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CAPITAL TRANSFERS AND EXTERNAL BALANCE IN POST-ACCESSION POLAND

Abstract: Poland's accession to the EU in 2004 resulted in changes in the external conditions influencing the functioning of the domestic economy. The balance of payment structure changed, together with the role of the capital account. Capital transfers in the form of investment grants became a major category of revenues in the capital account. The aim of this article is to show the capital account changes in terms of external balance indicators after 2004 and to verify a hypothesis concerning the impact of a positive capital account balance on the improvement of the said indicators. The research problem pertains to the role of capital transfers with reference to the balance of payments theories, external balance indicators and domestic investments. The adopted research method consisted of a statistical data analysis with the use of dynamics indicators, as well as literature studies on the balance of payments theories. The obtained results of the research shows that capital transfers filled the gap arising from the lack of domestic savings and did not exclude the positive impact of capital transfers on the improvement of the Polish external imbalance level.

Keywords: balance of payments, external balance, capital account, capital transfers.

JEL codes: E220, F360, F380, F410.

TRANSFERY KAPITAŁOWE A RÓWNOWAGA ZEWNĘTRZNA POLSKI PO AKCESJI DO UNII EUROPEJSKIEJ

Streszczenie: Akcesja Polski w 2004 roku do UE spowodowała zmianę zewnętrznych uwarunkowań funkcjonowania gospodarki krajowej. W efekcie zmieniła się struktura polskiego bilansu płatniczego, w tym rachunku kapitałowego, którego główną

kategorią przychodów stały się transfery kapitałowe w formie grantów inwestycyjnych. Celem artykułu jest prezentacja zmian, jakie nastąpiły na rachunku kapitałowym po roku 2004 na tle wskaźników równowagi zewnętrznej Polski. Dokonano także weryfikacji hipotezy o wpływie transferów kapitałowych na wartości wskaźników równowagi zewnętrznej. Problem badawczy dotyczył roli transferów kapitałowych w kontekście teorii bilansu płatniczego, równowagi zewnętrznej i inwestycji krajowych. W niniejszym artykule posłużono się analizą danych statystycznych wspartą studiami literatury w zakresie teorii bilansu płatniczego. Uzyskane wyniki badań wskazują, że transfery kapitałowe wypełniały lukę powstałą na skutek braku oszczędności krajowych i nie wykluczyły ich pozytywnej roli w kształtowaniu wskaźników równowagi zewnętrznej Polski.

Słowa kluczowe: bilans płatniczy, równowaga zewnętrzna, rachunek kapitałowy, transfery kapitałowe.

Introduction

Poland, becoming a member of the European Union [EU] in 2004, also became a part of the common market. Poland's accession resulted in changes in external conditions influencing the functioning of the domestic economy. The balance of payment structure has changed, together with the role of the capital account [CPA]. Capital transfers in the form of investment grants became a major category of revenues in the capital account.

The capital account balance, because of the relatively low volume, is usually combined with the financial [FA] or current account [CA]. In the case of Poland, the value of the capital account due to the investment grants was relatively large. The capital account revenues have become an important source of financing of investments in the domestic economy. The amount of received grants depends on the EU Financial Perspective – Multiannual Financial Framework [MFF]. The MFF has specified the amounts of the annual ceilings on commitment appropriations by category of expenditure and of the annual ceiling on payment appropriations. These have resulted from agreements among the EU Council, the European Parliament and the EC, and are pursuant to the provisions of the Treaty on the Functioning of the EU (EC, Official Journal C 326) and it can change in the following years. Taking these circumstances into account, the entire period of Poland's EU membership has become an interesting field for research.

As the global imbalance phenomenon has appeared, because of the group of countries with permanent CA deficits simultaneously with a group of

countries with permanent CA surpluses, the need to monitor the level of a country's external imbalances appeared, especially from the point of view of international organizations, such as the IMF, rating agencies, and, in the Poland's case, also the European Commission [EC] (EC, 2017; GUS, 2014, p. 1). The objective of this article is to identify the changes in the capital account after Poland's accession to the EU with respect to the chosen external imbalance indicators. Taking into account the total presentation of current and capital accounts in the balance of payments, one can put forward a research hypothesis: in the case of Poland the EU transfers, by increasing the positive capital account balance, have an influence on the improvement of external balance indicators.

