Journal of US-China Public Administration, December 2015, Vol. 12, No. 12, 936-956
doi: 10.17265/1548-6591/2015.12.004

Macroeconomic Imbalances in the Economies of Former Communist Countries During the European Integration*

Anna Moździerz
Cracow University of Economics, Cracow, Poland

In 2011, the European Union (EU) introduced the new economic governance aimed at reducing the build-up of macroeconomic imbalances. A procedure to prevent excessive macroeconomic imbalances is an important element of this supervision. The theoretical part of this paper reviews the approach of different schools of economics to the macroeconomic balance—internal and external—as well as to the sources of its instability. The main purpose of this paper is to recognise the scale and sources of macroeconomic imbalances in the post-communist countries during the European integration. The following countries were surveyed: Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Bulgaria and Romania, and the survey covered the 2004-2013 period. These analyses allowed the author to find many common features, typical for countries in economic transition, catching up to the developed countries of the EU. The results reinforce the arguments that the EU's economic governance should take into account the different economic situation of particular countries.

Keywords: macroeconomic equilibrium, economic governance, public finance, Macroeconomic Imbalance Procedure (MIP)

During the global financial crisis, significant macroeconomic imbalances appeared in the European Union (EU). The crisis revealed deficiencies of the adopted institutional arrangements and forced a reform of the EU's economic governance. Before the crisis, ensuring the sustainability of public finances was at the core of the system of supervision over economic (fiscal) policies of the EU countries. Disciplined public finances were to foster economic growth and competitiveness of the EU. The fact that this simplified approach to the economy was proved wrong during the crisis resulted in the implementation, starting from 2011, of procedures to prevent excessive macroeconomic imbalances. The new supervisory rules are aimed at reducing the build-up of macroeconomic imbalances—external and internal—in the economies of the EU, and not only fiscal imbalances. In the eurozone countries, more restrictive institutional arrangements were introduced. This approach is necessary for the coordination of macroeconomic policies, on the one hand, considering the monetary policy pursued by the European Central Bank, while, on the other hand, maintaining sovereign national fiscal policies. Difficulties in harmonising the monetary policy and fiscal policy, against and in connection with macroeconomic policy in general, in the eurozone countries are the subject of intensive and

* The paper is financed from the funds granted to the Faculty of Finance at Cracow University of Economics, within the framework of the subsidy for the maintenance of research potential.

Corresponding author: Anna Moździerz, Ph.D., lecturer, Faculty of Finance, Department of Financial Policy, Cracow University of Economics, Poland; research fields: theory and practice of public finance, fiscal policy, fiscal consolidation, economic policy, European integration, and income inequality. E-mail: anna.mozdzierz@uek.krakow.pl.

ongoing research, empirical analyses, and scientific syntheses.

Another group of countries in the EU that are an interesting subject of research in the field of macroeconomic imbalances are the post-communist countries, which since the beginning of the 1990s, have transformed their economies and have participated in the European integration processes. Research in this area is essential, since the implementation of the same institutional solutions in the post-communist countries, without taking into account their specificity, may cause additional economic and social disturbances.

A study of these countries requires a broader view of internal and external imbalances, and not only the context of the recent financial crisis (economic, fiscal). For this reason, the aim of this paper is to recognise the scale and sources of macroeconomic imbalances in the post-communist countries during the European integration. The following countries were surveyed: Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Bulgaria and Romania, and the survey covered the 2004-2013 period. The analysis does not include the Baltic countries, i.e., countries of the former Soviet Union, and Croatia, which only joined the EU in 2013. Despite the exclusions, the analysed group of countries still differs considerably in terms of the period of their membership of the EU or participation in the euro area (Slovakia, Slovenia).

General Equilibrium and Partial Equilibriums

If an open market economy is the subject of research, then the general equilibrium is defined as a state of simultaneous internal and external balance. During a long-term general equilibrium, the economy is neither in crisis nor booming, and the current account balance is zero (Begg, Fischer, & Dornbusch, 1999, pp. 309-310). The long-term general equilibrium in the economy does not rule out periodic disturbances, followed by a return to the initial equilibrium. According to Blaug (1994, p. 416), the equilibrium is stable if the system, after each small shock, returns to equilibrium.

In order to determine the conditions of general equilibrium, different economic schools have adopted a number of simplifying assumptions. A characteristic feature of the first attempts to grasp the general equilibrium was primarily the assumption that the economy is closed. It turns out, however, that even in a closed economy interdependencies that occur between phenomena hinder the construction of a model that would take account of all of them. For this reason, partial equilibrium models, allowing for a closer examination of equilibrium conditions in individual markets, are increasingly important. The narrower approach to the phenomenon studied can facilitate the identification of conditions for the achievement of general equilibrium. Partial equilibriums concern the following markets: goods, money, labour, foreign exchange.

A lack of general equilibrium does not necessarily mean the presence of some partial equilibrium. On the other hand, it must be noted that the partial equilibrium in particular markets does not necessarily lead to the achievement of economic balance.

Theoretical Determinants of Macroeconomic Equilibrium

The theory of the Lausanne school was a pioneering attempt to capture the state of general equilibrium, taking into account the interdependence of different sectors of a market economy. Walras laid the foundation of this theory by arguing that maximising behaviour of consumers and producers may lead, and in certain circumstances indeed leads, to a balance between the volume of demand and the size of production in all product and production factors markets in the economy (Blaug, 1995, p. 243). This theory did not explain the mechanism of achieving equilibrium, but pointed to the existence of such a possibility.

The classical school believed that competition in individual markets: Consumer goods, capital goods, and labour, were essential to the achievement of general equilibrium. Believing in the effectiveness of market forces in conditions of perfect competition, proponents of classical political economics believed that the economy will always seek equilibrium. If supply created demand, then competition between manufacturers provided full employment and the equilibrium was achieved at the level of production potential. Ensuring full use of resources was a determinant of the stability of the economic system.

In the development of the neoclassical theory of equilibrium, significant achievements can be attributed to Patinkin. In his model of a closed economy, the equilibrium on the goods and services markets is achieved if the global demand and global supply are equal, as determined by the economic potential of the economy, since the labour market seeks equilibrium in conditions of full employment (Fedorowicz, 1993, p. 62). Patinkin, in his model, took into account the investment demand and consumer demand, which are determined by the size of income, the size of the money supply maintained due to the transaction motive as well as by the interest rate in the stock market. The model has also introduced the demand for money, as the market of goods and services, as seen by Patinkin, was a money market, which is progress compared with the analysis conducted by the classical school. Patinkin showed that an increase in money supply does not affect the balance of real variables. Demonstrating the neutrality of money was possible with the assumption of perfect flexibility of prices and nominal wages, absence of fiscal illusion and a lack of inflation expectations and interest rate changes (Fedorowicz, 1993, pp. 69-71).

The adoption by the new classical school of the assumption that the markets in the economy clear themselves continuously as a consequence of extremely flexible prices led to the claim that equilibrium exists both in the short and long term. The restrictive and controversial assumption of continuous clearing of markets is also a part of the real business-cycle theory. Due to flexible prices, the market clears itself continuously, resulting in the equilibrium existing at all times. Fluctuations in total output and employment are caused by technological shocks, i.e., phenomena on the supply side.

In contrast to the classical school, Keynes did no subject the achievement of equilibrium to the full use of production factors, arguing that the economic system can achieve equilibrium without full employment (Keynes, 2003, p. 29).

According to Blaug (1994, pp. 663-666) in Keynes's theory, there are three factors that make achieving equilibrium without full employment possible. These are: liquidity trap, low investment flexibility with respect to interest rate and rigidity ("stickiness", "inertia") of wages. According to Spychalski (1999, p. 253), Keynesian theory can not be called an equilibrium theory, but rather a theory of economic imbalances and methods of avoiding them.

The theory of effective demand was based on the concept that in a capitalist economy (Lopez & Assous, 2011, p. 76): (1) under normal conditions, the level of production and employment is determined by demand and not by supply; (2) the main factor determining the level of demand is the level of investment; and (3) there is no guarantee of such a level of investment that full capacity utilisation and full employment of labour is reached.

Assuming the stability of prices and wages, the equilibrium between global demand and global supply, as understood by Keynes, can be achieved if investment and savings in the economy are equal.

In contrast to the classical school, Keynes includes the interest rate in his analysis of equilibrium in the economy. He believed, however, that the interest rate was not a sufficient enough tool to stimulate investment.

For this reason, if the economy remains below its potential, he advocates an increase in investment spending to, by using the multiplier effect, multiply the increase in demand and national income (Górski, Kowalik, & Sierpiński, 1967, pp. 319-323).

