OPTIMUM CURRENCY AREA THEORY – A CRITICAL VIEW[27]

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Abstract. The launching of monetary union in Europe, from a historic point of view, represents a completely new solution. It did not have a very strong background in economic theory. The paper deals with the theory of optimum currency area (OCA) as the theoretical basis for analyzing the advantages of membership in a monetary union. R. A. Mundell in his ground-breaking essay of 1961 opened up the issue of optimal currency areas and put the question of under what conditions it is advantageous for a group of countries to introduce a common currency. The project of EMU has raised questions and polemics among a professional public. The criteria of the optimum currency area together with real convergence play a key role in assessing preparedness to join the monetary union, as well as in evaluating the costs and benefits of membership in it. The criteria for an optimal currency area are not a black and white problem. Some of them may be partially met and others not at all. This paper deals with the polemic issues related to the theory of OCA, explores the development of OCA theory and analyses the arguments pro-and-cons of a monetary union and finally discuss the relation between a political union
and a monetary union.
Key-words: optimum currency area, criteria, R. Mundell, monetary union, political union, EMU

Introduction

Theory of optimum currency area (OCA) is the theoretical basis for analyzing the advantages of membership in a monetary union. This theory has been described as "wondrous doctrine which can often be the background for quite contradictory conclusions" (Dědek, 2002). Defenders of the common currency and critics as well refer to this theory. Theory of optimum currency areas allows to answer the questions: what are the conditions for the participation in the monetary integration, and then, what are the costs and benefits of joining to monetary union. The main cost of monetary integration is the inability to use an independent monetary policy to combat unexpected asymmetric shocks. As the main benefits of the single currency are identified: reduction of transaction costs, elimination of uncertainty of exchange rate developments, price transparency. The paper deals with the polemic issues related to the theory of optimum currency area. Section 1 deals with Robert Mundell´s contribution to the theory, section 2 explores the development of OCA theory, section 3 analyses the arguments pro-and-cons monetary union. Then section 4 analyses the relation between a political union and a monetary union.

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Robert Mundell and optimum currency area theory

R. A. Mundell in his ground-breaking essay of 1961[28] opened up the issue of optimal currency areas and put the question of under what conditions is advantageous for a group of countries to introduce a common currency. The work was published in a period when discussions on the advantages and disadvantages of a fixed and floating exchange rate were conducted mostly at the academic level and the national currency was considered as essential for a country.

R.A. Mundell (together with R.I. McKinnon and P. Kenen) belong to the most important economists dealing with OCA focused mainly on defining the criteria that determine the optimum currency area with a fixed exchange rate (see summary of theories Ishiyama, 1975). It should be noted that the OCA theory does not specify the exact critical values for each criteria. R.A. Mundell focused on the country's ability to adapt to the shift in the demand for products from the one country´s products for products of other country (Mundell, 1961). The result of this shift is the decline in output and employment negatively affected by a demand shock. In the case of monetary sovereignty (a country has had its own currency), a negative demand shock would be resolved through depreciation respectively currency devaluation. In the case of monetary union Mundell considers labor mobility as a factor that may restore macroeconomic balance.

According to Mundell´s original theory, the optimal currency area is an area where there is high mobility of factors. Mundell defines optimality as the ability to stabilize employment and price levels in the country (Mundell, 1968). In other words, if the economy manages to maintain external balance without an increase in unemployment or without an increase in inflation induced demand, the existing exchange rate regime (whether it is a floating or fixed) is considered as optimal. Based on the previous analysis Mundell concludes: if there is sufficient mobility of production factors within the country but low in relation to foreign countries, the national currencies, should operate effectively under floating exchange rates (Mundell, 1961).

In 1973 R. Mundell developed his original theory and analyzed the free movement of capital. The exchange rate stopped to be an effective instrument of monetary policy to stabilize the economy and on the contrary it has become a potential source of asymmetric shocks (Mundell, 1973). The countries that did not enter into monetary union, may become targets of destabilizing capital flows and will face asymmetric shocks. Therefore the exchange rate may not be effective to

[28] R. A. Mundell’s article “A Theory of Optimum Currency Areas” in 1961 represents a classic in the theory of optimal currency areas. In: the American Economic Review, 60, no. 4 (September 1961), pp. 657-665.

eliminate the effects of such shocks. This theory is known as the Mundell II. Membership in EMU helps to insure against this type of asymmetric shocks.

