Spis treści

Summaries

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MUNDELL-FLEMING MODEL AND MAASTRICHTS FISCAL CONVERGENCE CRITERIA: FISCAL AND BUDGETARY STABILIZATION NEED IN THE CONTEXT OF EMU[1]

1. Introduction

Maastricht convergence criteria represent important steps towards EMU introduction and realization. Criteria are called as "EMU's entry ticket" [7, p. 358]. In the context of EMU reality the fiscal Maastricht criteria, which should ensure the budgetary stability became more important than others. The need of fiscal convergence in the EMU is supported by the Mundell-Fleming model, which analyzes relation of the fiscal and monetary policy in the open economy. Purpose of this paper is to analyze the need of fiscal stabilization in the context of EMU using the Mundell-Fleming model as the theoretical background.

2. Maastricht fiscal criteria and budgetary convergence

7th February 1992 the Treaty on European Union and Treaty Establishing the European Community with supplementary protocols known as Maastricht Treaty (Treaty) were signed [3]. In the Treaty the principles and objectives of Community have been declared together with policies, which should be followed. The policies or competencies have been divided into the common, centrally coordinated policies (monetary policy) and policies provided in accordance with principle of subsidiari-

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ty [8]. Fiscal policy stayed in the competence of the national governments responsibilities, excepting the "voluntary obligation" of the fiscal convergence criteria fulfillment. This result is in accordance with the recommendation of the Padoa-Shioppa Report (1987), which recommends the budgetary policy, social security, employment protection regulations, and pay determination decentralized. The Community should use the instruments of the voluntary convergence based on the decentralized choices and the instruments of the obligatory harmonization based on centralized legislation in these policy areas [6]. Fiscal convergence criteria (convergence of the state debt and deficit) are defined only in the range of recommended rates [8; 9; 10].

2.1. Mundell-Fleming model, budgetary convergence and need of fiscal stabilization

Budgetary convergence, including the convergence of state deficit and state debt, is an important precondition of the macroeconomic stability in the context of EMU. Budgetary convergence should be viewed as a particular degree of fiscal policy central control, which otherwise stayed in the competence of the national governments. Central control of fiscal policy (followed by the fiscal stability) supports the Mundell-Fleming model of the open economy. The Mundell-Fleming model is theoretically comes from the IS-LM Keynesian model and analyzes the effects of the expansive fiscal and monetary policy in the condition of the capital mobility and fixed exchange rate[2].

Figure 1 shows the fiscal expansion in the Mundell-Fleming model. Curve **LM** represents the money market, **IS** curve represents the goods market, and the relation between the interest rate and income[3]. Bottom quadrant shows the stability of the home market – **IS** curve represents the stability on the home market at the given exchange rate, **FF** curve represents the equilibrium at the foreign exchange market (**BP** curve – the curve of the balance of payment is balanced) [4]. **FF** curves has been called the financial integration line because it is impossible in the condition of open economy and free labor and capital mobility the home interest rate to diverge from foreign interest rate [1]. In the case of the different level of the home and foreign interest rates the arbitrage would balance their rates. So the **FF** curve is maximally elastic.

We can write:

$$i = i,$$

[2] Mundell-Fleming model had to be modified in the EMU condition. EMU exchange rate is in the managed floating, fixed exchange rates of the member states have been in the ERM2 system.

[3] Original Mundell model (1963) represents the IS curve as the XX curve.

where i – home interest rate;
i^* – foreign interest rate (interest rate on the EUR invested abroad).

Home stability is reached in the $\boldsymbol{\pi_0}$, general equilibrium in the $\mathbf{i_0}$ (at point **A** and **C**), at the point of the IS-LM-FF intersection.

