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Iwona Maciejczyk-Bujnowicz
Uniwersytet Łódzki
e-mail: iwonabujnowicz@uni.lodz.pl

CHANGES IN CAPITAL FLOWS IN PROCESS OF INTEGRATION OF THE EUROPEAN UNION – SELECTED ASPECTS*

ZMIANY W PRZEPŁYWACH KAPITAŁU W PROCESIE INTEGRACJI UNII EUROPEJSKIEJ – WYBRANE ASPEKTY

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Summary: The paper aims at assessing the changes in flows of selected forms of capital under deepening financial integration in the European Union. EU member states are divided into two groups: members of the euro area and those outside of it. The analysis coincides with the establishing of the EU monetary union and covers years 1998–2011 and 2003–2013 for Poland. We have reviewed major theoretical concepts providing grounds for further considerations. Together with the progressing financial integration of the EU member states there is an increase in the overall value of financial flows measured with net IIP. The research method applied in this particular study includes the overview of theoretical concepts, literature review and a comparative analysis based on statistical data. Analyses of selected data revealed significant differences between developed and developing countries when it comes to various forms of net capital and its relation to the GDP based on the International Investment Position. The analysis of the degree of financial and trade integration of the euro zone countries compared to the Member States outside of the euro area demonstrated that the two groups are at two opposite extremes.

Keywords: International Investment Position, capital flows, financial crisis, financial integration, euro area, financial integration.

Streszczenie: Celem opracowania jest próba oceny stopnia zmian w przepływach wybranych form kapitału w procesie pogłębiającej się integracji finansowej w Unii Europejskiej. Kraje podzielono na dwie grupy: należące do strefy euro i pozostające poza nią. Analiza zbiega się z powstaniem unii walutowej w UE i obejmuje okres 1998–2011. Wraz z postępującą integracją finansową krajów należących do Unii Europejskiej następuje ogólny wzrost wartości przepływów finansowych mierzonych pozycją netto MPI. Zastosowana metoda badawcza w opracowaniu odnosi się do przeglądu koncepcji teoretycznych, analizy

* Paper financed under the research grant of the National Science Centre No. UMO-2013/09/B/HS4/01329 "Impact of Capital Imports upon Economic Growth".

literaturowej przedmiotu oraz analizy porównawczej na podstawie danych statystycznych. W wyniku przeprowadzonych analiz wybranych danych zauważono, że istnieją znaczące różnice w odniesieniu do poszczególnych form kapitału netto wobec PKB na podstawie międzynarodowej pozycji inwestycyjnej pomiędzy krajami rozwiniętymi i rozwijającymi się. Analiza stopnia integracji finansowej i handlowej krajów ze strefy euro w porównaniu z krajami spoza niej pokazała, że te dwie grupy znajdują się na przeciwległych biegunach. Ponadto, dokonano oceny międzynarodowej pozycji inwestycyjnej Polski na tle wybranych krajów Europy Środkowo-Wschodniej oraz krajów strefy euro.

Słowa kluczowe: międzynarodowa pozycja inwestycyjna, przepływy kapitałowe, kryzys finansowy, strefa euro, integracja finansowa.

1. Introduction

At the turn of the 20th and 21st centuries significant changes took place in external investment position in the global economy. Developing countries in Asia and in the Middle East improved their external investment positions, while European developing countries experienced changes in capital structure. Asian and Middle East countries recorded dynamic increase in financial surpluses. The rest of developing countries experienced considerable increase in the share of equity to total liabilities and strong accumulation of foreign exchange reserves. Countries regarded as developed strengthened their external investment position to GDP due to relatively higher share of liabilities in the IIP structure (Australia, Spain, United States) and relatively higher share of assets in IIP structure (Japan, Switzerland). When it comes to financial integration of developing countries, we may say that its scale is smaller than in developed countries. That is especially true of low level of financial integration with respect to debt. Further liberalisation of capital flows in these countries and further advances in the development of national financial markets may impact progress in further international financial integration.