The role of the capital account as a part of the balance of payments which can improve the external balance has been shown with reference to balance of payments theories and external balance indicators. The adopted research method consisted of a statistical data analysis with the use of dynamics indicators and literature studies on the balance of payments theories. Eurostat, Statistics Poland and the NBP annual data in million euros from the years 2004–2017 have been taken into consideration in this paper.

1. External balance in the balance of payments balance context

The concept of the external balance has evolved in time and has not yet been unambiguously defined (more detailed: Śliwiński, 2011, pp. 15–75). In this article the external balance has been shown in the context of the balance of payments, since this phenomenon is a synthetic statement of all foreign transactions of a given country.

During the period of the international monetary system based on fixed exchange rates and limited capital flows, the external balance was brought down to the trade accounts [TB] balance, hence the elasticity and absorption approaches.

In the elasticity approach, the accent was placed on the impact of the changes in domestic and international prices on the balance in the balance of payments. Devaluation or depreciation of the domestic currency was considered to be a major instrument which could improve the trade accounts balance, provided the Marshall-Lerner (ML) condition was met. ML condition means that an exchange rate devaluation or depreciation will cause TB improvement if the absolute sum of the long-term export (DX) and import demand (DM)

elasticity is greater than unity [$\varepsilon_{DX} + \varepsilon_{DM} > 1$, (1), where ε means elasticity]. As a result, imports became more expensive and exports became cheaper due to the change in relative prices (Machlup, 1955, pp. 255–278).

In the absorption approach (Alexander, 1952, pp. 263–278), the TB balance has been defined in two ways: (i) the country's output of goods and services (Y) less its absorption (A), where the term 'absorption' means expenditure by domestic residents on goods and services [$CA = TB = Y - A$ (2); $A = C + I + G$ (3)], where C – consumption, I – investment, G – government expenditure]; (ii) the country's savings (S) less investments [(4)]. The improvement of the TB balance (and the balance of payments and the external balance) requires the country's output to be higher than absorption and with complete employment in the economy, and requires the reduction of the investment higher than the savings. The absorption approach also requires the ML condition to be met.

The changes of the international monetary system rules, which resulted in floating exchange regimes, the development of financial markets and the liberalization of capital flows, have changed the approach to balance in the balance of payments. The analysis has been extended by international capital flows and the changes in foreign assets and liabilities. In such circumstances, the monetary approach was created. According to this approach an imbalance in the balance of payments is a result of a money market imbalance, stemming from the supply of domestic money mismatching the demand for it (more: Frankel, 1971, pp. 159–187). In this approach the quantity theory of money has been applied to the open economy analysis, according to which the changes of the money supply result in the changes of prices and do not impact on real income. Monetarists, in contrast to the elasticity and the absorption approaches, were against the sterilization of balance of the payments' cash flows, because these cash flows enable the correction of money market imbalance automatically. The balance in the balance of payments affects the domestic money supply (Sobański, 2009, p. 24). There is only one size of money supply which equates the balance of payments, and its imbalances are the adjustment phases of the money supply to the money demand. With fixed exchange rates, the central bank has no long-term control over the money supply and cannot pursue an independent monetary policy: each external imbalance causes a necessity to change the official currency reserves [$dR = dP_f + dY - dD$ (5), where R – reserves, P_f – foreign prices, D – domestic assets of the central bank]. With floating exchange regimes, the imbalance in the balance of payments is corrected automatically by the exchange rate changes [$dE = dD - dP_f - dY$ (6), where E – exchange rate].

