Optimal Monetary Areas and European Experience

by
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Abstract: From historical point of view, each country used to have its own currency, but from economic point of view, we can ask the following question: why does a single monetary area have to correspond with the space of a nation?
Practically, national currencies are useful because they make trade and financial transactions easier. The introduction of a single currency in a certain space must take into account certain criteria, because the space for a single currency is not infinite. The Central Bank of the area cannot react to local changes, therefore some costs will appear if we use a single currency.

*Keywords***:** economy, currency, monetary union, fiscal transfers, workforce mobility.
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1 Introduction

Optimal monetary area theory aims to identify the compromise which we can make between the benefits and the costs of introducing a single currency in a certain geographical space. The questions which the optimal monetary area theory aims to answer are: what are the areas, referred to as optimal monetary areas in which we can maximize the difference between the benefits and costs of using a single currency? And how do we determine whether a certain area is favorable to the adoption of a single currency? There are several aspects which can be criteria of this economic and political theory.
The mobility of workforce is a first aspect which must be considered. Mundell proposes this criterion in the same article from 1961 in which he mentions the optimal monetary area theory. The central idea is that the problems generated by an asymmetrical shock in a monetary union would be eliminated if the production factors, the capital and workforce were perfectly mobile in the monetary union. In conclusion, if there is free circulation of capital, the problems caused by an asymmetrical shock are caused only by the poor workforce mobility. An optimal monetary area is the area in which people can easily move in that space.
Let us assume that an IS (negative) shock appears in a monetary union. If the Central Bank of the Union reacts to this shock which affects only the country A, it will have to deal with a certain unemployment and the country B will have to deal with a certain inflation. The country A, in which the shock IS is produced will face a strong unemployment in the beginning, but following the intervention of the central bank, it will diminish. The country B will face a lesser inflation than normally (because of the intervention BC) generated by the increase of aggregated demand. But if the workforce migrated from country A to country B, the unemployment would decrease in country A and the inflationist pressures would reduce in country B, as a result of the influx of workforce. Thus, the asymmetrical shock would be less costly.
According to this criterion, the optimal monetary areas will mainly coincide with the countries, because in general it is easier to move in the same country than from one country to another country, because of linguistic and cultural barriers. There are also institutional barriers such as the right to settle in a certain country for an alien. Then, we must distinguish between the financial capital and the physical capital, where the financial capital moves more easily from one country to another, while the physical capital, respectively means of production (factories, equipment) need time. Also, the goods produced in country A will be different from the goods produced in country B. the workers who would migrate would have to go through a training process to produce in

country B, which represents a limitation of mobility possibilities.

2 Diversity and Similar Monetary Area

As for the aspects related to *diversity and similarity*, the countries with a very diversified and similar structure between production and exports form an optimal monetary area. This criterion was exposed by the economist Peter Kenen in an article published in 1969 and approaches the problem of asymetrical shocks on demand side. Most of shocks on demand side can be associated with changes in consumption patterns which in turn can be the consequence of changes in the tastes of consumers or new technologies (e-mail replaced fax, for example). This change can explain the appearance of an asymetrical shock when the sector is important in the considered country. For example, we consider a country specialized in the production of beer; if wine becomes more popular, the country in question will suffer the effects of a negative shock on demand side. The countries which are the most likely to be affected by asymetrical shocks are the countries which have a less diversified structure of production of goods.

With reference to the *opening of economy*, as McKinnon signaled in an article back in 1963, the countries which are very opened to the exterior and which trade a lot with one another form an optimal monetary area.

To illustrate the pertinence of this criterion, we must mention a major difference between a monetary union and a group of countries with own currencies: in case of a monetary union, the exchange rate is fixed (actually it disappears), so that it does not represent a tool in the reduction of effects of asymmetrical shocks.

McKinnon claims that certain goods are produced by several countries (or by all) in the same way and if we have free trade, then the price of these goods should be equal. This is the "Single Price Law» which is valid also when the nominal exchange rate fluctuates. For these goods, the nominal exchange rate does not affect the competitiveness of the countries in question. The relative price of these goods is constant in all the countries, so that the change of nominal exchange rate will neither affect the relative price, nor competitiveness. So, in this case, the exchange rate does not represent an instrument of reaction to asymmetrical shocks, therefore a monetary union is possible.

The higher the degree of opening of economies to the exterior, the more likely they will produce identical goods and then it is useless to maintain a flexible exchange rate system to react against asymmetrical shocks.

We must also consider the problem of *fiscal transfers*. In a union composed of the countries A and B, where the country A is affected by negative shock on demand side, if there is a fiscal transfer from the country B to the country A, it reduces the recession from country A, because it will lead to the possibility of payment of salaries; the inflationist pressure in B will also be reduced. Why would country B be willing to make the transfer to country A? Because it would be a mechanism of protection against negative shocks. In the following year, country B can be affected in the same way as the country A.