The end of the 1990s was the period of dynamic increase in financial liquidity in the global economy. The development of financial markets, also capital markets and the banking sector, encouraged enterprises and public institutions to seek increasing amounts of capital in international markets. Cross-border capital flows broke up when the crisis began in 2008, which was also reflected in global trade turnover [Sula, Willet 2009]. Developed members of the euro zone, especially those which made their growth dependent upon the inflow of foreign capital, suffered the most from the lack of capital. In some countries, specifically in peripheral ones, credit boom in the market of consumer and mortgage loans caused, inter alia, by low interest rates, contributed to the speculative bubble in the real estate market. As a result of rapid increase in the risk of investing in foreign financial markets, capital, in particular portfolio capital, was flowing out of particular countries. From the viewpoint of the stability, the system is the most sensitive to developments in global markets. The latest crisis of 2008–2011 revealed weaknesses of progressing financial integration of the banking system not only in the United States but also in the EU. The beginning of the 21st century was also the period of powerful and dynamic development of the banking sector in the EU member states. The EU economy is largely based on the financial intermediation of banks. At the end of 2012 the assets of the banking sector accounted for ca. 350% of EU GDP. On top of that, securitisation of banks assets progressed, motivated by the development of capital markets, especially in the United States. In balance sheets bank loans gave way to securities. We need to stress that the stream of payments resulting from increased trade among countries caused, inter alia, by increased GDP was largely directed not only to the real sector but increasingly to the financial sector. The two sectors: financial and real one, started to go apart. This specific asymmetry of trade flows and the flows of payments dictated changes in the balance of payments of individual economies. National financial systems became resistant to the controls and operations of monetary and fiscal authorities. Free inflow and outflow of capital, in particular loans, intensified financial intermediation.

The paper tries to evaluate the changes in capital flows under the deepening financial and trade integration in the EU. We analysed net International Investment Position of the EU countries. The countries were divided into two groups: members of the euro zone and member states outside of it. The analysis coincides with the establishing of the monetary union in the EU and covers the period 1998–2011.

2. Overview of selected theoretical concepts of capital flows

Classical economy[1] is considered the first strand in the theory of economics, which looks at processes that take place among economies in a comprehensive way. The theory of international trade developed by D. Ricardo, theory of comparative advantage, assumed relative absence of capital mobility among countries. The theory of neoclassical economy started in 1871 as a result of the publication of W.S. Jevons [1871]. Its main representative was A. Marshall (*Principles of Economics*, 1890), who developed the marginal productivity theory. He assumed perfect competition, which leads to immediate self-regulation in the market, i.e. in the case of the balance of payments, all divergences from the equilibrium are corrected. Neoclassical theory assumes benefits resulting from complete liberalisation of capital flows. Although the development of neoclassical theory took place under the system of gold currency, nowadays many authors still use its achievements to explain some economic phenomena. Gold currency system and its operating conditions contributed to the first wave of globalisation of financial markets (1871–1913)

[1] The strand is represented by: A. Smith, 1776, *An Inquiry into the Nature and Causes of the Wealth of Nations*, marks the beginning of classical economics, D. Ricardo, 1817, *On the Principles of Political Economy and Taxation*, J.S. Mill, 1865, *Principles of Political Economics*, based on: [Janicka 2010].

connected with increased capital flows. It was generally approved that external, not internal, balance was the overriding economic goal of a given economy. The outbreak of World War I put an end to the system of golden currency. In 1936 J.M. Keynes [1936] laid down the grounds for a new theory of economics. Differently from the previous theories, he made references to the liberalisation of capital flows. According to him, financial markets should provide their participants with liquidity and the idea of financial investment is harmful. That coincided in time with the outbreak of the Great Depression in 1929. J.M. Keynes supported restrictions imposed on the free flows of capital among the countries, considering the flows one of the key destabilising factors.