The aforementioned concepts have focused on the reasons for the external imbalance and ways of improvement it. The intertemporal approach to the balance of payments (Obstfeld & Rogoff, 1994) has revised the external imbalance attitude – deficits stopped being treated as an undesirable phenomenon, limiting the development opportunities of the domestic economy. The intertemporal approach built on the absorption approach – the current account balance was also defined as a difference between the domestic savings rate and the domestic investment rate, but that relationship was considered over a long-term period. The basis of these considerations was Friedman's permanent income theory, according to which the consumption changes result from expectations regarding future income (more: Meghir, 2004). Extending these assumptions to the entire economy one can expect that a country beginning its economic development is able to increase consumption thanks to foreign loans, having the balance of payments' deficit as the effect (Sobański, 2009, p. 28). So, this approach has identified the external imbalance with the time optimization of consumption and investment by economic entities. The occurrence of a deficit ceased to mean a weakness of the domestic economy, but constituted the optimal method of distributing of consumption over time and a way to speed up the capital accumulation to enhance the development of the domestic economy.

The integration of Poland and other Central and Eastern Europe countries with the EU has meant an integration of partners with differing levels of economic development. For the purpose of convergence various instruments have been created. They were based on capital transfers from the EU budget to the countries with a lower level of economic development, like Poland. From the point of view of the absorption approach and the intertemporal approach these capital transfers can be treated as a kind of foreign savings, which can increase the level of domestic investments. This approach explains why there were imbalances in Poland's balance of payments. Poland has been using the EU developed countries resources (through capital transfers), increasing own production potential and the dynamics of economic growth. In this case both the capital providers and the recipients can benefit. The capital providers get the opportunity to generate a higher profit rate than on their internal markets, and the recipients of the capital (like Poland) get the opportunity to increase their economic potential. Poland has been a net capital recipient and has been developing due to foreign savings. But in the long-time period this situation can lead to tensions in the balance of payments and to a loss of financial liquidity (Janicka, 2016, pp. 358–369).

2. The specificity of capital transfers in the balance of payments

In contrast to the other exchange transactions in the balance of payments, a transfer encompasses the delivery of the goods and services to entities without the equivalent repayable transaction. A transfer can be also understood as a transaction including either an economically irrelevant repayable transaction or a transaction of an incomparably lower value (International Monetary Fund [IMF], 2009, p. 207). The International Monetary Fund [IMF] specifies exchanges as “something for something” and transfers as: “something for nothing” (IMF, 2009, p. 31). This feature of transfers affects the way they are recorded. There is a double-entry bookkeeping rule in the balance of payments, but in the case of transfers – in fact there is an entry being a reply to the occurrence of the transaction. As a result, in the case of current accounts – credit denotes entries from exports, and in the case of capital transfer – credit denotes transfers receivable, and debit conversely, denotes imports of goods and services, and in the case of capital transfer – transfers payable (IMF, 2009, pp. 34–35).

In this article, the subject of consideration concerns the transfers recorded on the capital account. The capital account consists of the disposals or acquisitions of non-produced, non-financial assets, and capital transfers. The first group is composed of transactions concerning natural resources, contracts, leases, licenses and marketing assets (and goodwill). The second group is composed of debt forgiveness, nonlife insurance claims, investment grants, one-off guarantees and debt assumption, taxes, other capital transfers (more detailed in: IMF, 2009, pp. 217–221).

In Poland's balance of payments capital transfers consist mainly of the property transfers of physical assets transfers as gifts and funds for non-returnable assistance, financing of tangible assets, debt cancellation by the lender, and transfers of funds related to the acquisition and disposal of non-produced and non-financial assets. These are divided into two sectors – general government and others, including financial corporations, nonfinancial corporations, households, and non-profit institutions serving households [NPISH] (National Bank of Poland [NBP], 2018, pp. 21–22). Capital transfers of the government sector in Poland constitute the value of funds received or transferred to and from EU institutions, countries and international organizations, as well as debt cancellation by the redemption of capital and interest. Received funds finance investments into such tangible assets as roads, highways, bridges, schools and hospitals, etc. (NBP, 2018, pp. 21–22). Capital transfers of the other

sectors in Poland are composed of receivable and transferred gifts and funds for non-returnable assistance to finance fixed assets (NBP, 2018, p. 22). The acquisition and disposal of non-produced and non-financial assets encompasses the purchase and sale of brand names, patents, trademarks, as well as the purchase and sale of land by Polish embassies abroad (NBP, 2018, p. 22).