Referring to the Keynesian equilibrium without full employment, Pigou formed the view that consumption is affected by not only income, as measured by Keynes in units of wages, but also by assets. Pigou (1941) claimed that if the assumption of flexibility of nominal wages and prices was added to the Keynesian model then achieving equilibrium without full employment would be impossible.

Keynesian theory is a static theory; it applies to a short period and ignores the relations of the economy with foreign countries. The focus on a short period had its origins in the fact that, according to Keynes, an observation that in the long-(mid) term equilibrium will establish itself is of little value if that period is made up of short periods that are periods of imbalance.

In contrast to Keynes, Friedman focused his analysis on the long term and introduced to it the natural rate of unemployment. From the perspective of equilibrium, it was essential to recognise the active and causative role of money in determining the level of prices and nominal income. One of the theses of monetarism was that, given the stability of money demand, most of the observed instability of the economy could be attributed to fluctuations in the money supply induced by the monetary authorities (Snowdon, Vane, & Wynarczyk, 1998, p. 156). The orthodox monetarism assumed that the economy is stable and a period of disruption is followed by a quick return to the long-term equilibrium with a natural rate of unemployment. This resulted from the assumption of full price and wage flexibility.

The orthodox monetarists argue that in the short and medium term, the role of money is non-neutral and in the long-term equilibrium, they assumed the neutrality of money, i.e., long-term proportionality of money and prices, based on the stability of money demand, or its inverse, i.e., high velocity of money (Blaug, 1994, pp. 692-693).

As previously noted, the determination of conditions for macroeconomic equilibrium by different economic schools has been associated with making a number of assumptions, including primarily the assumption of a closed economy. Thus, the above considerations on macroeconomic equilibrium essentially relate to the internal balance. For this reason, the rest of this paper presents the views of different schools of economics on the external balance and the methods of achieving it.

The external balance is a complex phenomenon that is more difficult to define in economic than in accounting terms. One attractive definitional attempt was made by P. R. Krugman and M. Obstfeld (2007, p. 307) who wrote that external balance is achieved when the current account of a country shows neither so large a deficit that in the future, the country may have problems with repayment of foreign debt, nor so large a surplus that other countries may have similar problems.

An analysis of the theory explaining the causes of imbalance of payments and the methods of restoring the balance shows that the economists' approach has evolved with the development of economies and market integration processes. The paper is consciously focused on the three traditional approaches: Elasticity, absorption, and monetary, which formed the foundation for the development of new theoretical concepts. In all of the above approaches, deficits were seen as a disturbance of the balance, but different reasons were attributed to these disturbances.

The elasticity approach to the external imbalance arose on the basis of Keynes's theory, who has not created a theory of balance of payments, but formulated a number of valuable observations in this respect. In

his consideration on the consequences of wage reductions for various factors, we can find comments on their impact on the trade balance during under-utilisation of production factors. According to Keynes (2003, p. 236), in an open economic system, a reduction of nominal wages in relation to nominal wages abroad is beneficial for investment because it will contribute to the strengthening of the balance of trade. At the same time, he noted that "Although the reduction in nominal wages will increase the trade balance surplus, however, the terms of trade will probably deteriorate".

According to the elasticity theory, a crucial role is played by recommendations for economic policy aimed at maintaining effective demand through currency devaluation (Robinson, 1937; Sławiński, 1992, p. 12). The mechanism of correction of the negative balance of trade through currency devaluation was to rely on the fact that devaluation would lead to adjustments of the domestic expenditure structure between imported goods and domestic goods and adjustments to the structure of foreign spending between goods exported by the country and foreign goods (Najlepszy & Sobański, 2010, p. 62).

The considerations on the impact of devaluation on the trade balance were carried out while respecting the assumptions on the stability of: (1) all the potential factors that could affect the demand and supply of foreign currencies, with the exception of relative prices resulting from a possible change in foreign exchange rates; (2) prices; and (3) autonomous domestic expenditure.

The research carried out in this respect resulted in a condition of the effectiveness of devaluation, known as the Marshall-Lerner condition, commonly used in the elasticity approach. According to it—other things being equal—the real depreciation improves the current account balance when exports and imports are sufficiently flexible in relation to changes in the real exchange rate (Krugman & Obstfeld, 2007, p. 5). The condition in the form of equation: $\eta + \eta^* > 1$ means that the improvement in the current account is possible if the sum of the relative price elasticities of export demand (η) and import demand (η^*) is greater than one. This condition is met with the assumption that the disposable income does not change with the real exchange rate change.

The proposals for adaptation policy with respect to the balance of trade (balance of payments) framed by Keynesians as well as by supporters of the elasticity approach were based on the assumption of under-utilization of production factors. The development of the absorption theory occurred in the 1950s, a period with full employment in the global economy and inflation. The assumption of under-utilisation of production factors has become obsolete, which was essential for further deliberations on the absorption policy. This had important implications for the evolution of the theory of balance of payments, thus contributing to, *inter alia*, a broader view of the effects of the impact of the devaluation on the trade balance during not only under-utilisation but also during the full use of production factors. In an economy that achieves its production potential, the effectiveness of devaluation depends on whether the inflationary pressure, caused by devaluation, reduces the real size of absorption (limits on domestic expenditure) (Johnson, 1974, p. 222). Improvement in the trade balance depends on a decrease in real income. To ensure the effectiveness of the devaluation, it must be accompanied by the appropriate stabilisation policy, involving, among others, reduced lending, reduced public spending so that the wage growth is not higher than the price growth.

In the absorption approach, the trade balance is defined as the difference between national income and domestic expenditure (absorption). This definition suggests that the improvement in the current account balance is possible through an increase of the national income or reduction of the absorption. The adjustment policy should focus therefore on increasing the national income and/or reducing domestic expenditure.

The theory of absorption provided two crucial observations for further considerations:

Firstly, that in the economy with full use of production factors, the price elasticity of demand and supply is not sufficient for the adjustment policy that includes devaluation to be effective;

Secondly, in the adjustment policy, the fundamental importance is attributed to the coordination between the monetary policy and fiscal (economic) policy. Under the devaluation resulting in increased inflation pressure, a restrictive fiscal policy is required, intended to reduce absorption.

The last traditional approach theory is the monetary theory of balance of payments. It makes an assumption of full integration of the world market, which contributed to its description as "global monetarism". The theory is based on the assumption that changes in the money supply result in changes at price levels but do not affect the real income. Under global market integration, this assumption means that the "law of one price" has been added to the theory, according to which the price of a commodity (good) is determined on the world market. There is a tendency to equalise prices. As a result of the assumption of full integration of not only commodity markets, but also the financial market, the "law of one price" also applies to the interest rate. The above assumptions supported the claim of an automatic adaptation of the money supply to money demand.

The equilibrium of the balance of payments in the monetary theory (monetary approach) is only possible at one point, determined by the level of money supply. A surplus or deficit is natural states in restoring the balance in the money market. Under a fixed exchange rate, the increase in money demand leads to a surplus in the balance of payments and the accompanying increase in the money supply, which keeps the balance in the money market. In turn, the increase in domestic credit increases the money supply in relation to demand for money, which creates a balance of payments deficit, a reduction in the supply of money and thus the equilibrium point is achieved (Krugman & Obstfeld, 2007, pp. 286-287).

Kalicki (1998, p. 40) emphasised that proponents of the monetary theory of the balance of payments do not dispute that the deficit can be caused by real factors (and not just monetary), but in practice, they are exceptional and cannot explain permanent deficits.

The literature distinguishes between the monetary theory of the balance of payments and the monetary approach to the balance of payments. The distinction stems from the fact that some theorists treat the monetary approach very narrowly: reduce models to ones in which not only there is no sterilisation of money, but also a perfect substitution of domestic and foreign assets is considered as a distinguishing feature (De Grauwe, 1985, p. 171). The above division is not indisputable.

A characteristic feature of the monetary approach is the focus of the analysis on compensatory transactions account, as changes in foreign exchange reserves determine the money supply. This stems from the fact that in the analysis of the balance of payments, carried out from the perspective of money supply, the fact that an imbalance in the current account, covered by a surplus in the capital account, occurred, was irrelevant. The structure of the balance of payments did not matter. Therefore, changes in reserves rather than autonomous transactions play a crucial role in the monetary approach.

According to the monetary approach, one assumes that in the long term, a sterilisation of changes in foreign exchange reserves is ineffective.

Krugman and Obstfeld (2007, p. 287) recognise the advantages of the monetary approach consisting of drawing attention to the fact that problems of balance of payments in many cases result from imbalances in the money market, hence the monetary policy should be the most appropriate way to resolve them. At the same time, they warn that in many cases, e.g., a temporary decline in foreign demand for domestic goods, the

analysis based on the monetary approach can lead to erroneous conclusions and wrong decisions.

Considering the above and appreciating the analytical advantages of this theory, caution is advised.