From the theoretical point of view, an ideal situation is the one when the balance of payment is zero. In modern times it is hard to find an example of economy where domestic savings equal pending investment projects. That is the case of the so called “closed economy”. In open economies freely moving capital enables to finance investment when there is not enough capital in the home market. As a result, we have surpluses or shortages in the balance of payments. Moreover, under the absence of external balance it is hard to arrive at internal balance, both in the real and in the financial sectors. The model of general economic stability IS-LM supplements Keynes’s theory [Hicks 1937]. It describes the behaviour of the real and financial sectors in the internal market, for which it was vastly criticised. The IS-LM-BP model expanded by Mundell-Fleming shows the balance achieved simultaneously in internal and external markets. In this approach when there is disequilibrium in the balance of payment, restrictions may be imposed upon such capital flows, which threaten the stability of the balance of payments [Mundell 1968]. Pursuant to the assumptions of the IS-LM-BP model, taking into account the assumptions of the Keynes’s theory, the degree of liberalisation of capital flows (complete, partial or no liberalisation) with floating exchange rate enables effective monetary policy. On the other hand, if we adopt a fixed exchange rate regime, monetary policy is ineffective. If, however, for the fixed exchange rate model we pursue an expansive fiscal policy, its effectiveness will be the highest under partial liberalisation of capital flows. The dichotomy of using many solutions was applied in the idea of “Impossible Trinity”. It means it is impossible to have all three of the following at the same time: stabilisation of the exchange rate, independent monetary policy, and full liberalisation of capital flows. Monetarism emerged after World War II. The main representative of the monetarist theory is M. Friedman [1957], who spoke in favour of economic liberalism. He criticised theoretical assumptions of the far-reaching Keynes’ interventionism. After the collapse of the Bretton Woods system the volume of international flows increased. Individual countries started eliminating barriers to it. Additionally, in 1990 Lucas [Lucas 1990] published an article, in which he highlighted certain relationship that was termed the *Lucas paradox* in literature. He noticed that capital, contrary to theoretical assumptions, flows from poor to rich countries, not the reverse. Thus, he challenged conclusions of the neoclassical theory, according to which we expect capital to flow to poor countries from rich countries better equipped in capital. The past decade has demonstrated the challenges that international capital flows can pose for financial stability. Between 2002 and 2007, annual gross international capital flows rose from 5% to 17% of world GDP, and the network of cross-country financial linkages became increasingly complex [Hoggarth, Mahadeva, Martin 2010].

3. Trends in external capital structure

Since the 1970s and 1980s in developed countries we have observed increasing share of liabilities in GDP (Total Liabilities/GDP). As of the beginning of the 1990s until the early 21st century the share of equity capital in GDP dynamically increased (EQI = (FDI + Portfolio Equity)/GDP). Between the 1970s and 2004 the EQI ratio increased by ca. 40 p.p. (from ca. 5% of GDP to ca. 45% GDP) in developed countries while in developing countries the increase reached ca. 20 p.p. (from ca. 10% GDP to ca. 30% GDP). Interestingly, between the 1970s and mid-1980s developing economies covered by the study reported decreased (by ca. 50%) share of equity in total capital structure (Equity/Total Liabilities) from ca. 35% to ca. 16–18% on average. In rich countries the drop was slightly more moderate (ca. 10 p.p.) and represented ca. 25% of liabilities. Since the 1990s both groups of countries demonstrated high rate of growth of equity in capital structure. In rich countries the increase of equity in liabilities reached on average ca. 40% in 2000 while later on its proportion decreased to ca. 30%, contrary to the rest of countries, where its share increased to ca. 50% in total liabilities.

P.R. Lane and G.M. Milesi-Ferretti [2000] reviewed literature concerning the essence and structure of external investment position of countries. Basing on that, they selected potential determinants of the financial structure of the balance of payments in developed and developing countries. Special attention was paid to the relation between debt structure and equity (FDI + Portfolio Capital). The analysis of results obtained from the regression function allowed them to formulate interesting conclusions. One of them says that relatively bigger countries with a developed financial market and open to trade have externally diversified financial structure (external diversification). The group of developing countries is dominated by diversified structure of liabilities. Both developed and developing countries from the group of high GDP *per capita* enjoy higher levels of assets and liabilities and usually are bigger creditors than smaller countries. According to the authors [Lane, Milesi-Ferretti 2000] openness to trade favours capital flows of all types, however, equity flows, in particular FDI, slightly dominate debt. Summing up, we may say that the size of the country, economic development and the development of capital market encourage the inflow of equity capital. Other researchers [Faria et al. 2006], as a result of horizontal and time-based analysis of economies, have selected factors decisive for the structure of liabilities of IIP in high-income and other countries.