The originality of Mundell's approach in formulating the problem influenced the work of further generations of economists, who consider the two case studies contained in his work (monetary union and a floating exchange rate regime) as the most important alternatives.

Development of the theory of optimum currency area

R. I. McKinnon (1963) proposed openness as a criterion of optimum currency area. Membership in a monetary union brings benefits from the integration of the country, higher openness leads to higher savings in transaction costs and greater benefits from the elimination of exchange rate volatility. Openness of the eurozone´s countries is relatively high (McKinnon, 1963).[29]

In 1969 P. B. Kenen suggests the degree of product diversification as a criterion for determining the fixed exchange rates. If the country produces and exports a diversified range of products, the negative impact of asymmetric shocks is smaller than in less diversified economy. In this case, it is not necessary to change in the exchange rate. The fixed exchange rates become more favorable if the product diversification increases. Countries that specialize in one sector are more vulnerable in case of asymmetric shocks. In the case of a demand shock an independent monetary policy would be an effective tool for solving problems in these countries.

J. M. Fleming pointed out that only countries with almost the same rate of inflation may enter and remain fixed exchange rates (Fleming, 1971). Different rates of inflation are the main cause of current account imbalances. The same rate of inflation between countries enables the maintenance of relative purchasing power parity and, consequently, leads to the stabilization of business conditions. In the long run the stable foreign trade relations lead to current account balance and the need to use the exchange rate change is minimized. If inflation diverges too much a system of fixed exchange rates between countries can not be maintained in the long-term. It means that a monetary union must undergo the steps towards convergence of inflation rates.

According to J.C. Ingram another criterion of optimum currency area is the integration of financial markets (Ingram, 1973). Capital flows from the relatively stable areas to the shock affected regions may replace a role of the nominal exchange rate (to some extent).

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[29] Currently, a small open economy (under the existence of unrestricted capital mobility) has little manoeuvre room for the implementation of effective independent monetary policy. Independent monetary policy may become a source of shock and not just shock absorber (De Souza and Van Aarle, 2004).

The other criteria were proposed as follows: fiscal solidarity and homogeneity of preferences (Iša, Okáli 2008). Homogeneity of preferences means that there is a consensus accross monetary zone on the way how to react in case of negative developments. Fiscal solidarity may occur in the form of fiscal transfers. Summary of the criteria of optimum currency areas provide a study developed by Tavlas (1993) and Mongelli (2002).

Optimum currency area criteria was based on economic evaluation of costs and benefits, countries may decide to join a monetary union on the basis of political reasons, since the common currency may be a first step towards the creation of political union. As stress Baldwin, Wyplosz OCA are not black and white issue. Some may be partially met and others not at all (Baldwin, Wyplosz, 2008).

Mundell´s pro-and-cons monetary union

Mundell's theory of the optimal currency area was to become the starting point of controversies over the establishment of EMU, in particular in respect of researching the benefits and disbenefits of monetary union. Mundell considers a common currency as crucial for monetary union, where he identifies three phases in its achievement: introduction of a fixed exchange rate with a credible mechanism; setting binding rules for monetary policy; and the replacement of the domestic currency by the common currency of the monetary union (or partner countries).

In his latest works Mundell has again returned to a cost-benefit analysis of monetary union attempting a systematic definition of the arguments for and against joining a currency area (Mundell, 1997). According to Mundell, a country should consider membership of a currency union, or zone with fixed exchange rates for these reasons:

- If the country has an interest to maintain a rate of inflation different from the rate of inflation in the currency area;
- If the country wants to use the exchange rate as an instrument of employment for lowering or raising wages;
- If the country wants to use the exchange rate as an instrument for influencing the balance of trade (currency devaluation);
- If the country prefers to use monetary expansion for refinancing government expenditures (something which would be prevented by the required discipline in the conditions of fixed exchange rates);
- If the government is not willing to surrender segniorage as a means of international payment;

- If the regime of fixed exchange rates could clash with the policy of a central bank having a mandate to maintain price stability;
- If currency integration with many countries means the elimination of national sovereignty, which is a symbol of national independence;
- If there is not a political and economic elite available in the country capable of maintaining a system of fixed exchange rates in balance;
- If political authorities are not able to achieve a balanced budget and/or create confidence in a permanently balanced budget or in the viability of the fixed exchange rates;
- If the country is not willing to accept the degree of integration instituted by the agreement on the optimal currency area (e.g. common standards, immigration, tax legislation, labour law).

