Fiscal stabilisation policy in the EMU An insight from the theory of optimum currency areas

Małgorzata Misiak*

Introduction

One of the functions of public finances is to stabilise the economy. The task involves public authorities allocating resources and redistributing revenue to dampen economic cycle variations. Economic activity rises and drops, and market mechanisms are unable to ensure a satisfactory and sustainable rate of economic growth, high employment rate, low inflation, or balance of trade equilibrium. Mitigating business cycle variations has an enormous impact on economic growth in the long term. The article examines the role and the place of the fiscal stabilisation policy in the European Monetary Union (EMU) from the perspective of the theory of optimum currency areas (OCA). We address issues such as stabilisation policy in a monetary union, fiscal integration as a criterion of an optimum currency area, and budgetary policy organisation in a type of multi-level governance system such as the monetary union, which is composed of a regional level (in EMU this is the Member State level) and a central level, which in the case of the EMU, is the European level.

The theoretical part of the research was completed at the European University Institute in Florence under the College of Europe Summer Fellowship Programme in 2011.

^{*} Małgorzata Misiak – PhD, University of Lodz, Faculty of Economics and Sociology, Institute of Economics, Department of International Trade, malgorzata.misiak@uni.lodz.pl

Fiscal integration as a criterion of OCA

The issue of fiscal stabilisation policy in the EMU was pioneered by Mundell. In 1961, he published the work entitled "*A theory of optimum currency areas*" (Mundell 1961), in which he expressed the view that two countries can benefit from forming a single currency area if the related economic benefits prevail over the costs. In such a situation, the currency area is optimal (Kenen 1995, p. 81). Mundell defined a single currency area as a territory with one or more currencies, but with mutually fixed exchange rates (Bien 1988, p. 15). He defined optimality as the ability of such an area to stabilise its employment and price levels or ability to automatically restore equilibrium without resorting to monetary and fiscal policy instruments, which can be ensured by high factor mobility within the area.

Suppose we have two countries, A and B, which have separate currencies with a fixed exchange rate, and which are in internal and external equilibrium. Let us start from the assumption that demand drops in country A. As a result, output declines, and unemployment rises. A current account deficit appears because exports decline faster than imports, as the automatic economic stabilisers dampen the fall of income (and expenditure). In country B, prices rise, and a balance-of-payments surplus is registered. Thus, both countries experience adjustment problems. Country B may decide to tighten its monetary policy to counteract inflation, but it will be burdensome for country A. If country B allows prices to rise, its terms of trade will deteriorate, which may initiate adjustment processes in country A.

Are there any mechanisms other than exchange rates to restore equilibrium in both regions? Yes, there are market mechanisms. They include wage and price adjustment, as well as factor mobility. The problem is that they do not work properly in practice as prices and wages are sticky, and labour is not particularly internationally mobile. Even if they work, they may be costly for both economies – in the above-mentioned example, country A will have to accept deflation, which will eventually restore the competitiveness of exports and solve the problem of the balance-of-payments deficit. In this context, an alternative for these mechanisms may be interregional transfers from the central budget, which in our instance will call for the imposition of tax in country B and the transfer of the raised money to country A.

If we assume that instead of two countries we have two regions, A and B, forming a single currency area and that the monetary authorities pursue a full-employment policy, a shift from the demand for goods produced in region A to B will cause unemployment in A and inflationary pressure in B (as shown above). The monetary authorities will be helpless: increasing the supply of money to correct unemployment in region A will ultimately result in increasing the inflationary pressure in region B. Thus, there will always be a trade-off between unemployment and inflation.

Another of Mundell's theoretical model that brings corollaries useful for policymakers assumes two North American countries, the USA and Canada, both with a separate currency. The continent is divided into two regions, the boundaries of which do not align with state borders: the East, which produces cars, and the West, which produces construction materials. Let us assume that the demand for cars declines, and the demand for construction materials grows. The East will register unemployment, while the West will see inflationary pressure. The monetary authorities of these two regionally diversified countries are again helpless. To lower unemployment in the East, they have to increase the national money supply. To lower inflation in the West, they must decrease the national money supply. Again we arrive at an unsolvable dilemma between unemployment and inflation. The problem can be tackled successfully by introducing regional currencies, an Eastern dollar and a Western dollar, instead of the national currencies. The Western dollar would appreciate relative to the Eastern dollar, ensuring the balance of payments equilibrium, and both regions would be able to take effective action to stabilise both prices and employment.