Detection of Macroeconomic Imbalances in the EU

The reform of the economic governance in the EU implemented from 2011 was forced by a series of mistakes in the first decade of the functioning of the economic and monetary union, made as a result of institutional shortcomings. Before the reform, the supervision of economic policies of the member states boiled down essentially to fiscal supervision. The changes aim to strengthen the already exercised fiscal supervision while introducing macro-prudential supervision. For this purpose, pursuant to Regulation No. 1176/2011 of the European Parliament, an alert mechanism to detect imbalances and a special procedure for correcting excessive imbalances were set up.

The term "imbalances" means any trend giving rise to macroeconomic developments which is adversely affecting, or have the potential adversely to affect, the proper functioning of the economy of a member state or of the economic and monetary union, or of the union as a whole.

The term "excessive imbalances" means severe imbalances, including imbalances that jeopardise or risks jeopardising the proper functioning of the economic and monetary union.

In order to detect imbalances, an alert mechanism was established. It was based on a macroeconomic and macro-financial scoreboard, intended to enable early detection and monitoring of imbalances. These indicators are the basis for the economic and financial qualitative assessment of the member states, conducted by the European Commission in its annual report. The member states indicated in the report, in which imbalances have already occurred, or which may be at risk of them occurring, are subjected to a detailed analysis. In the event of an excessive imbalance, a suitable procedure is triggered.

In 2011, the European Commission, the European Parliament, and the European Council presented a proposal of an early warning scoreboard, which resulted from their joint work, and included 11 indicators. In 2012, it was expanded with an additional indicator enabling a preliminary assessment of the stability of the financial sector. The list of currently used indicators is provided in Table 1. It also includes indicative thresholds.

Table 1

Indicators of External and Internal Imbalances in the EU

External imbalances and competitiveness					
Indicator	Three year average of current account balance as a % of GDP (gross domestic product)	Net international investment position as a % of GDP	% change (three years) of real effective exchange rate, Harmonised Index of Consumer Prices (HICP) deflators relative to 35 industrial countries	Change (five years) in export market shares	% change (three years) in nominal unit labour cost
Indicative thresholds	+6/-4%	-35% lower quartile	+/-5% for €A +/-11% non €A lower and upper quartiles of EA, -/+s.d. of EA	-6% lower quartile	+9% €A +12% non €A Upper quartile €A 3 p.p.
Period for calculating thresholds	1970-2007	Mid-1990s-2007	1995-2007	1995-2007	1995-2007

Table 1 to be continued

Internal imbalances						
Indicator	y-o-y % change in deflated house prices	Private sector credit flow as % of GDP	Private sector debt as % of GDP	General government debt as % of GDP	Three year average of unemployment rate	y-o-y % change in total financial sector liabilities
Indicative thresholds	+6% upper quartile	+15% upper quartile	160% upper quartile	+60%	+10%	+16.5 upper quartile
Period for calculating thresholds		1995-2007	1994-2007		1994-2007	

Note. Source: European Commission (2011, p. 5).

Periods adopted for the calculation of the indicative thresholds varied, as determined by the availability of specific data. Most of them have been calculated on the basis of data from 1995-2007. It is noteworthy that the observation period ends in 2007, i.e., the year preceding the crisis in the EU. In the case of the current account balance, the calculation is made on the basis of the longest period—38 years.

Looking at Table 1, one should pay attention to the adoption, in some cases, of different indicative thresholds depending on whether they apply to a country belonging to the euro area or remaining outside of it.

Internal Imbalances in the Surveyed Countries in 2004-2013

The rest of this paper will analyse changes in the main macroeconomic and macro-financial indicators in the surveyed countries from 2004 to 2013. In 2004, the Czech Republic, Hungary, Poland, Slovakia and Slovenia joined the EU. Bulgaria and Romania only joined the EU only in 2007, however, the analysis of these countries starts in 2004 due to the ongoing preparations for membership (the countries signed their accession treaties in 2005).

In accordance with the adopted set of indicators, to detect internal imbalances, the author is using those indicators that involve changes: at the level of private and public debt, in the housing market, in the financial market, in the private sector credit flow, in unemployment. The individual indicators whose values exceed the indicative thresholds are highlighted in the tables.

Table 2 provides information on changes in house prices in the surveyed countries; for some countries, they are not complete. In the case of Poland, for example, the Central Statistical Office (*Główny Urząd Statystyczny*—GUS) publishes data with a significant delay, and the companies that analyse the market do not have the required data prior to 2007. On the basis of the data presented in Table 2 and information from publications in particular countries, one can notice a common trend for all countries. The accession to the EU started a boom in the housing markets of the surveyed countries, which lasted until the start of the financial crisis, when a clear downward trend could be observed. In Bulgaria and Hungary, prices rose significantly a year before their accession to the EU. Polish estimates (GUS data combined with the Home Broker and Open Finance indexes) show that after the accession to the EU, property prices have increased exponentially, reaching a peak in 2008. The rise in prices from 2003 to 2008 was as high as 143% (Forsal, 2014). The increase in property prices in the surveyed countries after the opening of their markets resulted from a reduction in the cost of credit, which increased lending, as well as purchases of property by foreigners, often for speculative purposes (resale considering the upward trend of prices).

As a result of the credit growth in the new EU countries, one could observe a growth of private sector credit in relation to GDP (see Table 3). Only in the Czech Republic and Slovakia, this indicator has been below the indicative threshold (+15%) throughout the surveyed period. In Bulgaria, this threshold was exceeded in 2004-2008 and in Slovenia in 2004-2007. The highest credit growth in Poland was recorded in 2008, and in other countries in 2007.

Table 2

Change in Deflated House Prices (y-o-y)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	-2.6	0.4	5.8	15.9	7.7	-4.7	-2.3	-1.6	-3.9	-1.2
Hungary	na	na	na	na	-3.1	-9.0	-5.8	-6.9	-9.3	-5.0
Poland	na	na	na	na	na	-5.4	-6.2	-5.4	-5.5	-4.4
Slovakia	na	na	na	25.7	12.8	-12.8	-5.0	-5.2	-5.9	-0.5
Romania	na	na	na	na	na	-26.9	-14.0	-17.6	-10.6	-4.6
Bulgaria	42.5	27.8	12.3	18.3	17.7	-21.1	-12.2	-9.6	-5.3	-0.1
Slovenia	6.4	12.1	14.0	18.7	1.4	-10.3	-1.3	1.0	-8.1	-5.8

Notes. na—not available. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 57).

Table 3

Private Sector Credit Flow as % of GDP

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	5.9	4.3	8.7	9.2	9.1	0.7	2.7	2.1	2.7	3.1
Hungary	12.3	11.3	14.0	16.1	12.7	6.0	-4.2	-4.5	-6.3	-1.0
Poland	0.4	3.4	9.0	12.0	16.3	4.2	5.8	7.9	3.6	2.9
Slovakia	2.9	7.4	8.5	9.7	11.1	3.1	3.1	2.7	3.1	5.4
Romania	8.9	11.6	15.1	20.3	13.1	-1.7	3.4	2.8	0.3	-1.5
Bulgaria	18.7	18.6	28.4	41.9	33.9	4.8	2.6	1.0	2.0	6.7
Slovenia	8.5	12.4	13.6	21.5	15.5	2.9	1.9	0.4	-2.9	-4.0

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 58).

The dynamic growth of private sector debt before the crisis resulted in an increase in its size expressed in GDP, but not big enough to exceed the indicative threshold, set at 160%, in any of the countries (see Table 4). In 2013, the indicator was closest to exceeding the threshold in Bulgaria (134.8%), where between 2004 and 2013, it grew by 77.5%. In Poland and Romania, it increased by 33.3% during this period and in the Czech Republic and Slovakia by less than 30%.

Table 4

Private Sector Debt as % of GDP

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	47.1	48.1	53.0	57.5	63.7	66.0	68.1	68.6	70.7	73.7
Hungary	71.0	79.8	84.2	94.6	106.0	117.5	116.1	115.4	101.8	95.5
Poland	41.6	42.2	47.8	54.4	67.7	67.5	70.1	74.7	74.0	74.9
Slovakia	46.7	49.1	52.2	60.9	65.8	70.2	68.7	71.1	71.2	74.8
Romania	33.1	39.1	44.5	57.8	65.5	71.9	77.8	72.9	71.7	66.4
Bulgaria	57.3	73.4	92.5	125.6	134.2	138.4	137.8	127.9	128.1	134.8
Slovenia	67.1	76.3	82.5	96.3	105.6	113.5	115.6	113.4	112.9	101.9

Note. Source: Alert Mechanism Report 2015 (p. 59).

Figure 1 clearly shows an increase in private sector debt after accession and then its suppression or, in some countries, reduction (Hungary, Romania, and Slovenia).