The authors distinguished two periods: 1996 and 2004. From the group of studied variables they selected foreign liabilities to GDP ratio, the coefficient describing the share of equity in total liabilities as well as the FDI and equity to GDP ratio. Results of calculations for both studied periods are very close, which helps us draw common conclusions. From the 1970s until mid-1980s in selected countries the share of total liabilities in GDP was very similar and represented ca. 25–30% up to ca. 50% GDP. From ca. mid-1980s on, the trajectory of liabilities owned by rich countries and other countries started to diverge. Rich countries have a much higher share of liabilities in the GDP (in 2004 they exceeded 140% share of liabilities in the GDP) compared to other countries, for which analysed ratio reached ca. 60% GDP over the same period. Moreover, the increased share of equity in total liabilities of the balance of payments positively correlates with the quality of institutional changes in researched countries. It was also observed that bigger countries have relatively smaller share of foreign liabilities and higher share of portfolio capital in total liabilities. Horizontal analysis for 2004 revealed positive correlation between equity and bigger openness to trade. P.R. Lane and G.M. Milesi-Ferretti [2006], based on data originating from 145 countries from the period 1970–2004 conducted a synthetic analysis of data and results of calculations. Their attention was paid to the structure of assets and liabilities of the IIP and to the attempt to identify trends in external financial structure of these countries. To this end, the authors used ratios that assess the level of international financial integration. One of them is the total external assets and liabilities to GDP ratio. In general terms, we may conclude that results obtained for developed and developing countries are close. There was a 7-fold increase in the ratio representing the level of international financial integration, from ca. 45% GDP in 1970 to over 300% GDP in 2004. Obtained results also demonstrated that at the turn of the centuries there were substantial changes in external investment position of analysed countries.

B. Gruić [2013] made an attempt to identify the determinants of the IIP of selected countries in the light of progressing financial globalisation. Quarterly data cover the period from the 4th quarter of 1997 until the 2nd quarter of 2004. Analyses were conducted for EU member states which do not belong to the euro area: the Czech Republic, Hungary, Poland, Slovakia, Slovenia, Bulgaria, Croatia, and Romania. He decomposed the net IIP for the group of countries covered by the analysis. From the end of 1997 the FDI/GDP (Foreign Direct Investments/GDP) ratio for selected countries decreased from −0.51 to −1.26 in July 2004, while the ratio of portfolio investments to GDP (Portfolio Investments/GDP) recorded −0.38 in 1997 and −0.54 in 2004. Other investments to GDP (Other Investments/GDP) ratio was −0.49 in 1997 and −0.62 in 2004. Special attention should be paid to the long-run perspective of the return on investment reflected in the FDI. Moreover, the level of international financial integration was analysed for countries included in the study. Countries with higher levels of gross assets and liabilities to GDP represent higher level of financial integration (IFI = (A + L)/GDP). At the same time IFI and

EQI evolution was shown (Equity investments; EQI = (EQA + EQL)/GDP)) over the period 1997–2004. Data analysis resulted in the conclusion that at the level of portfolio capital financial integration EQI increased more than twofold from 0.6 to 1.36, while financial integration measured with IFI increased from 3.22 to 4.90. Against this backdrop, the relationship between financial and trade integration was examined. For Romania, Bulgaria, and Hungary the results demonstrated that trade integration is not the pre-condition for closer financial integration of economies. For the rest of the studied countries, trade integration played the crucial role in progressing financial integration. In conclusion B. Gruić [2013] states that assets and liabilities depend on both domestic and foreign factors which include: openness to trade, size of the country, capital market development, and degree of financial liberalisation.

4. Data and methodology

4.1. IIP of EU countries in the process of financial and trade integration

M. Obstfeld and A. Taylor [2002], and P.R. Lane and G.M. Milesi-Ferretti [2003] constructed a simple measure used to estimate the degree of international investment integration of a given country (IFI = (FA + FL)/GDP). Results obtained from calculations enabled to initially assess the degree of integration. Generally speaking, the higher is the ratio, the deeper international financial integration of a given country. EQI ratio (EQI = (EQA+EQL)/GDP) helps evaluate financial integration against equity of a given country with the rest of the world. Like the previous ratio, the higher it is, the deeper financial integration measured with the equity to GDP ratio. By analogy, comparisons were made using the trade integration ratio (total exports and imports/GDP).