According to Mundell, the necessary criteria for an optimum currency area are wage and price flexibility, as well as factor mobility. The adjustment costs can be reduced if the countries that form a single currency area are able to use a fiscal policy to stabilise employment and price levels.

Mundell's followers extended the list of conditions for a currency area to be considered optimal (Misiak 2013, pp. 169–171). It includes:

- Financial market integration. As far back as 1962, Ingram concluded that capital flows between deficit and surplus countries constitute an important adjustment mechanism (Ingram 1962). On an integrated financial market, even the slightest variations in interest rates will generate balancing capital flows, which will translate into the convergence of long-term interest rates, lowered costs of the restoration of the balance-of-payments equilibrium, and effective resource allocation across the economy.
- Openness of economies. McKinnon believes that the more open the economy (measured by the share of tradeables in overall consumption), the less effective the flexible exchange rate in restoring a balance of payments equilibrium (McKinnon 1963).
- Diversification of production and consumption. Kenen concluded that the more diversified the structure of exports and imports is, the lower the risk of changes in the *terms of trade*. This is because, owing to the law of large numbers, negative factors that distort the profitability of exports of some categories of goods are offset by positive factors and factors that increase the revenues from exports of other goods. In a diversified economy, expenditure incurred on imports should also be more stable than in a non-diversified economy (Kenen 1969).

- Similarity of inflation rates. Fleming points out that the more similar (and lower) inflation rates between the single area members are, the lower the risk of a change in the *terms of trade*. This improves the stability of foreign trade transactions and minimises the need to use exchange rates as a tool for restoring the balance (Fleming 1971).
- Fiscal integration. Kenen believes that a centralised budget, which features a system of interregional transfers, may be an effective tool to stabilise employment and price levels. However, this requires far-reaching political integration (Kenen 1969).
- Political integration. According to de Grauwe, political integration improves the likelihood of centralising fiscal policy, making it possible to establish fiscal transfer mechanisms at a transnational level that protect the members of the union against asymmetric shocks. Moreover, political integration reduces the risk of asymmetrical shocks caused by economic policymaking areas such as expenditure, taxes, wages, or social security, which are delivered at the national level and spill over into other countries.¹ Furthermore, Tower and Willet (1976) demonstrate that an optimum currency area must be based on a similarity of preferences regarding the macroeconomic policy choices regarding economic growth, inflation or unemployment.

A question arises about the hierarchy of the above criteria. Market equilibrium restoring mechanisms such as wage and price flexibility and factor mobility are of the utmost importance. However, the conditions that a single-currency area should fulfil to be considered optimal are not clear-cut. Sometimes they are incoherent, e.g. a small and open economy, which seems to be well suited to participate in a single-currency area according to the McKinnon criterion, might be not sufficiently diversified in terms of production and consumption, as required by Kenen (Mongelli 2002). Tavlas (1994) also points to the problem of the non-conclusivity of the criteria: e.g. the economy of a country joining a monetary union may be sufficiently open in terms of trade exchange with the partners participating in the monetary integration, but there may be no factor mobility. Should they form a single currency area or not?

De Grauwe (2009) proposes grouping all criteria of an optimum currency into three categories: symmetry, integration, and flexibility. The first one means that countries that form a monetary union should be similar, which would reduce the risk of asymmetrical shocks. Their commodity markets and production factors should be flexible enough to restore internal and external equilibrium after an asymmetrical shock (flexibility criterion). Finally, members of a single-currency

¹ For instance, such shocks were caused by the shortening of the working week in France to 35 hours or by the wage increase policy pursued by Germany since 1999.

area should be integrated in terms of trade so that benefits arising from the use of a single currency could occur (flexibility criterion).

Figures 1 and 2 illustrate the above ideas. Figure 1 shows all the combinations of symmetry and flexibility that ensure equilibrium between the costs and benefits of single-currency area membership. The OCA curve is downward sloping because the smaller the symmetry between the monetary union members becomes, the higher the required flexibility.

Figure 1. Symmetry and flexibility as a criterion of an optimum currency area



Level of flexibility of economies

Source: de Grauwe, P. (2009), *Some Thoughts on Monetary and Political Union*, [in:] L. Talani (Ed.), *The Future of EMU*, Palgrave Macmillan (p. 12).