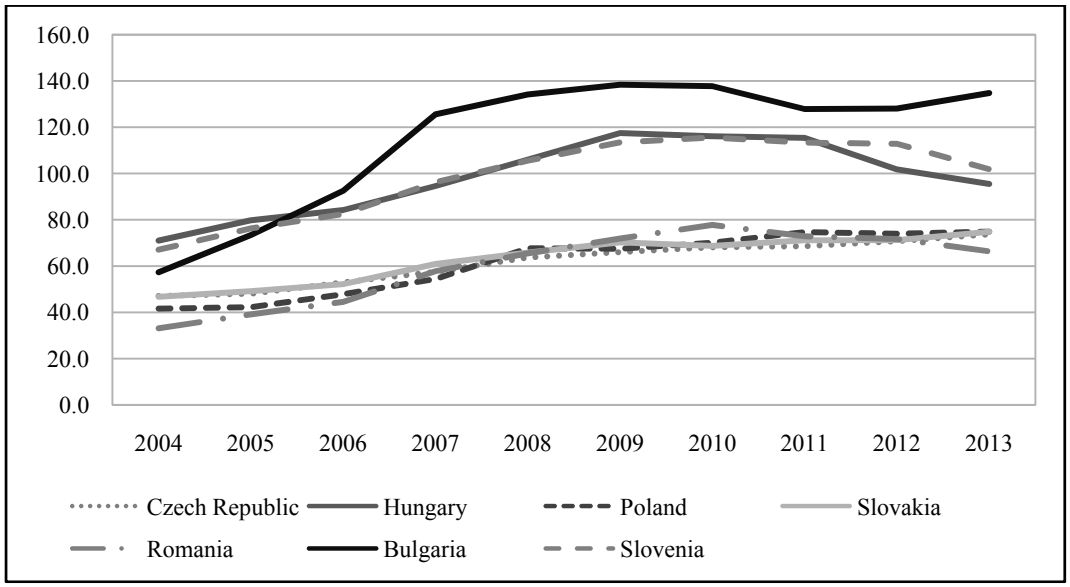

Figure 1. Private sector debt as % of GDP. Source: Alert Mechanism Report 2015 (p. 59).

The rise in private sector debt was accompanied by an increase in public sector debt, although its growth rate was significantly lower (see Table 5). From 2004 to 2013, the share of public debt in GDP rose the least in Poland (10 percentage points), and the most in Slovenia (33.6%). In the examined group of countries, we can distinguish Bulgaria, which reduced the share of debt in GDP by almost 18 percentage points. In the year of the country's accession to the EU, none of them exceeded the threshold (60% of GDP), which is defined by the provisions of the Maastricht Treaty. However, Hungary from 2005 onwards, until the end of the observation period, did not meet the debt criterion. Another country that exceeded the adopted limit was Slovenia in 2013.

Table 5

General Government Sector Debt as % of GDP

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	28.5	28.0	27.9	27.8	28.7	34.1	38.2	41.0	45.5	45.7
Hungary	58.8	60.8	65.0	65.9	71.9	78.2	80.9	81.0	78.5	77.3
Poland	45.7	47.1	47.7	45.0	47.1	50.9	53.6	54.8	54.4	55.7
Slovakia	40.6	33.8	30.7	29.8	28.2	36.0	41.1	43.5	52.1	54.6
Romania	18.6	15.7	12.3	12.7	13.2	23.2	29.9	34.2	37.3	37.9
Bulgaria	36.1	27.1	21.3	16.6	13.3	14.2	15.9	15.7	18.0	18.3
Slovenia	26.8	26.3	26.0	22.7	21.6	34.5	37.9	46.2	53.4	70.4

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 60).

The increase in public debt in post-communist countries during the transition to a market economy can be explained by the necessity to incur high costs associated with systemic, structural, and institutional reforms. The increase in debt observed in recent years is a result of the global financial crisis, which also caused the fiscal crisis. Changes in the size of public debt are the result of the fiscal policy implemented. Poland is characterised by a moderate level of tax burden (income relative to GDP was 38.6% in 2014); while a higher

level of public expenditure (41.8%) is maintained; the consequences of which are the annual budget deficits and increasing public debt. One of the factors putting pressure on public expenditure was integration processes, which created the possibility of co-financing of projects from European funds. Another significant factors, common to the new EU countries, that determine public expenditure, are unfavourable demographic processes.

Tables 6 and 7 below show data on imbalances of public finances; despite the fact that these indicators do not form part of the alert mechanism used in the EU. However, in the fiscal surveillance system, they play an essential role. The category of structural balance, in other words, cyclically-adjusted balance is of particular importance with regard to the diagnosis of the state of public finances and the assessment of fiscal policy. This balance is an estimate that enables the determination of what would be the condition of public finances, if the economy functioned with full use of the production potential (Możdzierz, 2009, pp. 54-57).

As shown in Table 6, excessive budget deficits occurred in all the countries surveyed in the crisis years, i.e., 2009-2010. In subsequent years, the observed countries reduced their deficits below the threshold. In 2015, Poland was also removed from the list of countries subject to the procedure, and the only country that remains covered by it is Slovenia.

Table 6

Net Lending/Net Borrowing as % of GDP

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Czech Republic	-2.7	-3.1	-2.3	-0.7	-2.1	-5.5	-4.4	-2.7	-3.9	-1.2	-2.0
Hungary	-6.4	-7.9	-9.4	-5.1	-3.7	-4.6	-4.5	-5.5	-2.3	-2.5	-2.6
Poland	-5.2	-4.0	-3.6	-1.9	-3.6	-7.3	-7.6	-4.9	-3.7	-4.0	-3.2
Slovakia	-2.3	-2.9	-3.6	-1.9	-2.4	-7.9	-7.5	-4.1	-4.2	-2.6	-2.9
Romania	-1.2	-1.2	-2.2	-2.9	-5.6	-8.9	-6.6	-5.3	-2.9	-2.2	-1.5
Bulgaria	1.8	1.0	1.8	1.1	1.6	-4.2	-3.2	-2.0	-0.7	-0.9	-2.8
Slovenia	-2.0	-1.3	-1.2	-0.1	-1.4	-5.9	-5.6	-6.6	-4.0	-14.9	-4.9

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: http://appsso.eurostat.ec.europa.eu (June 1, 2015).

According to a report from the European Commission (2015a), fiscal deficits in the studied period were mainly determined by structural factors (see Table 7). The average level of the structural balance in the period was the highest in Romania and Hungary (approx. 5% of GDP). In comparison to other countries, Bulgaria stands out, as from 2004 to 2008, it recorded structural surplus. Considering the policy to reduce the public debt from a relatively low level of 36.6% of GDP in 2004 to 13.3% of GDP in 2007, one could ask whether this policy has not hampered the development potential of the economy during European integration. The above question seems relevant when we analyse the changes in the wealth of societies after the EU accession.

The data presented in Figure 2 shows that between 2004 and 2013, GDP per capita (in purchasing power standards) increased in Bulgaria by 11 percentage points, while in Romania, Slovakia, or Poland by approx. 20 percentage points. The growth in the Czech Republic and Hungary amounted to respectively three percentage points and four percentage points. In Slovenia, a small increase in GDP per capita was observed from 2004 to 2008, but due to the crisis in 2013, it was four percentage points lower than in 2004. One should note, however, that Slovenia and the Czech Republic have, from the start of the observation period, been characterised by significantly higher indicators of wealth than other countries.

Another area in which imbalances are studied is the labour market. In this case, the average unemployment rate calculated on the basis of three-year periods is used (see Table 8). The indicative threshold set at 10% was

not exceeded in any year of the analysed period in the Czech Republic, Romania, and Slovenia; in contrast to Slovakia, which each year significantly exceeded this threshold.

Table 7

Cyclically Adjusted Net Lending or Net Borrowing of General Government—Adjustment Based on Potential GDP (% of GDP at Market Prices)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Czech Republic	-3.0	-4.2	-4.4	-3.2	-4.1	-4.7	-3.9	-2.5	-3.1	0.1	-1.2
Hungary	-7.5	-9.5	-11.7	-6.6	-4.8	-2.3	-2.6	-4.4	-0.5	-1.1	-2.2
Poland	-3.7	-2.7	-3.7	-3.6	-5.3	-8.2	-8.3	-5.9	-3.8	-3.6	-2.9
Slovakia	-2.1	-3.1	-4.8	-5.0	-5.4	-7.3	-7.3	-3.6	-3.3	-1.4	-1.7
Romania	-2.8	-2.5	-4.4	-5.2	-8.6	-8.8	-8.8	-5.8	-4.4	-1.6	-1.5
Bulgaria	1.6	0.9	1.4	0.1	0.3	-3.4	-2.6	-1.9	-0.6	-0.9	-2.8
Slovenia	-2.8	-2.4	-3.2	-3.5	-5.1	-4.8	-4.6	-5.9	-2.1	-12.7	-3.6

Note. Source: European Commission (2015a, p. 82).