Investments in tangible assets, human capital and technological innovations have been the key priorities in defining the directions of support through capital transfers received from EU institutions. According to Śliwiński (2013, pp. 539–540), the mentioned factors supported by appropriate policies can constitute a key determinant of economic growth. Due to the existence of membership fees these funds are not entirely irreclaimable. Despite these fees, however, Poland remained a net beneficiary of EU transfers during the analysed period.

3. The sources of revenues and expenditures in Poland's capital account

In the case of Poland in 2004–2017 capital transfers received from EU countries and organizations were the dominant component of the capital account revenues. They purpose finance investment objectives, support transformation processes in agriculture, co-finance investment projects in the area of transport and environmental protection. They depended on the MFF, and multiannual frameworks of 5 to 7 years. The first one the Delors package was introduced in 1988, next in 1993 the second Delors package, then in 2000–2006 the Santer package, and in 2007–2013 the Barroso package. Becoming an EU member in 2004 Poland used the funds from the third financial perspective (more: Russel, 2012, pp. 87–108). In the years 2007–2014 and 2016–2017 the share of EU transfers was between 98% and 100% of total capital transfers booked on the CPA (see Figure 1).

The amount of transferred investment grants kept growing until 2014. The highest growth rate was in the first two years after accession. The considerable decrease of the transfer value in 2016 was a result of the transitional period between the MFFs during the years 2007–2013 and 2014–2020 (NBP, 2016, p. 29). The major categories of Poland's capital account components in 2004–2017 were: debt cancellation by the government sector, payments related to the purchase of patents, licences, trademarks, withdrawal of funds in connection to the emigration of Polish citizens, as well as donations and funds for non-returnable assistance, which concerned the non-government

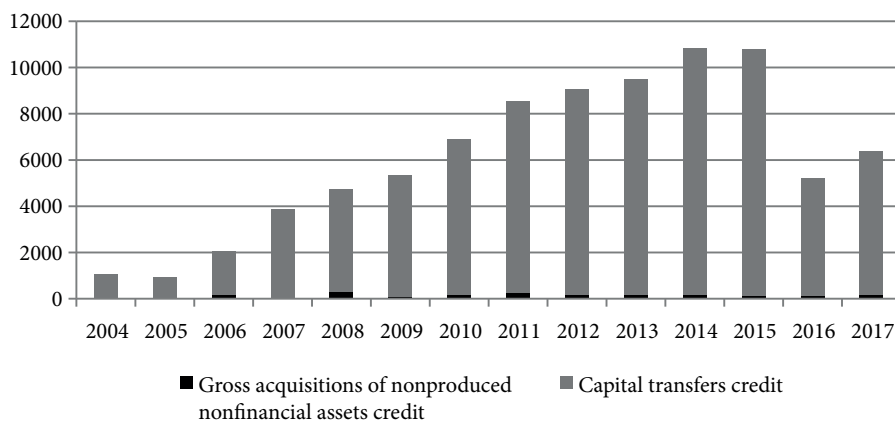


Figure 1. Poland's capital accounts revenues and their major categories of components, in million euros

Source: Own calculations based on the NBP data.

sector (NBP, 2004–2017). In this period capital transfers debit related to credit were on a relatively low level, except for 2011. From 2012 to 2017 disposals of non-produced and non-financial assets were the only components of CPA debit (see Figure 2).