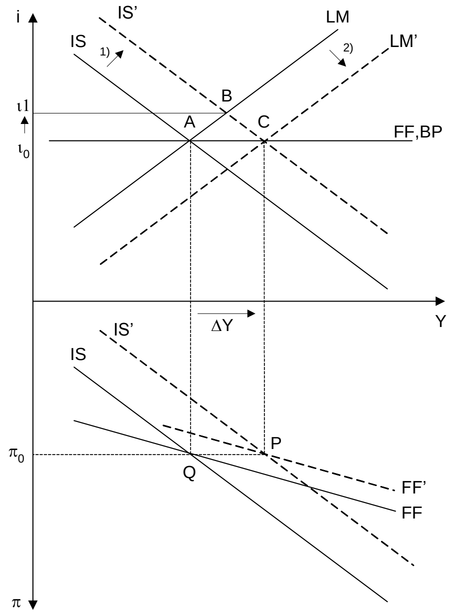

Fig. 1. Mundell-Fleming model: expansive fiscal policy

Source: [4, p. 483].

Fiscal expansion is caused by the increase of the government purchase, so **IS** curves shifts to the **IS´** curve. In the fixed exchange rate regime the shift of the **IS** curve will increase the interest rate and the money supply in the short period. Increase of the home interest rate above the foreign interest rate will cause the capital inflow to the country. So the country, which does not meet the fiscal discipline, gains the comparative advantage in face to the countries, which meet the budgetary discipline. The **IS** curve shift raises the inflation pressure (shift from the $\boldsymbol{\pi_0}$). Inflation pressure will cause the depreciation of the exchange rate, which affect the economic growth in the whole EU economy. The central bank will have to intervene at the foreign exchange markets (buys the foreign currency and sells the domestic currency). That will cause the shift of the **LM** curve to the **LM´** curve and decrease of the interest rate to the starting (balanced) interest rate. The product in the country, which does not meet the fiscal and budgetary criteria, will increase by the **ΔY** (the **FF** curve in the bottom quadrant will shift to the **FF´**). Nevertheless, the EU product will lose in general especially because of the inflation pressures, which can spill-over to the other economies and can destabilize the exchange rate. Also the interest rate will disadvantage the countries with budgetary discipline – they will become less attractive than those which do not hold the budgetary stability. Based on the historical experience is evident that the monetary union may effectively work only in the case that they are completed by the fiscal union (e.g. German monetary union, Switzerland, Italy, and USA in contrast to unsuccessful Scandinavian monetary union in the 19th century) [5]. From all of these reasons the budgetary convergence ensuring fiscal stability is highly important precondition of the setting and keeping of the monetary stability and the economic growth of the EU/EMU.

3. Conclusion

Mundell-Fleming model represents the important instrument in the argumentation of the fiscal stability and budgetary convergence in the context of EMU. Fiscal policy in the condition of the open economy and ERM2 significantly affects the monetary and economic stability. Fiscal policy has been stayed in the national government competence, nevertheless Maastricht convergence criteria in the field of the fiscal policy can be viewed as some particular kind of central control. The fiscal budgetary criteria fulfillment is then highly important precondition of the EMU monetary and economic stability.

Literature

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[9] EC: Protokol o postupu při nadměrném schodku.
[10] EC: Smlouva o Evropské unii a Smlouva o založení Evropského společenství.

MODEL MUNDELLA-FLEMINGA ORAZ FISKALNE KRYTERIA KONWERGENCJI Z MAASTRICHT: POTRZEBA STABILIZACJI FISKALNEJ W EMU

Streszczenie

W sytuacji, gdy polityka fiskalna zawiera się w kompetencji poszczególnych rządów krajów członkowskich, model Mundella-Fleminga stanowi ważny instrument stabilności fiskalnej i stabilizacji w Europejskiej Unii Monetarnej.

Otwarta gospodarka, jaką jest jednolity rynek europejski, i jednocześnie istnienie ERM2 silnie wpływają na politykę fiskalną i monetarną. Kryteria budżetowe z Maastricht mogą prowadzić do pełnej konwergencji budżetowej Unii Europejskiej i mogą być traktowane jak konkretny wskaźnik polityki fiskalnej, mający na celu wypracowanie fiskalnej polityki stabilizacyjnej. Wypełnienie budżetowych kryteriów konwergencji z Maastricht jest ważne dla osiągnięcia i utrzymania fiskalnej stabilizacji wewnątrz EMU.