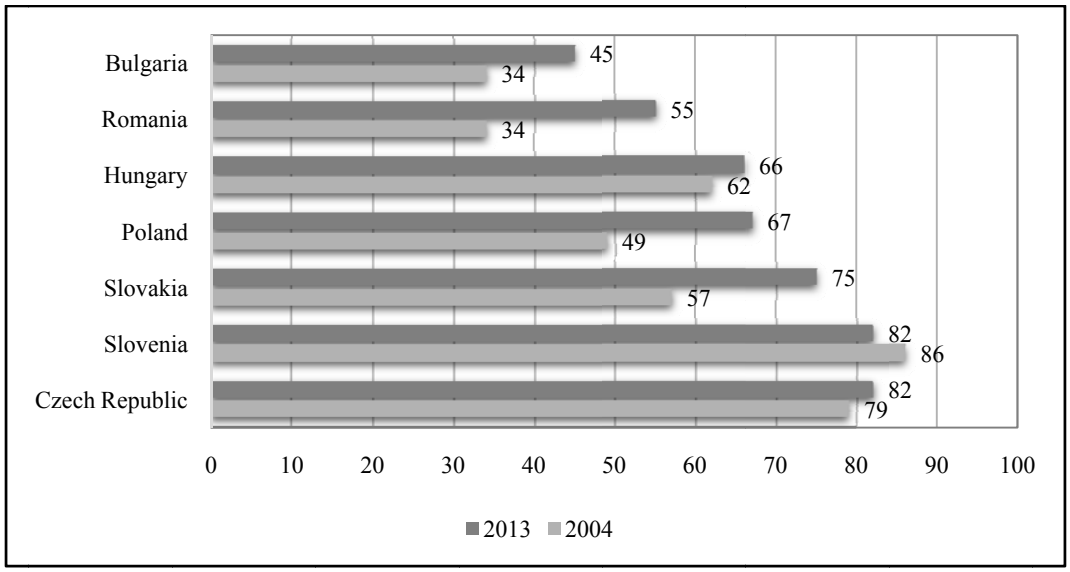

Figure 2. GDP per capita in PPS in 2004 and 2013 (EU28 = 100). Source: Eurostat.

Table 8

Average of Unemployment Rate (3 Years)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	7.8	8.0	7.8	6.8	5.6	5.5	6.1	6.9	7.0	6.9
Hungary	5.8	6.4	6.9	7.4	7.6	8.4	9.7	10.7	11.0	10.7
Poland	19.6	18.9	17.0	13.8	10.2	8.3	8.3	9.2	9.8	10.0
Slovakia	18.3	17.5	16.1	13.7	11.4	11.0	12.1	13.4	14.1	14.0
Romania	8.0	7.6	7.4	6.9	6.4	6.2	6.4	6.9	7.0	7.0
Bulgaria	14.7	12.0	10.4	8.7	7.2	6.4	7.6	9.5	11.3	12.2
Slovenia	6.0	6.5	6.3	5.8	5.1	5.1	5.9	7.1	8.1	9.1

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 61).

Studying the phenomenon of unemployment on the basis of the data on the unemployment rate at the year end in most countries, one can recognise its significant reduction after the EU accession. The restoration of

balance in the labour market due to the European integration was accomplished most evidently in Poland and Slovakia (see Figure 3). In another country with its economy under transformation—Hungary—an increase in the labour market imbalances could be observed during this period. In 2004, the unemployment rate of 6.1% in Hungary was three times lower than it was in Poland and Slovakia. These trends must be examined within the context of migration processes. The decline in unemployment observed in Poland after accession to the EU in 2004 and Bulgaria and Romania from 2007 to a large extent resulted from large scale emigration as a result of the opening of labour markets by the countries of the old EU.

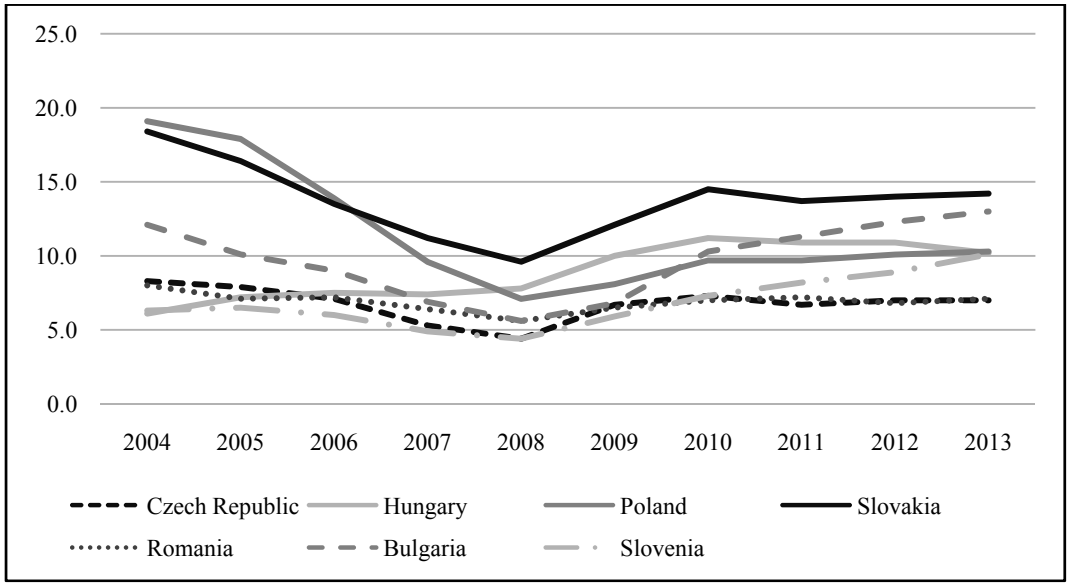

Figure 3. Unemployment rate (y-o-y). Source: Alert Mechanism Report 2015 (p. 62).

The data collected in Table 9 show that the net migration balance in Romania in 2007 was negative and amounted to nearly 460 thousand people. In the next two years, it stood at a level many times exceeding the balances in other countries. Emigration was one of the factors which resulted in a decrease in the population of Romania between 2004 and 2014 by 7.3%. In 2014, the population of Bulgaria decreased by 6.4% and of Poland by 0.5%. Maintaining a surplus of immigrants over emigrants had a positive impact on the population of the Czech Republic, Slovenia, and Slovakia, whose populations have increased. The decline in the Hungarian population by 2.4%, while the country has continuously recorded positive annual migration balance, clearly shows the impact of demographic factors, in particular an aging population.

Looking back at the situation on the labour market in the surveyed countries, one should notice, that the favourable downward trend in unemployment has been halted with the outbreak of the global financial crisis. At that time, the highest unemployment rate was observed in a member country of the euro zone—Slovakia (approx. 14%) and the lowest in the Czech Republic and Romania (approx. 7%).

The last of the indicators in the mechanism of detection of internal imbalances concerns changes in total financial sector liabilities. By financial sector liabilities, we understand the value of liabilities, i.e., cash and deposits, securities, loans, shares and other equity, insurance technical reserves. The indicative threshold set at 16% was not exceeded in the Czech Republic (see Table 10). Twice, in 2005 and 2007, the change in liabilities in Slovenia was higher than the adopted threshold. It should be reminded that the Czech Republic and Slovenia are the wealthiest countries among those transforming their economies.

Table 9

Net Migration and Population Change

Country	Net migration plus statistical adjustment										Population change		
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004	2014	difference 2014:2004
Bulgaria	na	na	na	-17.0	-18.1	-18.2	-17.7	-4.8	-2.5	-1.1	7,745.1	7,245.7	-499.4
Czech Republic	13.0	30.4	29.3	79.2	67.7	25.4	14.3	16.9	10.3	-1.3	10,195.3	10,512.4	317.1
Hungary	18.2	17.3	21.3	14.6	16.5	17.3	11.5	12.8	16.0	5.7	10,116.7	9,877.4	-239.3
Poland	-9.4	-12.9	-36.1	-20.5	-14.9	-1.2	-2.1	-4.3	-2.7	-26.9	38,190.6	38,017.9	-172.7
Romania	-96.2	-84.3	-87.9	-457.8	-163.9	-110.8	-48.1	-47.9	-21.5	-8.1	21,521.1	19,947.3	-1,573.8
Slovenia	1.7	6.4	6.3	14.3	18.6	11.5	-0.5	2.1	0.6	0.5	1,996.4	2,061.1	64.7
Slovakia	-1.1	-0.7	-0.4	2.3	2.1	-0.3	-4.9	3.0	3.4	2.4	5,371.9	5,416.0	44.1

Notes. na—not available. Source: Eurostat Database (June 2, 2014).