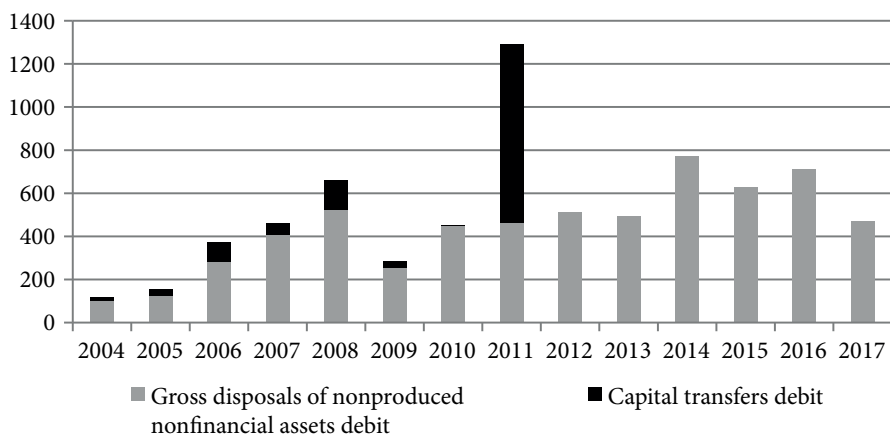


Figure 2. Expenditures of the Poland's capital account and their major categories of components, in million euros

Source: Own calculations based on the NBP data.

During the whole analysed period CPA debits (expenses) were relatively small, as compared to CPA credits (revenues), constituting about 5–18% of their value (own calculation). Hence, the capital account balances were determined by the revenues, which were composed of capital transfers (Figure 3).

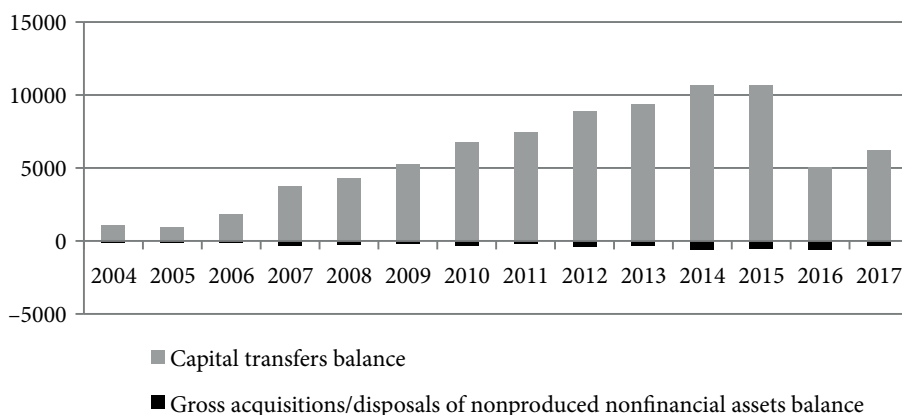


Figure 3. Capital account balances in Poland and their major categories of components, in million euros

Source: Own calculations based on the NBP data.

Thus, one may draw a conclusion, that in Poland in 2004–2017 the CPA balances were the result of funds transferred from the EU budget, due to EU membership.

4. Capital transfers with reference to the external imbalance indicators in Poland

There are many indicators used to assess the external imbalance of a country. Poland being an EU member became subject to European Commission guidelines. In 2011 the Macroeconomic Imbalances Procedure [MIP] was imposed on EU member states. The MIP was specified in the Regulation of the European Parliament and of the Council (EU No. 1176/2011) on the prevention and correction of macroeconomic imbalances. There is a scoreboard composed of a set of indicators, which shall be used as a tool to facilitate the early identification and monitoring of imbalances. The MIP indicators were divided into: internal and external imbalances (EU 1176/2011, article 4,

section 3). External imbalance indicators include: (i) the relation of CA balance to the country's GDP, the reference value is specified between -4% and $+6\%$ (the average of the last three years); (ii) net international investment position [IIP, IIP equals the balance of payments assets less the balance of payments liabilities], which should not be lower than minus 35% of the country's GDP; (iii) real effective exchange rates, which should not change more than $\pm 5\%$ in the case of Eurozone countries and $\pm 11\%$ in the case of other EU countries (within a period of 3 years) (GUS, 2014, p. 1).