Figure 2. Symmetry and integration as a criterion of an optimum currency area



Source: de Grauwe, P. (2009), *Some Thoughts on Monetary and Political Union*, [in:] L. Talani (Ed.), *The Future of EMU*, Palgrave Macmillan (p. 13).

Figure 2 presents the various combinations of symmetry and integration. Here, too, the OCA curve is negatively oriented, as the less symmetry between the countries of a single currency, the bigger macroeconomic costs of currency integration. The higher the level of trade integration, the greater the benefits of integration (mainly in microeconomic terms). Thus, for the balance to remain unchanged, the additional (macroeconomic) costs of integration should be offset by additional (microeconomic) benefits. If monetary integration accompanies political integration, the countries have an additional instrument for stabilising their economies – interregional transfers. This means that for each level of (a)symmetry between the countries, the costs of monetary union membership fall. This is reflected by the shift of the OCA curve towards the starting point of the coordinate system (cf. Figure 3). Economic policy coordination increases the similarity between the members of the single currency area, making the monetary union more sustainable.



Figure 3. Criteria of an optimum currency area and political integration

Source: de Grauwe, P. (2009), Some Thoughts on Monetary and Political Union, [in:] L. Talani (Ed.), The Future of EMU, Palgrave Macmillan (p. 15).

Classical OCA theory revisited

The classical theory of optimum currency areas as originally proposed by Mundell has come in for harsh criticism, notably from Mundell himself² in a less-known article entitled "*Uncommon arguments for common currencies*" published in 1973 (Mundell 1973). This paper is important for the design of the stabilisation policy in a monetary union because Mundell makes two observations:

² In the world literature, the concept is referred to as Mundell II.

- Membership in a single currency area provides a better shield against asymmetrical shocks thanks to access to loan capital and a lower risk premium.
- A floating exchange rate is not a good stabilisation instrument. Instead of reducing the economic volatility, as it is supposed to, a floating exchange rate appears to increase it. Free float is likely to be a source of asymmetrical shocks itself, as it is often the target of speculative attacks. This means that losing an exchange rate as an economic policymaking tool is less costly than initially expected. As a result, the OCA curve in Figure 3 moves towards the starting point of the coordinate system.

In the Mundell II model, we have two islands: Cancer and Capricorn. Both produce corn, but the crops on Capricorn are harvested in winter, while those on Cancer are harvested in summer. Corn cannot be stored for a long time, and each island is inhabited by half of the world's population. Under Mundell's model, Capricorn exports half of its corn output in winter, while Cancer does the same in summer. Production and consumption are distributed evenly between both islands, and they amount to 100. If, then, in summer, Cancer ships half of its crop to its partner, in return, it receives a claim to half of Capricorn's food crop in winter. Suppose that, as the crops on Capricorn are ripening, the central bank of the island issues money "under a pledge" to obtain half of the crops in summer. Cancer's monetary authorities do the same. The transaction is concluded when, in winter, the central bank of Capricorn sells crops to the central bank of Cancer. Capricorn registers a foreign trade surplus and an external debt drop. The central bank of Cancer sells the crops to the population of the island for the money it issued previously. Cancer runs a foreign trade deficit, and the island's debt increases. In summer, the situation is reversed. The system functions perfectly until crop irregularities appear. When, in summer, the crops on Cancer decline from 100 to 70 and Capricorn provides 50 monetary units to exchange them for 50 units of crops, the authorities of Cancer have two choices: either sell the 50 units to the partner (which will lead to famine on the island) or devaluate its own currency and propose to Capricorn fewer crops for 50 units of its own currency.

When a global currency is introduced, both islands hold their reserves in the currency amounting to 50 units each. Such a solution becomes beneficial in a crisis. When crops on Cancer drop to 70, 100 units of the world currency will be exchanged for 70 units of crops. It means that the price of crops will increase to 100/70 for both countries. Participation in a monetary union equips its participants with the risk-sharing mechanism, and the overall welfare of the single currency area increases.³

³ A broader discussion of the model can be found in R. McKinnon 2004.