Table 10

Change in Total Financial Sector Liabilities—Unconsolidated Data (% y-o-y)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	5.4	11.3	3.6	15.5	6.2	2.4	3.1	4.5	5.9	9.8
Hungary	8.2	34.8	17.8	23.7	26.2	1.9	-0.2	6.2	-5.9	-0.3
Poland	15.7	19.9	24.5	18.3	6.9	9.2	13.3	4.8	10.4	7.6
Slovakia	7.7	19.2	-8.3	25.6	9.3	-4.9	2.0	1.0	2.8	-0.3
Romania	62.9	46.8	35.3	35.1	11.8	14.6	4.6	4.4	4.9	3.1
Bulgaria	36.6	34.2	51.9	29.3	-0.8	1.3	-5.4	5.4	10.2	3.3
Slovenia	11.5	17.7	13.8	28.6	6.6	7.7	-3.4	-1.3	-0.7	-10.5

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 63).

In turn, in the poorest EU countries—Bulgaria and Romania—the liabilities of the financial sector from 2004 to 2007 changed on an annual basis at a rate significantly exceeding the indicative threshold (e.g., 62.9% in Romania in 2004 or 51.9% in Bulgaria in 2006). The strengthening of financial supervision at supranational level (EU) and the adoption of new solutions aimed at protecting the financial stability of the EU (Owsiak, 2015, pp. 383-387) contributed to the elimination of excessive imbalances in the financial markets in the surveyed countries. In 2008, the indicator was higher than the level assumed safe only in Hungary, and starting from 2009, it was below the threshold in all surveyed countries.

External Imbalances in the Surveyed Countries in 2004-2013

In accordance with the adopted set of indicators in order to detect external imbalances, the indicators that concern changes in the current account and net investment positions changes are used. In addition, changes in real exchange rates, shares in export markets, changes in unit labour costs, i.e., parameters determining the current account balance are observed.

Current account balance is the measure of a country's trade with the world economy, i.e., the buying and selling of goods and services and transfers of income. In the case of the indicator of the average level of the current account balance from a three-year period, both the upper and lower indicative thresholds (+6%/- 4%) were adopted. The data in Table 11 show that developing economies, which the post-communist countries are, are characterised by deficits in the current account.

Table 11

Current Account Balance (as a % GDP, 3 Year Average)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	-5.4	-4.0	-2.7	-2.4	-2.8	-2.9	-2.6	-2.7	-2.4	-1.7
Hungary	-7.6	-7.9	-7.6	-7.1	-7.1	-5.0	-2.5	0.1	1.0	2.2
Poland	-3.5	-3.4	-3.8	-4.1	-5.5	-5.5	-5.2	-4.7	-4.6	-3.3
Slovakia	-7.2	-7.4	-8.1	-7.2	-6.4	-4.7	-4.2	-3.4	-1.8	0.2
Romania	-5.9	-7.6	-9.1	-10.8	-11.8	-9.8	-6.9	-4.6	-4.6	-3.3
Bulgaria	-4.7	-7.8	-11.9	-18.1	-22.0	-19.1	-1.2	-3.4	-0.7	0.4
Slovenia	-0.8	-1.7	-2.0	-2.6	-3.8	-3.4	-2.0	-0.2	0.9	2.8

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 48).

Before the crisis, the deficit below the indicative threshold was recorded in Poland, Slovenia, and the Czech Republic (2006-2007). During the crisis years, only the Czech Republic kept its deficits below the threshold. As a result of an improvement in the balance observed in recent years, in 2013 in none of the countries surveyed, the indicator calculated for a three year period exceeded -4%, and moreover, in the case of Hungary, Slovakia, Bulgaria, and Slovenia, it was positive.

Figure 4 presents the annual current account balance. One can notice that there has been a positive balance in Hungary from 2010, in Slovenia from 2011, Slovakia from 2012, and in Bulgaria, a surplus was recorded in 2011 and 2013.

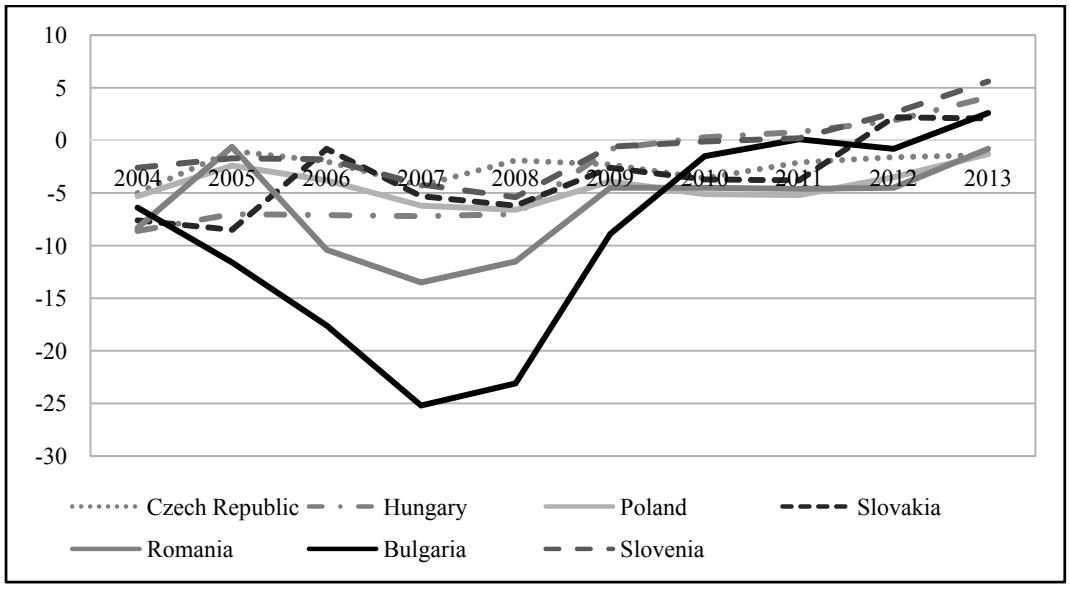

Figure 4. Current account balance (as a % GDP). Source: Alert Mechanism Report 2015 (p. 63).

The share of individual countries in world exports varies (see Table 12). The Eurostat database lacks complete data for Slovakia and Bulgaria. Poland has the largest share of world exports, a little over 1%. Second place goes to the Czech Republic with 0.74%, and third to Hungary with 0.52%. Bulgaria and Slovenia have the smallest shares (0.15%). The accession to the EU had a positive effect on the development of post-communist countries' exports. A decrease in the share in world exports in recent years has been linked to the financial and economic crisis.

Table 12

Export Market Shares (BPM6)—Percentage of World Total

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	0.62	0.69	0.71	0.77	0.79	0.81	0.76	0.76	0.73	0.74
Hungary	0.56	0.57	0.58	0.64	0.66	0.64	0.58	0.55	0.49	0.52
Poland	0.80	0.85	0.90	0.97	1.04	1.07	1.03	1.02	0.99	1.06
Slovakia	na	na	na	na	na	0.43	0.41	0.42	0.42	0.45
Romania	na	0.14	0.15	0.22	0.25	0.27	0.29	0.31	0.28	0.31
Bulgaria	na	na	na	na	na	na	na	na	na	0.15
Slovenia	0.17	0.17	0.18	0.19	0.18	0.18	0.16	0.16	0.15	0.15

Notes. na—not available. Source: http://ec.europa.eu (August 22, 2015).

In the detection of macroeconomic imbalances procedure, the indicator of changes in interest rates during the past five years is used to detect imbalances in export market shares. An analysis of indicators presented in Table 13 shows a downward trend in all surveyed countries. Nevertheless, the indicative threshold of -6% was only exceeded in the Czech Republic and Hungary in 2013, and in Slovenia from 2011 to 2013.

Table 13

Change in Export Market Share (% Change—5 Years)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	44.1	42.1	26.6	25.8	22.0	10.1	10.2	6.4	-3.4	-7.7
Hungary	44.1	39.6	24.4	27.1	23.3	12.1	2.4	-2.7	19.9	-19.2
Poland	55.1	48.2	37.5	42.2	39.2	27.9	20.1	12.2	1.1	-0.4
Slovakia	61.5	57.0	59.4	74.4	52.1	39.8	31.3	21.1	3.2	-2.2
Romania	71.7	64.6	51.2	42.8	41.6	32.7	51.9	49.4	13.8	16.4
Bulgaria	51.5	41.0	42.4	43.4	33.1	18.3	14.9	16.6	4.7	5.7
Slovenia	16.4	27	19	19.8	12.1	6.8	-3.7	-7.0	-20.4	-16.6

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 53).