These types of fiscal transfers already exist inside a country (regions within a country). In some cases, these transfers are explicit. Inside a country there are also simple implicit transfers because when there is a certain region which is affected by negative shocks on demand side, the production decreases and the unemployment rate increases, the income decreases, etc. This region will pay less taxes and will receive supplementary incomes from the government, which are obtained from the other regions. This involves receiving fiscal transfers by the region from the state, which is made of all the other regions, so the transfers come from all these regions.

With reference to *homogenous priorities* – a symmetrical shock does not cause problems if the countries react in the same way. Yet, in some situations, a similar reaction to shock means that they have the same priorities. If there is a negative shock on supply side, some countries can be concerned about inflation and willing to fight against it, while other countries

would be concerned about unemployment and willing to fight against it.

Another example: following an unfavorable symmetrical shock on demand side, some countries from Monetary Union will want to depreciate the single currency in favour of exporters, while other countries will not depreciate the currency in favour of consumers, who will gain a higher purchasing power.

If the monetary area comprised countries with different priorities, they would want to have a common central bank which supervises the exchange rate differences. In conclusion, whatever the central bank would do, at least one country would be dissatisfied, and these countries are affected by symmetrical shock. Therefore, it is necessary that the countries members of monetary area would have a consensus with a view to diminishing shocks.

It is worth mentioning what we can refer to as *common destiny*. The theory provides the lack of perfect optimal monetary areas. A country is a monetary union, but it is not perfect. When the common monetary policy generates conflicts of national interest, the countries which form the monetary area have to accept the costs by virtue of a common destiny.

3 The Theory of Optimum Monetary Area

The optimal monetary area theory implies that *countries will want to be part of an area with a fixed exchange rate with which there are close connections by trade and mobility of factors.* The decision of a country in this respect is determined by the difference between the gains of efficiency on monetary level and losses in terms of economic stability determined by the accession. The diagram GG-LL demonstrates the connection between these two factors and the degree of economic integration between the country and the area with a fixed exchange rate. Only if the degree of integration exceeds a certain critical level, the benefits will be higher than losses.

At country level, there are certain differences. They are based on the decomposition into three axes: agriculture, industry and manufacturing. This explains the difference between Norway and Germany, because the main exports of Norway are of oil and fish.

Some smaller European countries are very specialized, such as Finland in the field of wood and electronics, Ireland in agriculture and high technology and Luxembourg in banks and finances.

We can also say that a vast majority of European countries fulfill the criterion related to the *degree of opening*, especially the small countries which are much opened. If the considered economy is much opened, we expect that the vast majority of goods produced and consumed are traded on international markets, so that the price is determined by these markets. This involves that any change in exchange rate is influenced by a change of domestic price. This exchange rate does not affect the competitiveness of economy. When a country has a high opening degree, a flexible nominal rate is useless because it cannot handle asymmetrical shocks.

The majority of EU member states export between 10% and 20% of their production to other European countries and the smaller countries tend to be more opened than the largest ones. If we measure the opening degree as average of the ratio between import and export, in 2000, this value was 49% for Belgium and Luxembourg, 39% for Ireland, 27% for the Netherlands and 24% for Austria. This would explain why smaller countries were more enthusiastic than large countries about the creation of Economic and Monetary Union.

On the other hand, European Union member states took direct measures to stop the free circulation of goods, services and production factors. In June 1985, the European Commission elaborated a document which contained 300 proposals for the perfection of internal market until 1992 (eliminating all the commercial international barriers left, the movement of capital). All this had to be fulfilled by 1st January 1993. Then, the members of European Union transposed the document in a single European document of 1986, which was the basis of the Treaty of Rome. Most of market integration measures from 1992 were implemented. The citizens of

European Union are free from the legal point of view to look for a job anywhere on its territory. However, *the workforce mobility* is still very limited. The main reason is the existence of linguistic and cultural barriers.

From the point of view of *fiscal transfers* we cannot say that EMU meets the requirements of an optimal monetary area. There is a low degree of fiscal federalism in UE, compared to United States. For USA it was estimated that the decrease of income in a certain state of US was compensated by federal transfers, an amount estimated between 10 and 40% of the initial income loss. In UE there is no such system, because the EU budget is too small with less than 2% of GDP. The EU budget is spent almost entirely on 2 things, structural funds (the support of poorer regions, whether they are affected by shocks or not) and common agricultural policy (CAP), which consists of subsidies for farmers. Any fiscal transfer system requires a significant increase in EU budget, but most EU member states are not willing to increase this budget.

The question which raises is whether asymmetrical shocks will frequently take place in Economic and Monetary Union and will be of large sizes. The only solution is to look in the past and assume the same frequency of asymetrical shocks. In any case, Euro will change the economic structure of the country. The countries which decide not to join EMU, are affected by different shocks. An exception is Finland, which suffered from a large-sized asymetrical shock in wood industry (the main industry of the country) during the ’90s.