Below we present statistical analysis of data and try to assess the relationships between international financial integration and financial openness of Poland and selected Central and East European Countries (CEECs). Among the CEECs we focused on: Bulgaria, Croatia, the Czech Republic, Lithuania, Poland, Romania, and Hungary. Euro area consists of 18 economies. The United Kingdom, Denmark and Sweden were not included in the analysis. Below, we can see the average for the above mentioned countries for the period from 2004 till 2011 (Figure 1). 0*X* axis gives average openness to trade over the period 2004–2011 while 0*Y* axis represents average financial integration.

We may note that the euro area countries compared to non-euro countries remain at opposite extremes. While in the single currency countries (EA) financial integration was on average 3.23 over the years 2004–2011, in CEECs (nEA) the ratio amounted to 1.86. Hungary was the only exception, as their financial integration was on average 3.80 with openness to trade ratio of 1.55. The degree of financial integration of the rest of EU Member States outside of the euro area ranged between

1.0 and 2.0. Interestingly, the openness ratio for Croatia was 0.88, for Poland 0.82, and for Romania 0.76. Calculations allow us to conclude that the period 2000–2011 witnessed strong financial integration of Poland with international market. That was true of both financial integration IFI and equity integration EQI.

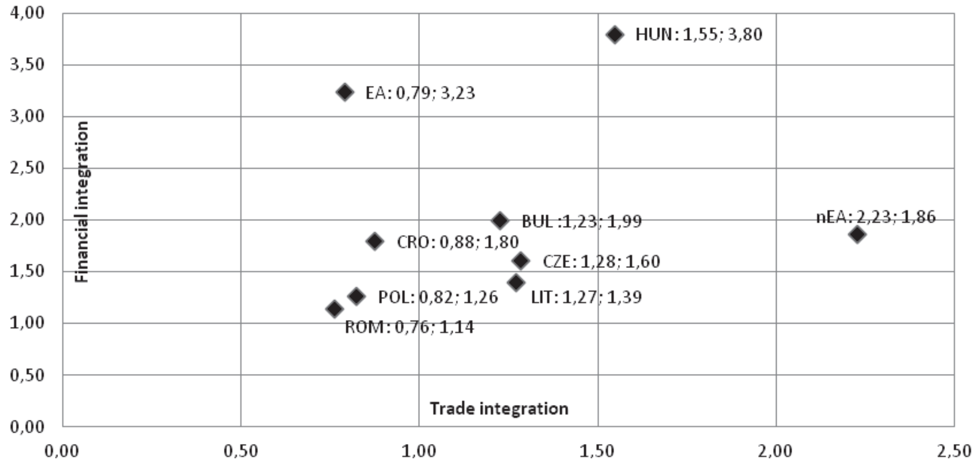

Figure 1. International financial integration and trade integration of the EU (2004–2011)

Source: author's estimates based on the NBP (National Bank of Poland) [www. nbp.pl], Eurostat, and IMF data [www.imf.org].

The results of studies conducted by R. Hausmann and E. Fernandez-Arias [2001], and E. Borensztein, J. De Gregorio and J.W. Lee [1998] demonstrated positive impact of relatively increasing share of FDI in IIP liabilities of a given country. The higher it is, the more stable and safe the country in the eyes of potential investors. Literature describes it as „good cholesterol". The case of foreign exchange reserves is similar. If their share in foreign assets is relatively high, their importance as a preventive measure protecting against the risk of crisis is higher. When it comes to the impact of portfolio equity upon the risk of crisis, results of studies are inconclusive. Current account deficit oscillating around 4% of GDP is the variable playing the major role in the prediction of crisis in most studied specifications. In general terms, as demonstrated by the decomposition of external net investment position of analysed countries into net equity and net debt, net debt liabilities is the most relevant determinant of net external investment position, which importantly affects the risk of crisis.

4.2. IIP net analysis

Many interesting conclusions can be drawn from the analysis of IIP structure of the euro zone countries (EA) and the CEECs outside of the euro area (nEA). Changes that took place over recent 14 years concern individual components of IIP liabilities (Table 1).