Another measure of external imbalances is the indicator of the changes in net international investment position. This category represents the difference between the amount of foreign assets and liabilities of domestic entities. Its information value lies in the fact that it shows whether a country is a net creditor or debtor to the rest of the world. In the first years of observation, the Czech Republic, Romania, Bulgaria, and Slovenia did not exceed the indicative threshold set at -35% (see Table 14). From the start of the financial crisis in the EU until the last year of observation, imbalances between foreign assets and liabilities can be observed in all surveyed countries. In recent years, the highest negative rates were recorded in Hungary. In 2013, the Czech Republic and Slovenia were only slightly below the indicative threshold.

Comparing the position of the surveyed countries with other EU countries is not easy. On the one hand, the positions of some countries of the old EU that belong to the euro area have deteriorated on a much larger scale. In 2013, the value of the indicator was negative and amounted to -119.3% of GDP in Greece, -118.7% of GDP in Portugal, and -104.9% of GDP in Ireland. On the other hand, the crisis has strengthened the position of some net creditors. The greatest improvement in this area was recorded in Luxembourg, where the rate increased from 95.5% of GDP in 2007 to 184.1% of GDP in 2013. In the same period, the indicator for Germany increased from 26.5% of GDP to 48.4% of GDP. A significant improvement was also recorded in the

Netherlands, which in 2007 had a surplus of liabilities over assets, representing 6% of GDP and in 2013, a surplus of assets over liabilities of 46.3% of GDP (European Commission, 2015b, p. 50).

Table 14

Net International Position as a % of GDP

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	-28.2	-26.9	-32.3	-38.7	-38.2	-44.0	-46.1	-45.3	-46.1	-40.0
Hungary	-83.9	-92.5	-95.5	-88.9	-102.7	-116.1	-109.4	-106.7	-94.1	-84.4
Poland	-41.6	-42.3	-45.7	-50.1	-56.3	-58.8	-65.2	-62.7	-65.4	-68.0
Slovakia	-39.9	-48.6	-53.5	-51.5	-57.4	-66.7	-63.1	-65.5	-64.1	-65.1
Romania	-26.4	-29.5	-36.2	-47.1	-52.5	-62.0	-63.8	-65.6	-67.3	-62.4
Bulgaria	-30.1	-44.1	-58.0	-81.1	-98.4	-101.8	-95.4	-85.9	-78.2	-76.2
Slovenia	-7.7	-10.8	-16.8	-21.3	-35.1	-38.9	-42.4	-40.2	-45.2	-38.2

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 50).

The measure of a country's price competitiveness against major trading partners is the real effective exchange rate. The macroeconomic imbalances procedure monitors its changes over three-year periods. The real effective exchange rate is based on the harmonised index of consumer prices deflators and takes into account the changes in exchange rates and consumer prices of 42 countries (EU member states, Australia, Brazil, Canada, China, Hong Kong, Japan, Norway, New Zealand, Mexico, Russia, South Korea, Switzerland, Turkey, the United States). Changes in the indicators during the three-year periods are shown in Table 15. It should be emphasized that upper and lower indicative thresholds have been adopted and that they are different for the countries in the euro area and those outside it.

Table 15

Real Effective Exchange Rate With HICP Deflators (% Change—3 Years)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Indicative threshold
Czech Republic	8.9	3.3	10.2	12.6	23.2	13.6	12.0	-0.6	0.4	-3.1	+/-11%
Hungary	18.2	9.0	1.8	6.6	8.0	7.8	-1.2	-4.2	-1.0	-4.0	+/-11%
Poland	-15.7	-2.0	11.6	16.4	14.3	-4.0	-1.4	-11.6	1.2	-4.3	+/-11%
Slovakia	27.2	27.2	18.3	18.1	24.9	26.9	10.9	3.4	-3.2	2.1	+/-5%
Romania	-0.6	16.6	28.1	35.9	9.5	-5.0	-10.8	-3.3	-1.9	0.3	+/-11%
Bulgaria	11.5	8.4	9.2	9.9	18.5	18.3	9.7	1.9	-4.0	-1.0	+/-11%
Slovenia	4.7	0.9	-2.8	-1.2	2.1	5.2	1.2	-1.1	-4.5	-0.7	+/-5%

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 51).

In 2004, Poland was top of the table in terms of price competitiveness and Slovakia was last. Slovakia's position improved after the country joined the euro zone in 2009. The improvement of price competitiveness of Slovenia could only be seen in 2011, despite the fact that it joined the euro area in 2007. In the last two years of observation, neither country exceeded the indicative thresholds. According to the 2013 date, the greatest improvement in price competitiveness was recorded in Poland, and Slovakia and Romania have lost competitiveness.

Differentiated indicative thresholds, based on the criterion of belonging to the euro zone, were also applied in the case of another indicator of detection of macroeconomic imbalances—changes in nominal unit labour cost. The cost of labour in post-communist countries—with a few exceptions in Poland and Romania—has

been increasing. The indicator was particularly high in Romania from 2005 to 2010 and Bulgaria during the global crisis (see Table 16). Higher rates during the crisis years are largely explained by the fact that labour costs are expressed in relation to gross domestic product, the growth of which has considerably slowed down during the crisis years. Flexibility of labour costs was lower than the change in GDP.

Table 16

Nominal Unit Labour Cost (% Change—3 Years)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Indicative threshold
Czech Republic	13.0	5.0	2.6	2.6	5.6	9.1	6.2	3.2	3.1	3.7	+12%
Hungary	20.0	13.1	8.9	10.5	12.6	13.5	7.0	4.1	4.8	5.9	+12%
Poland	na	-4.7	-2.4	2.4	10.4	12.4	12.0	4.4	5.1	3.9	+12%
Slovakia	10.2	10.2	8.5	6.2	6.5	11.1	9.7	6.3	1.2	2.5	+9%
Romania	24.2	52.0	32.0	38.5	39.1	37.0	29.5	-0.5	-1.0	0.7	+12%
Bulgaria	5.7	10.3	11.8	18.9	26.9	37.5	32.7	20.2	12.4	14.8	+12%
Slovenia	14.6	9.7	6.3	5.4	10.6	18.5	16.1	8.3	0.5	1.3	+9%

Notes. na—not available. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 55).

Despite the large percentage change in labour costs in Romania and Bulgaria, they still remain the lowest in the EU (see Figure 5). In 2014, the hourly labour cost in Bulgaria amounted to EUR 3.7 and was more than six times lower than the average for the EU28, and almost 11 times lower than labour costs in Sweden (40.2 EUR). The increase in labour costs, in its part related to wages, in countries in economic transition is a natural phenomenon during the European integration.

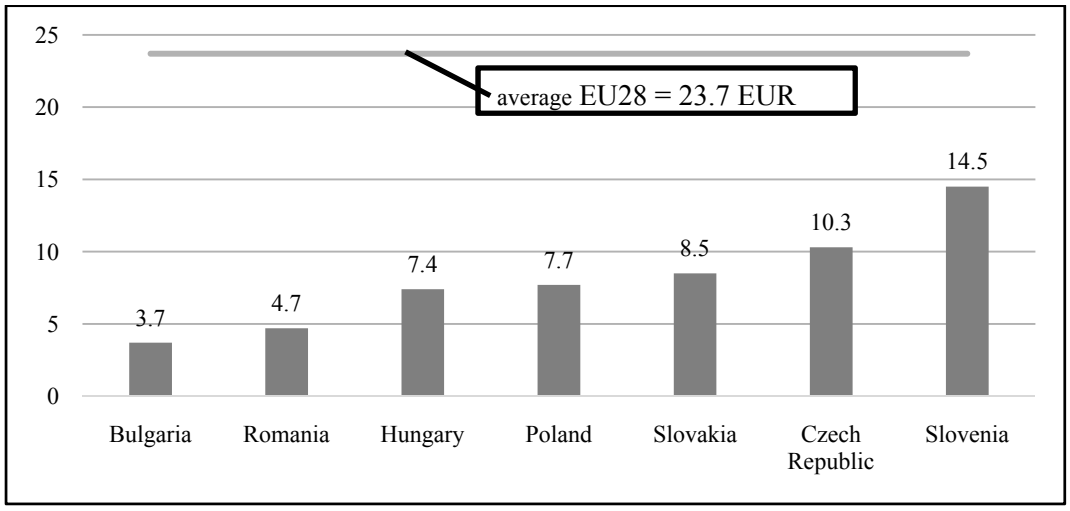

Figure 5. Hourly labour cost in 2014 (in EUR). Source: Eurostat (September 3, 2015).