Recommendations from OCA theory for policymaking

The theory of optimum currency areas delivers important proposals about economic policymaking in a monetary union. An important contribution in this respect was made by Kenen (1973), who believes that a monetary and fiscal policy are two centres of gravity, and they should jointly act to obtain economic objectives. This can only be achieved when the area covered by their operation is the same, i.e. when the territory covered by the single fiscal policy is equal to or - at least - not bigger than the territory of the monetary union.Otherwise, the "centre responsible for fiscal policy would face many problems" (Kenen 1973, p. 40). One of these may be maintaining a sustainable tax burden on the members of the multi-currency area where a single fiscal policy is pursued, but there are different monetary policies, and therefore different inflation rates applied. Difficulties would also occur on the expenditure side. When one has multiple currencies and one fiscal policy, which currency would the government use to purchase goods and services, to pay state officials, or to issue government debt? He concludes that the efficient functioning of a monetary union requires not only that the monetary policy be centralised but also the budgetary policy. Furthermore, members of a single currency area would be able to stabilise the economy by means of interregional transfers from the central budget.

Corden (1972) expresses a similar opinion. Membership in a monetary union means giving up national monetary policy or exchange rate policy. As a result, a country experiencing a demand shock has no other options than to use a fiscal policy to achieve policy goals. However, fiscal policy is not a perfect substitute for exchange rate policy, because it does not substitute adjustments; it merely stretches them over time and reduces their costs. Hence, market adjustment mechanisms such as wage and price flexibility are needed, as they involve the possibility of changing the real exchange rate. Another alternative is private capital flows, which was pointed out by Mundell in 1973, as well as interregional transfers such as unemployment benefits.

Corden focusses on fiscal integration in a monetary union. He defines it as an effect of fiscal harmonisation, which he finds important for ensuring the neutrality of the tax systems within the integrated area. More specifically, Corden says that tax harmonisation does not necessarily require the same taxes (including their equal rates), rather a situation in which the structure of taxes is agreed centrally. Drawing on the experience of the American monetary union, Corden suggests that some taxes influencing the free flow of goods, services and production factors should be approximated, while other taxes could remain autonomous and diversified in order to ensure horizontal equality. In his opinion, total fiscal harmonisation leads eventually to fiscal integration, i.e. a situation in which "all expenditure and taxes are harmonised in one budget". Budget centralisation could offset such disadvantages of the area as sticky prices or wages, low factor mobility or small diversification of the economy (Lutkowski 2004, p. 42).

The endogeneity of OCA criteria

There are costs and benefits of monetary integration. The most important benefits are microeconomic, and they include a drop in transaction costs resulting from the elimination of exchange risk in the trade between member countries. In this context, it comes as no surprise that countries characterised by close trade relations are particularly destined for participation in a single-currency area. This is McKinnon's optimality criteria.

On the other hand, monetary integration generates costs, the most substantial of which is the loss of the exchange rate and domestic monetary policy as tools of policymaking. This leads to the formulation of another optimum currency area criterion that stipulates business cycle synchronisation so that the above-mentioned tools are no longer needed. Meanwhile, Frankel and Rose notice that both criteria are endogenous, which means that even if countries joining a monetary union do not fulfil the conditions of an optimum currency area ex-ante, they can meet them ex-post (Frankel, Rose 1996, 1997). Figure 4 presents the relation between the level of economic integration and the symmetry of the business cycle (Frankel, Rose 1998, p. 1012).

Figure 4. Endogeneity of the optimum currency area criteria



Source: Frankel, J. & Rose, A. (1998), Endogeneity of the Optimum Currency Area Criteria, Economic Journal, 108(449), 1012, July.

According to Frankel and Rose, the creation of a monetary union should reduce the risk of asymmetrical shocks. Advanced integration leads to the growing convergence of the participating countries' economic structures. As a result, the countries react to economic shocks in a similar way, and the shocks become symmetrical. This is evidenced by their empirical research. They examined the relationship between the intensity of trade cooperation (as measured by exports, imports and their sum) between pairs of countries *i* and *j* – the explanatory variable, and the correlation of the economic activity between them (measured by GDP, output, employment and unemployment, net of seasonal fluctuations) – the explained variable. Cross-sectional data covered 30 years and 20 industrialised countries.