In this article the external imbalance has been brought to the current account imbalance, and according to this, the imbalance level assessment is based on indicators composed of the balance of payments elements. The considered ones are the first two: CA balance/GDP and IIP/GDP. The change of real effective exchange rates requires an analysis that is based on a more than annual frequency, so this indicator has not been taken into account. Chart 1 shows Poland's CA and CPA balances in relation to the Polish GDP, separately and together. The way of total presentation of CA and CPA is a standard way of a balance of payments presentation, pursuant to the IMF rules (IMF, 2009, p. 304).

Poland had CA deficits in 2004–2016. Prudential thresholds, specified in the MIP, were exceeded in the years: 2004, 2007–2008 and 2010–2011. The EU

Table 1. CA and CPA balances in relation to GDP in Poland (years 2004–2017, in %)

Year	CA	CPA	CA+CPA
2004	-5.5	0.5	-5
2005	-2.6	0.3	-2.3
2006	-4	0.6	-3.4
2007	-6.3	1.1	-5.3
2008	-6.7	1.1	-5.6
2009	-4	1.6	-2.3
2010	-5.4	1.8	-3.6
2011	-5.2	2	-3.2
2012	-3.7	2.2	-1.5
2013	-1.3	2.3	1
2014	-2.1	2.4	0.4
2015	-0.6	2.4	1.8
2016	-0.5	1.1	0.5
2017	0.2	1.3	1.4

Source: Eurostat.

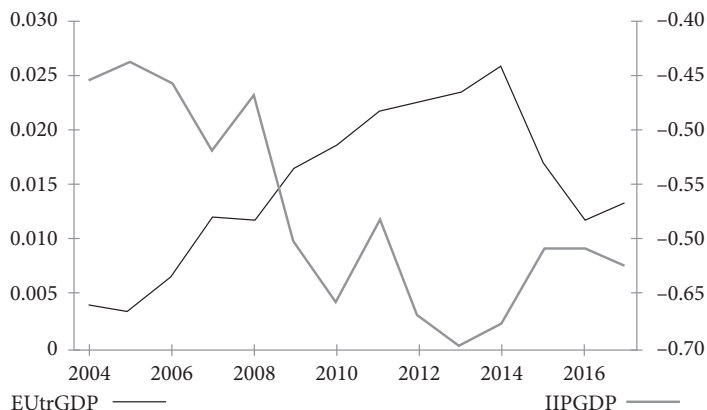


Figure 4. EU transfers revenues and the IIP in relation to GDP, in Poland in the years 2004–2017

Source: Own calculations based on Eurostat and NBP data.

transfers – the major components of CPA credits and balance, caused (when putting CA and CPA together) the prudential thresholds not to be exceeded in the years 2010–2011, and in the case of the previous years the external imbalance level diminished.

The second indicator taken into account was the relation of the net international investment position to GDP [IIPGDP]. Figure 4 shows this indicator with reference to the EU capital transfers credit to GDP [EUtrGDP].

The shape of variables suggests a high level of their covariance. The analysis has included the correlation coefficient, which was -0.89 in the years 2004–2017. The relation of IIP to GDP during this time period equalled between -0.69 and -0.43 and the relation of capital transfers to GDP between 0.003 and 0.026 , so one can observe no grounds for testing the relation between these variables, which could be significant from the statistical point of view. However, the presented data does not exclude a hypothesis concerning the positive impact of capital transfers on the improvement of the Polish external imbalance level in 2004–2017.

5. Capital transfers and investment in Poland

Because of the political and economic transformation, Poland since the 1990s has been in need of a higher level of investment outlay. EU transfers affected the value of investments in Poland after 2004. The MFF starting and ending

periods affected the level of public investments and companies' investment demand. Private enterprises were not the direct beneficiaries of a Cohesion Policy, but they adjusted their production capacities to a higher level of public investments. According to the National Bank of Poland assessments, public investment growth by 10 billion PLN annually expected by enterprises in Poland caused simultaneous private investment growth by 3.3 billion PLN. This resulted in an additional 14.6 billion PLN of private investments in total during the 8-year period (NBP, 2017, pp. 9–11).