The analyses carried out in this paper indicate different sources of macroeconomic imbalances. Using the 2013 scoreboard, a comparison was made of the surveyed countries in terms of areas where there are macroeconomic imbalances (see Table 17).

In all the countries surveyed, a common source of external imbalances is a poor net international investment position. In the Czech Republic, Hungary, and Slovenia, a decrease in the share of world exports is

the additional factor disrupting external balance. In Bulgaria, in addition to the poor net international investment position, the excessive growth of unit labour costs is seen as a disrupting factor. In the Czech Republic and Romania, internal imbalances have not been detected. The dominant sources of internal imbalances are disturbances on the labour market. Excessive disturbances are also related to the size of public debt in Hungary and Slovenia and private debt in Bulgaria.

Table 17

The MIP (Macroeconomic Imbalance Procedure) Scoreboard in 2013

Item	Czech Republic	Hungary	Poland	Slovakia	Romania	Bulgaria	Slovenia
Internal balance							
Change in deflated house prices (y-o-y)	-1.2	-5.0	-4.4	-0.5	-4.6	-0.1	-5.8
Private sector credit flow as % of GDP	3.1	-1.0	2.9	5.4	-1.5	6.7	-4.0
Private sector debt as % of GDP	73.7	95.5	74.9	74.8	66.4	134.8	101.9
General government sector debt as % of GDP	45.7	77.3	55.7	54.6	37.9	18.3	70.4
Average of unemployment rate (3 years)	6.9	10.7	10.0	14.0	7.0	12.2	9.1
Change in total financial sector liabilities	9.8	-0.3	7.6	-0.3	3.1	3.3	-10.5
External balance							
Current account balance (as a % GDP, 3 year average)	-1.7	2.2	-3.3	0.2	-3.3	0.4	2.8
Net international position as a % of GDP	-40.1	-84.4	-68.0	-65.1	-62.4	-76.2	-38.2
Real effective exchange rate with HICP deflators (% change—3 years)	-3.1	-4.0	-4.3	2.1	0.3	-1.0	-0.7
% change (5 years) in export market shares	-7.7	-19.2	-0.4	-2.2	16.4	5.7	-16.6
% change (3 years) in nominal unit labour cost	3.7	5.9	3.9	2.5	0.7	-14.8	1.3

Notes. The numbers in grey mean exceeded the indicative thresholds. Source: Alert Mechanism Report 2015 (p. 57).

Summary

The analysis shows that the concept of equilibrium itself, as well as the sources of imbalances, was the subjects of theoretical disputes. According to orthodox Keynesian and post-Keynesians equilibrium meant a state of rest probably below full employment. According to orthodox monetarists and new classicals, who assumed extremely flexible prices, equilibrium meant market clearing at a natural rate of unemployment. While orthodox Keynesians and post-Keynesians perceived fluctuations of autonomous expenditure as the main source of imbalances, orthodox monetarists and new classicals pointed to monetary disruptions. Many of these differences have their origins in the adoption of a number of simplifying assumptions concerning adjustments in wages, prices as well as in different time frames of analysis.

In practice, in the EU, a mechanism introduced in 2011 is used to detect sources of macroeconomic imbalances. The first alert mechanism report was presented in 2012. The mechanism consists of a series of indicators relating to both the changes in the real economy and changes in the financial sphere. It enables an identification of the causes of instability divided into internal and external ones. The imbalances alert mechanism is an important tool for economic governance in the EU. The economic governance system prevailing before the financial crisis was based on the regulations relating to the sustainability of public finances. The alert mechanism enables monitoring of important economic parameters for all EU countries while maintaining the comparability of data. The analysis of the macroeconomic imbalances in the EU's post-communist countries carried out in this paper enabled capturing many common characteristics of the

surveyed economies. They are typical for countries in economic transition, catching up to the developed countries of the EU. In this context, it is worth noting that, in accordance with the Regulation of the European Parliament [Regulation (EU) 2011 point 13], in preparation of the scoreboard the diversity of economic circumstances, including catching-up effects in individual countries should be considered. Implementation of this regulation can be seen in the fact that some indicative thresholds are different for the countries of the euro area. The application of this criterion raises doubts as some post-communist countries, which still have some catching-up to do, are members of the euro area, and some countries like United Kingdom, Denmark, and Sweden, with a high level of economic development, are outside the euro zone. This leads to the question whether the new rules of economic governance in the EU will foster the macroeconomic stability and convergence or will they lead to increased economic divergence. The excessive macroeconomic imbalances procedure is similar to the concept of excessive deficit procedure. It also includes financial penalties for failure to comply with the council's recommendation of up to 0.1% of GDP. The EU's fiscal surveillance, conducted on the principles in force before the global crisis, based on the excessive deficit procedure, did not bring anticipated outcomes. The short period of functioning of special procedures for correcting excessive imbalances makes evaluation of its effectiveness impossible at this time.

References

Acocella, N. (2002). *Zasady polityki gospodarczej. Wartości i metody analizy (The foundations of economic policy. Values and techniques)*. Warsaw: WN PWN.

Begg, D., Fischer, S., & Dornbusch, R. (1999). *Makroekonomia (Macroeconomics)*. Warsaw: PWE.

Blaug, M. (1994). *Teoria ekonomii. Ujęcie retrospektywne (Economic theory in retrospect)*. Warsaw: WN PWN.

Blaug, M. (1995). *Metodologia ekonomii (Methodology of economics)*. Warsaw: WN PWN.

De Grauwe, P. (1985). *Macroeconomic theory for the open economy*. Berlin: Springer-Verlag Berlin Heidelberg GmbH.

European Commission. (2011). Scoreboard for the surveillance of macroeconomic imbalances: Envisaged initial design. Commission Staff Working Paper, Brussels, SEC(2011) 1361 final.

European Commission. (2015a). *Cyclical adjustment of budget balances*. European Commission, Spring.

European Commission. (2015b). Alert Mechanism Report 2015, Statistical Annex of Alert Mechanism Report 2015, accompanying the document Report from the Commission to the European Parliament, the Council, the European Central Bank and the European Economic and Social Committee, Commission Staff Working Document.

Fedorowicz, Z. (1993). *Teorie pieniądza (Theories of money)*. Warsaw School of Economics, Finance and Banking, Poltext, Warsaw.

Fletcher, G. A. (1989). *The Keynesian revolution and its critics*. London: Macmilan.

Forsal. (2014). Retrieved from http://forsal.pl/artykuly/793816,ceny-mieszkan-od-2004-roku-podrozaly- dwukrotnie.html

Górski, J., Kowalik, T., & Sierpiński, W. (1967). *Historia powszechnej myśli ekonomicznej 1870-1950 (History of universal economic thought 1870-1950)*. Warsaw: PWN.

Johnson, H. G. (1974). The monetary approach to balance of payments theory and policy: Explanation and policy implications. *Economica, 44*(175), 217-229.

Kalicki, A. (1998). *Pieniądz a bilans płatniczy (Money and balance of payments)*. Warsaw: PWE.

Keynes, J. M. (2003). *Ogólna teoria zatrudnienia, procentu i pieniądza (The general theory of employment, interest and money)*. Warsaw: WN PWN.

Krugman, P. R., & Obstfeld, M. (2007). *Ekonomia międzynarodowa. Teoria i polityka (International economics: Theory and policy)* (Vol. 2, 3rd ed.). Warsaw: WN PWN.

López, J., & Assous, G. M. (2011). *Michał Kalecki*. Warsaw: PTE.

Morgan, B. (1978). *Monetarists and Keynesians: Their contribution to monetary theory*. London: Macmillan.

Moździerz, A. (2009). *Nierównowaga finansów publicznych (Imbalance of public finances)*. Warsaw: PWE.

Najlepszy, E., & Sobański, K. (2010). *Niestabilność równowagi zewnętrznej krajów rozwijających się (Instability of the external balance in developing countries)*. Warsaw: PWE.

Owsiak, S. (2015). *Finanse (Finance)*. Warsaw: PWE.

Patinkin, D. (1965). *Money, interest and prices* (Issue 2). New York: Harper and Row.

Pigou, A. C. (1941). *Employment and equilibrium*. London: Macmillan.

Robinson, J. (1937). The foreign exchanges. In *Essays in theory of employment*. Oxford: Oxford University Press.

Sławiński, A. (1992). *Polityka stabilizacyjna a bilans płatniczy (Stabilisation policy and balance of payments)*. Warsaw: WN PWN.

Snowdon, B., Vane, H., & Wynarczyk, P. (1998). *Współczesne nurty teorii makroekonomii (A modern guide to macroeconomics)*. Warsaw: WN PWN.

Spychalski, G. B. (1999). *Zarys historii myśli ekonomicznej (A brief history of economic thought)*. Warsaw: WN PWN.