In all of the numerous variants, there was a statistically significant and strong positive relationship between the intensity of trade and the employment and production convergence levels.⁴ It might have been due to an autocorrelation between economic activity and foreign trade, so in the next experiment, Frankel and Rose replaced output and employment with variables used in gravitational models, such as geographical distance between the business centres of the two countries, the neighbourhood, common language, and finally, membership in a regional integration grouping. The results were basically the same as in the previous study.

They conducted similar research in 2000, when they assessed the impact of membership in a monetary union on trade, output and per capita income (Frankel, Rose 2000). They used a gravitational model designed for 180 countries in which the size of bilateral trade depends on the distance between a pair of countries, their size (measured by GDP and GDP *per capita*), and a range of dummy variables describing bilateral trade determinants such as common language, neighbourhood, common colonial past or trade, monetary and political integration. They concluded that becoming a member of a currency area leads to a trade creation effect – the tripling of trade between the countries. Membership in an integration grouping stimulates trade more than common language or borders, but it is of less importance than having a common colonial past. Next, by means of a regression equation in which per capita income is explained by the size of the country, volume of trade, investment and the quality of human capital, they demonstrate that each additional percentage point of trade between a pair of countries is responsible for 1/3 of growth over 20 years (1970–1990).

Thanks to eliminating the exchange risk and lowered transaction costs, trade intensification is the most important benefit of a monetary union. The magnitude of this effect depends on who the partner is in a single currency area. For example, it may be expected that Lithuania will benefit more from introducing the euro than

⁴ It is worth mentioning that the correlation was observed across the variants, regardless of the cycle synchronisation measure, the measure of the trade integration level or the method for eliminating cycle variations

the Australian dollar, while for El Salvador, it would be more profitable to form a monetary union with the United States than the EU. These common-sense expectations are confirmed by the estimates by Frankel and Rose. For example, Ecuador, whose main trading partner is the United States, would see a 19% growth in per capita income as a result of the 30% increase in trade with the US if the American dollar was introduced as a common currency. As a result of accession to the EMU, Poland's GDP per capita would rise by 1/5.

Specialisation hypothesis

In his famous article entitled "*Lessons of Massachusetts for EMU*" (Krugman 1993), Krugman proves that economic integration increases the territorial concentration of manufacturing, which may expose countries to sectoral shocks. Let us imagine that there is an industry that operates in two regions, A and B. There is a demand for manufacturing products in both regions. The demand is price inelastic, and thus output in region A amounts to OQ, while in region B it equals QO* (cf. Figure 5).





Source: Krugman, P. (1993), *Lessons of Massachusetts for EMU*, [in:] F. Torres, F. Giavassi (Eds.), *Adjustments and Growth in the European Monetary Union*, Cambridge University Press (p. 245).

Curves CC and CC* illustrate the supply in regions A and B, respectively. It can be seen that region A has a cost advantage, because $c < c^*$. It may be due to the bigger market or factor endowment. However, the advantage does not necessarily mean that the industry will concentrate in region A. It will not happen if the

transaction costs exceed the difference between c* and c. If, as a result of integration (e.g. removal of border checks or the introduction of a common currency), the transaction costs are reduced, the cost advantage of region A will increase, which will result in the territorial concentration of the industry in region A.

According to Krugman, a further reduction in transaction costs occurs due to external benefits of concentration. The presence of other businesses in a given region guarantees the existence of a market for goods and services, well-developed technical and public utility infrastructure, specialised production factors, especially labour resources, and the diffusion of knowledge (Marshall 1925, pp. 258–262; Krugman 1993b, pp. 25–67).

Suppose the industry consists of identical firms that sell their products to consumers living in the two regions at price p, with various transport costs. Let us assume that part of the firms' output (x) is intermediate products. The manufacturing costs are expressed by the following formula: F+cx, where F is the fixed costs associated with starting a business. T is the cost of transporting a unit of production from one region to another. The production is concentrated in one of the regions. Each business sells (1-u) x/2 to consumers in both regions and ux to industry. A business may wish to set up a plant in the other market, but then it must incur cost F, which might be offset by decreased transport costs t(1-u) x/2. Geographical concentration will take place, if F> t(1-u)x/2, i.e., the higher the cost of setting up a business, the stronger the relationship with industry (measured by u), and the lower the transport cost. Due to international specialisation of manufacturing, a sectoral shock becomes a country shock. In conclusion, establishing a single currency area means an increased risk of asymmetric shocks.