In a similar manner Mundell introduces the reasons that should support a country's decision on becoming a member of an optimal currency area:

- Adjustment of the set rate of inflation in the optimal currency area;
- A lowering of transaction costs in international trade;
- Elimination of expenses for the emission and maintenance of the national currency;
- The setting of a clear direction for economic policy around which the expectations of economic subjects may be formulated;
- The elimination of exchange rate movements;
- Ensuring the international softening of the negative impact of shocks;
- Greater participation in financial markets and the capital market of the union;
- The creation of a competitive currency as a certain counterbalance against the dollar;
- The creation of a larger economic bloc with the possibility of influencing international economic development;
- The creation of a mechanism for strengthening monetary and fiscal discipline outside the influence of the political process.

Political integration and monetary union

In the real world the currency is synonym for national sovereignty. The creation of a new monetary arrangements should be accompanied by political changes (Mundell, 1961). Optimum currency area is effective only in areas where there is political integration as well. The success of monetary union is also based on a common political consensus and sharing common priorities relating to the given macroeconomic objectives such as: economic growth, unemployment, inflation. Political will to integrate is critical to adopting the single currency (Mintz,1970).

Even before the launching of EMU critical comments were made. They pointed out that there are risks arising from the absence of political integration (Krugman, 1992; Feldstein, 1992). Feldstein states that an artificially created economic and monetary union may actually restrict trade between Member States and would almost certainly increase the level of unemployment for some time. Feldstein did not understand those who advocate monetary union, but rejected any move towards a federalist political structure for Europe. This is the formula for the economic costs without any political gain (Feldstein, 1992).

According to Feldstein political considerations prevailed over economic ones and monetary union is not beneficial for the EU. It is clear that there is a political vacuum at the European level in terms of a European superstate. The absorption of shocks remains solely in the hands of nation states and it is an important risk element. It is debatable to what extent nation states are able to eliminate the effects of asymmetric shocks, which can result in conflict between national governments and the ECB. Full monetary union without political union could have serious fiscal consequences for the euro area (Krugman,1992).

De Grauwe distinguishes two levels of political integration: institutional and operational one (De Grauwe, 2006). From an institutional point of view the EU has created a large number of institutions to which member states have delegated some of their sovereignty. In functional terms, the transfer of sovereignity takes place unevenly. There are areas in which the significant transfer of sovereignty has been realized such as: agriculture, external trade policy, competitiveness. On the other hand, the minimum transfer of sovereignty is registered in the area of taxation, social security and wage policy. De Grauwe argues that the euro area without further political integration has little chance to survive. Firstly, the political union should have certain characteristics of budgetary union, i.e. member states should provide some competence in the area of expenditure and taxation to the European executive bodies. This would allow to create a system of insurance against asymmetric shocks in the euro area. On the other hand, it would require a substantial increase in the size of the European budget.

Conclusion

1. The theory of optimum currency area has become extremely influential theory as a basis for monetary integration process.

2. The OCA theory represents a starting point of evaluation whether European Union had been prepared for the single monetary policy. The renaissance of theory began just with the European integration process (EMS crisis in 1992-1993, a project of EMU expansion of eurozone).
3. The theory of optimum currency areas has been criticized as well. Firstly, the critics have asked whether the differences between countries are so important that they result in the costs in the monetary union. Secondly, it was pointed to the fact that the exchange rate instrument is not always effective in resolving the differences between countries.
4. Optimum currency area is effective only in areas where there is political integration as well. The success of monetary union is also based on a common political consensus and sharing common priorities.

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