4 Optimal area and the European single market

The Single Market has created a greater variety of products and services at lower prices to consumers, driving the growth and quality and safety. It created a common set of rules for business, as well as access to a market of 500 million consumers. The single market has been essential for the smooth functioning of economic and monetary policies of the EU and has served as a basis for the launch of the euro. The single market has expanded Europe more open, more diverse and more competitive - creating new opportunities, social rights and promote high standards of health, safety and environment. The single market only contribute to creating jobs and all sorts of positive aspect which will be seen in the short term but also medium to long. Despite these achievements, the single market has a huge potential to be exploited and must adapt to new realities. At the beginning of 2007, the Commission established the vision for the single market of the XXI century: a strong market, innovative and competitive, which exploit the potential of services, brings direct benefits for consumers and businesses, and allow Europe to better respond to the forces of globalization and shape them. The single market will be built and will operate on solid foundations current repositioned itself to meet new challenges - globalization, innovation and rapid change, the evolution of social and environmental realities. The single market is in the midst of a set of policies. The creation of the euro at the beginning of this century and its adoption by an increasing number of Member States than strengthens the interaction between the single market and economic and monetary union. The single currency has already proved an anchor of stability and driver of the creation of the single market has benefited the EU economy as a whole, not only the euro area. Significantly boosting growth and jobs, the single market is the key to achieve the priorities set by the Lisbon Strategy. This analysis should be monitored in the next phase of the strategy, for which the Commission will present proposals in December 2007. The single market, closely related to social protection policies and the environment, contribute to the goals of sustainable development. New strategy for the next years appears amid a deep economic crisis

and enhancing long-term challenges such as globalization, pressure on resources use and aging. The strategy is intended as a way out of the crisis, the Community action leading to the EU into an economy - 21st century - smart, sustainable and inclusive growth, leading to increased employment in the labor market, the productivity and economic, social and territorial cohesion. The objectives for the future will be achieved only in a European Research Area efficiently, effectively and with adequate funding. Educational policies (including the promotion of lifelong learning and informal and non-formal education) will be reformed. Education systems need upgrading at all levels so as to increase their efficiency and lead to greater educational and professional mobility. Steps must be taken to create a genuine single market for on-line based broadband Internet, digital economy that benefits are used to their full potential. Initiatives under this priority will belong to both the Union and the Member States and regions. The single market should deliver better results and tangible benefits for consumers and SMEs, responding to their expectations and concerns. Consumers need to feel confident and entitled to make full use of their rights. Market opening and consumer policy are interrelated. Today, consumers can shop in other EU countries or on the internet without having to worry about the payment of customs duty or value added for an additional fee. They have the warranty of high standards in terms of food and consumer goods. And food labeling, as well as price transparency requirements, facilitates the comparison at the time of purchase. The single market must continue to focus on areas that affect the daily lives of consumers, such as energy, telecommunications, retail financial services and wholesale and retail absence of effective competition and fragmentation of markets, due in part different national laws of consumer protection should be addressed so as to ensure that consumers benefit from the advantages of effective market opening and understand more easily how the single market can work for them. By educating and empowering consumers, for example in the field of retail financial services, action at Community level can boost productivity and efficiency. Although the legal framework for electronic commerce there may be more that citizens can exploit the opportunities offered by the internet. The benefits of the knowledge economy depends on the direct contribution of labor, whose expertise is central to European economic growth. Subsumed under this priority actions aimed at modernizing and strengthening social protection systems and those of education and training in order to reduce unemployment, increase labor market participation and the degree of corporate social responsibility of the business community. Also, in order to implement this priority, it is important to ensure access to childcare facilities and care for dependents. In the next decade, flexicurity will occupy an important place in EU policies as the instrument that best meets the challenges of jobs that require new skills. In turn, occupational mobility should contribute to a better match supply and demand in the labor market, but also to the supply of new skills recognized. Major efforts should be made to combat poverty and social exclusion and reduce inequities in the access to health systems. Equally, it is very important ability of Member States to meet the challenge caused by aging.

5 Conclusions

The creation of a monetary union can determine the gradual changing of structural characteristics of the analysed area, which results in a higher or lesser compliance with the criteria of optimal monetary area theory. They are endogenous, because the performances of a given area by this criteria change with the decision to form or not a monetary area.

From the point of view of *diversification and similarity*, the point is that European countries are very similar from the point of view of structures and manufacturing industries, which reflects in the high volume of intra-branch trade inside Europe.

With reference to the question *whether the EMU can be considered an optimal monetary area*, in the light of previously presented aspects, we can argue especially the following aspects: EMU satisfies relatively well two criteria, the opening and the diversification; it does not satisfy though the criterion of workforce mobility and fiscal transfers. The other aspects remain rather questionable. As for EMU, we can say that at least for the time being, it does not satisfy the criteria of an optimal monetary area.

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