Krugman believes that labour and capital mobility is a factor that exacerbates asymmetric shocks. Suppose a region sees exogenous growth of demand for its capital-intensive exports, which will lead to a growth of the expected return on capital invested. With no capital mobility, this would lead to a rise in the price of exports and a fall in its profitability and competitiveness. However, when capital is mobile, growing demand for exports will generate capital inflows, and exports will be stimulated even further! Factor mobility also deepens divergence between regions. When the demand for a region's exports declines and the prices of production factors fall, labour and capital will emigrate to places where they can earn more. As a consequence, the "*disgraceful region is left with no industry, but also capital and labour*" (Krugman 1993, p. 40).

Economic integration increases the risk of asymmetric shocks and deepens regional differences. Krugman concludes that fiscal policy remains the only tool to stabilise the regional economy (the single monetary policy is meant to stabilise prices and employment at the supraregional level), but its effectiveness is low. It is because of the spill-over of fiscal stimuli within an integrated area and the free-riding effect – regional authorities may be unwilling to act, hoping for

a response from the monetary authority, as the regional and national employment rates are correlated. Quite often, a decline in economic activity in regions is not temporary, but permanent, which makes fiscal policy inefficient. Krugman admits that labour and capital mobility can act as an adjustment mechanism, but referring to empirical research, he claims that it cannot fully restore equilibrium. According to a study by Eichengreen of the American market, only 40% of regional unemployment variation is "absorbed" by migration processes (Eichengreen 1990) and requires a long time. What is more, the operation of market adjustment instruments may prove costly. Hence, the need to pursue a fiscal stabilisation policy at the supraregional level is well pronounced.

Krugman is correct when the borders of the industry align with state borders. As Casella rightly notices in a commentary to Krugman's article, a glance at the business map of Europe proves that it is not the case. Secondly, Krugman assumes that the specialisation between countries is of the inter-industry type. Then, as trade expands, the manufacturing profiles of the members of a currency area will diverge more and more, and the risk of asymmetric shocks will increase. If, on the other hand, specialisation is of an intra-industry nature, the process will be reversed – the economic structures will become similar, the synchronisation of the cycle will increase, and the risk of asymmetrical shocks will gradually decrease (Fidrmuc 2005, p. 56). The latter seems to be more feasible: removing barriers to trade leads to a drop in the prices of imported goods; thus, it has a strong impact on the demand for goods, including intra-industry products, which are by definition close substitutes and are characterised by high price flexibility of the demand (Bijak-Kaszuba 2003, p. 141). Opening markets and the resulting economies of scale may make manufacturers increase output at the cost of reducing the product range. Access to a large market of an integration grouping facilitates intra-industry trade. Increased investments, including FDI, stimulated by economic integration, create trade flows between parent companies and their subsidiaries. These are also flows of intra-industry trade (Ethier 2008). A gradually evolving process of integration causes the business cycle to be more and more synchronised.

Conclusions and recommendations

The theory of optimum currency areas is univocal with regard to stabilising fiscal policy in the EMU: it should be conducted at the highest level of governance, i.e., at the European level. Even the most optimistic theorists, Frankel and Rose, who claim that trade integration makes business activity more and more synchronised, and therefore, the monetary union less costly, admit that adjustment processes are difficult, time-consuming, and costly.

The above-mentioned corollary was envisaged in an early debate about monetary and economic integration in the 1970s. Both the Werner Report and the MacDougall Report highlighted that the prospective EMU would benefit from a centralised stabilising fiscal policy, but they failed to get much political support. When the issue re-emerged in the late 1980s, considerations about fiscal policy and its stabilising role were – to some extent – ignored, and it was decided that this policy would be left at the domestic level, which made the EMU more politically viable.