The value of investments (gross capital formation) in Poland kept growing until 2009, but the speed of growth had a decreasing tendency. In 2009, 2013 and 2016 investment outlays dropped in relation to the previous years (see Figure 5). The considerable investment fall can be explained by the downturn in the global economy: the global crisis in 2008, the Eurozone crisis in 2010–2012, and in 2016 the dynamics of global trade reached its lowermost level since the explosion of the global economic crisis. The expectation of the low economic growth of Polish trade partners resulted in a fall of investment outlays of enterprises in Poland (NBP, 2017, pp. 9–11).

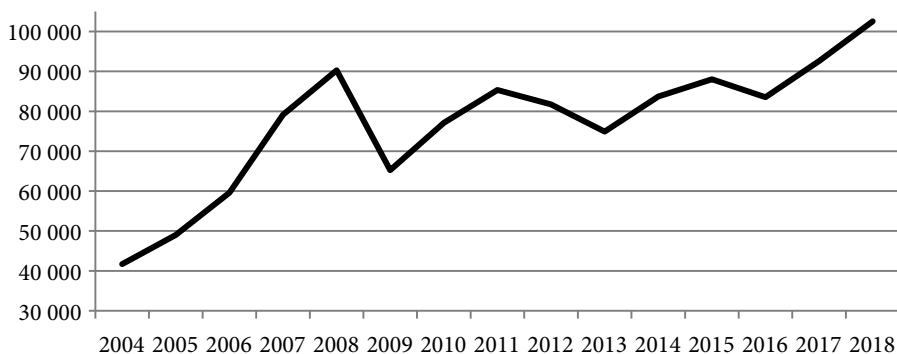


Figure 5. Gross capital formation [GFC] in Poland in million euros

Source: Own calculations based on the Eurostat data.

According to the NBP analysis, the Polish economy is strongly dependent on EU funds. Enterprises in Poland finance parts of their development expenditures thanks to investment grants or preferential loans from EU funds. They use EU funds support in the development of infrastructure and environmental protection areas both directly or indirectly. A low level of interest rate together with the Polish openness to global markets limited the effect of displacing private investments by the government sector (NBP, 2016, p. 5).

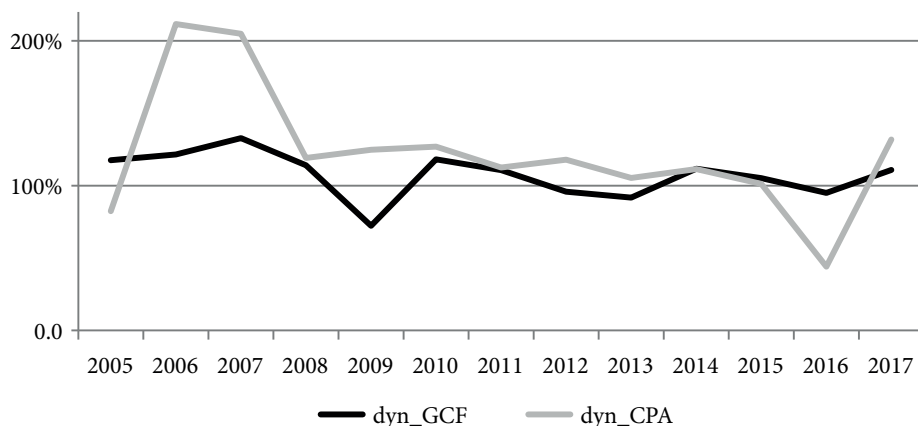


Figure 6. The gross capital formation dynamics ratio [dyn_GFC] as compared to the capital account balance dynamics ratio [dyn_CPA] in Poland

Source: Own calculation based on Eurostat data.

