autumn 2012 Latvia has been meeting all the Maastricht criteria. Thereby, Latvia can positively influence the future development of the whole euro zone as an optimal currency area. However, a risk lies in the need for the real convergence of the economy of Latvia with the European countries.

Conclusion

In an optimal currency area member states are closely integrated economically, with the free movement of the factors present. A common monetary policy guarantees price stability and lower interest rates as well as decreases the exchange rate volatility. Fiscal requirements are designed to ensure a member states have a strong fiscal condition.

During the global financial and economic crisis in the euro zone countries asymmetric shocks manifested themselves very distinctly. In individual Member States the economic consequences of the crisis (impact on GDP and labour market, impact on government finances, increase in public debt-to-GDP ratios) have found different expressions, thus creating problems for the whole euro area.

Is the euro zone an optimum currency area? The answer is: partly. There is a compliance with such criteria as common market, fixed exchange rate, single monetary policy, sufficiently integrated economy of the Member States, similar economic cycles, sufficient price stability. And there is also a non-compliance with such criteria as different levels of economic development, different structures of the economy, insufficient flexibility of wages, different fiscal situations, different responses to asymmetric shocks, poor common reaction mechanisms to shocks during the crisis.

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