The economic and financial crisis of 2007–2009 revealed critical "design failures" in the functioning of the EMU and its arrangements (de Grauwe 2013). We witnessed a number of transformations and reforms of the EU and EMU systems of public finances via the Six-Pack, the Two-Pack, and the Fiscal Compact (Thirion 2017). They focused on strengthening the rules, fostering economic policy coordination, monitoring economic imbalances, and creating some crisis resolution mechanisms. Despite these changes, most observers argue that the EMU architecture remains fragile (Allard et al. 2014; Belke 2013; Bordo et al. 2013; Corsetti et al. 2014; Dabrowski 2015; Eichengreen, Wyplosz 2016). What the EMU lacks most is a system of common fiscal resources, the theoretical underpinning of which was developed by Kenen. He argued that the interregional fiscal transfers act as automatic insurance when a country is affected by an adverse country-specific shock. The need for them is even more pronounced if one considers the limited scope for market adjustment in the EMU due to weak labour mobility, sticky prices, and wage rigidities. Different proposals of such schemes have emerged (Alcidi, Thirion 2016). They have gained some political support at EU level - the "Five Presidents' Report" (Juncker et al. 2015) advocates the need to create a fiscal stabilising function within an autonomous EMU budget to deal with severe crises, possibly taking the form of an unemployment insurance mechanism.

While the theoretical rationale appears rather compelling, there are some design challenges. They can be summarised as follows (Thirion 2017):

- Should the fund be able to borrow in order to provide inter-temporal stabilisation of EMU-shocks?
- Should disbursements from the fund be triggered only be large asymmetric shocks?
- What is the best measure of the business cycle?
- How can the funds be channelled in a timely manner to maximise the stabilisation effect?
- How can moral hazard be reduced without damaging stabilisation?

Answering these questions is beyond the scope of the article, although it is important to pose these questions for further research. Apart from the design challenges, there is a political economy dimension. As Pisani-Ferry pragmatically stated ten years ago, the domestic political realities of the EMU member states might "ditch long-held federalist dreams – such as a significant increase of the EU budget, significant horizontal transfers, or a much tighter coordination of national economic policies" (Pisani-Ferry 2010).

In the European Commission's draft of the EU budget beyond 2020 (European Commission 2017, 2018), the proposal of a new European Investment Stabilisation Function was proposed. It is supposed to complement existing instruments at the national and European levels to absorb large asymmetric macroeconomic shocks in the euro area. As shown in the recent crisis, national automatic stabilisers alone may not be sufficient to cope with large asymmetric shocks and the cuts in investment that often result. It is proposed that the EU budget should guarantee back-to-back loans of up to EUR 30 billion. The loans would be available to Member States that comply with strict eligibility criteria for sound fiscal and economic policies. The European Investment Stabilisation Function would also provide an interest rate subsidy in order to provide the necessary funding for national budgets to maintain investment levels. This subsidy would be financed from contributions from euro area Member States equivalent to a share of monetary income (*seigniorage*). The proposal, which is part of the Multiannual Financial Framework package, is being negotiated at the moment. It remains to be seen whether we will witness the emergence of the first system of interregional stabilising transfers at the EU level.

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Summary

The aim of the paper is to examine the role and place of the fiscal stabilisation policy in the European Monetary Union (EMU) from the perspective of the theory of optimum currency areas (OCA). We examine the theoretical underpinning for the policy to mitigate the economic fluctuations in a monetary union, and answer the questions of whether fiscal integration is a prerequisite for the "optimality" of a currency area and at what level of governance a stabilising fiscal policy should be conducted. We conclude with a short revision of how OCA theory is applied to the project of monetary and economic integration in the European Union (EU) and some conclusions for future development and research.

Keywords: monetary union, fiscal policy, business cycles, stabilisation

Streszczenie

Stabilizacyjna polityka fiskalna w Unii Gospodarczo-Walutowej Perspektywa teorii optymalnych obszarów walutowych

Celem artykułu jest ocena znaczenia stabilizacyjnej polityki fiskalnej dla prawidłowego funkcjonowania Unii Gospodarczo-Walutowej (UGW) z perspektywy teorii optymalnych obszarów walutowych. Rozważamy kwestię polityki stabilizacyjnej w unii walutowej, integracji fiskalnej jako jednego z kryteriów optymalności obszaru jednowalutowego oraz problem organizacji polityki fiskalnej w unii walutowej. Następnie przechodzimy do ukazania wykorzystania (?) wniosków płynących z teorii optymalnych obszarów walutowych w procesie budowy unii walutowej w Unii Europejskiej. Kończymy wskazaniem kierunków rozwoju badań nad stabilizacyjną funkcją polityki fiskalnej w UGW.

Slowa kluczowe: unia monetarna, polityka fiskalna, cykle koniunkturalne, stabilizacja

JEL: E62, F45, F410