The capital account balances in Poland were determined by the capital revenues, which were composed mainly of EU transfers. A higher level of capital transfers dynamics indicators in 2005–2006 was the result of a low base effect – funds started to flow into Poland only in 2004. Except 2008 and 2015–2016 funds transferred from the EU to Poland grew at a higher rate than the growth of investments in the country. A decrease in EU capital

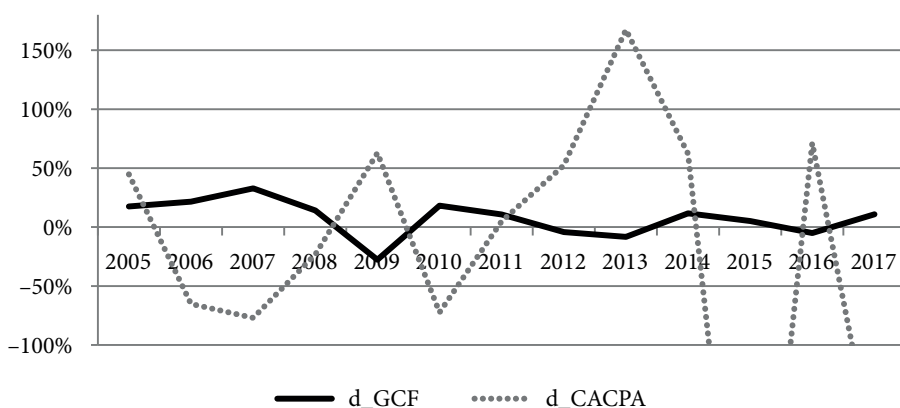


Figure 7. The rate of change of gross capital formation [d_GFC] as compared to the current and capital account balance rate of change [d_CACPA] in Poland

Source: Own calculation based on Eurostat data.

transfer values in relation to the previous year was noticed only in 2016 (see figure 6.) and coincided in time with the decrease in investment. EU capital transfer decreases can be explained by the change of the budget perspective in the EU and the difficulties related to the use of the new MFF funds, like new contests, and new priorities.

According to the absorption approach, balance improvement can occur through an increase of domestic savings or/and decrease of domestic investments [(4)]. In the case of Poland, the changes of CA&CPA balance and investments proceeded in accordance with these theoretical assumptions during the analysed period: a fall of investments rate of change [d_GCF] accompanied a growth in the rate of change of CA & CPA balance [d_CACPA] – see Figure 7.

Conclusions

Poland being a country which is transforming and not having rich natural resources had a low rate of domestic savings. The negative trade account balance enabled Poland in this period to increase the level of domestic consumption and private and public investments. The trade balance deficit had to be funded by foreign capital, which resulted in a negative IIP. The capital account surplus in a way, financed the current account deficit, but this surplus was not able to diminish the negative IIP (Dorosz, 2016, pp. 59–69). An increasing negative IIP can cause: (i) a risk of losing external payments balance, (ii) a risk of stagnation of the living standards of society and stagnation of the domestic economy (Dorosz, 2013, p. 199). According to the intertemporal approach international capital flows allow moving the expected future income to the present consumption. A deficit country can benefit thanks to any present consumption increase, and thus forfeiting future consumption. This approach explains why Poland used foreign funds to finance its domestic investments during the transformation period. The CPA transfers were one of the sources of CA deficit financing (compare to: Śliwiński, 2011, p. 66; 2013, p. 541). They filled the gap formed because of the lack of domestic savings, constituting, in contrast to the balance of payments' financial account liabilities, being an irreclaimable source of financing. The non-refundability of EU transfers is not complete. These transfers are connected with reverse transactions in the form of membership fees, which Poland must pay to the EU budget. But the relation of these fees to the value of received funds was in 2004–2017: 47.52 billion euros of payments to 143.71 billion euros of inflows, which makes the

premium equal 33% the value of received transfers. Poland has received 96.2 billion euros net during the analysed period (Ministerstwo Finansów [MF], 2018, pp. 1–4). These numbers indicate the important role of EU capital transfers in investment, balance of payments and external balance formation in Poland. Transferred funds are not an indefinite and stable source of funding of the Polish economy. They should be treated as interim ones and used to keep the goods and services account surplus and to increase Polish foreign assets, resulting in an improvement of the primary income balance.

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