Table 1. Net IIP to GDP (%) of the euro area countries (EA) and CEECs (nEA) in 1998–2011

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Net Foreign Assets/GDP														
nEA	−0.28	−0.33	−0.34	−0.31	−0.36	−0.41	−0.48	−0.46	−0.61	−0.71	−0.64	−0.82	−0.78	−0.67
EA	−0.10	−0.07	−0.08	−0.07	−0.12	−0.13	−0.13	−0.10	−0.14	−0.17	−0.18	−0.21	−0.18	−0.18
Foreign Direct Investments net/GDP														
nEA	−0.17	−0.21	−0.25	−0.27	−0.31	−0.33	−0.38	−0.34	−0.42	−0.45	−0.36	−0.47	−0.46	−0.38
EA	0.01	0.05	0.05	0.06	0.03	0.01	0.01	0.04	0.06	0.07	0.07	0.10	0.11	0.12
Portfolio Investments net/GDP														
nEA	−0.11	−0.12	−0.11	−0.11	−0.11	−0.13	−0.17	−0.16	−0.17	−0.15	−0.10	−0.15	−0.17	−0.16
EA	−0.10	−0.13	−0.12	−0.12	−0.14	−0.14	−0.14	−0.14	−0.20	−0.23	−0.22	−0.29	−0.28	−0.28
Other Investments net/GDP														
nEA	−0.14	−0.14	−0.14	−0.09	−0.13	−0.17	−0.15	−0.13	−0.16	−0.21	−0.24	−0.33	−0.31	−0.28
EA	0.00	−0.02	−0.06	−0.05	−0.04	−0.03	−0.02	−0.02	−0.02	−0.02	−0.05	−0.04	−0.04	−0.03

Source: author's estimates based on IMF data [www.imf.org].

The course of the NFA/GDP data for the euro area countries oscillates between −0.10 and −0.18 (with the exception of −0.21 in 2009). The net balance of the investment position to GDP for non-euro area countries starting from 1998 (−0.28) deepens year to year out and reached −0.82 in 2009 and −0.67 in 2011. The dynamics is almost 4 times higher than in the euro area (−0.13) and amounts to −0.51 on average.

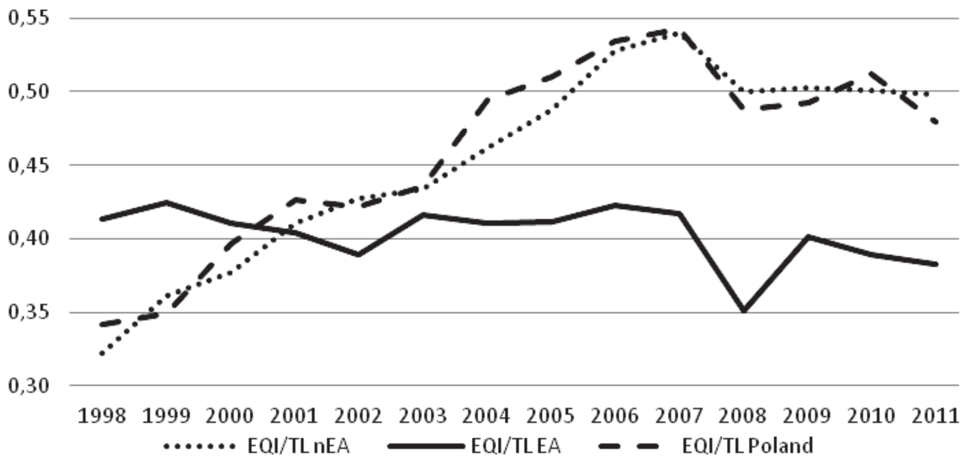

Figure 2. Equity in IIP liabilities (EQI/TL) in the euro area and in the CEECs in 1998–2011

Source: author's estimates based on NBP and IMF data [www. nbp.pl; www.imf.org].

It is worth stressing that FDIs account for the biggest share of negative NFA balance in developing countries. In developed countries the FDI/GDP balance showed positive values in each year covered by the study and amounted from 0.01 GDP in 1998 to 0.12 GDP in 2011. Balance totals of net portfolio capital to GDP in both groups of countries were close since 1998 (nEA: −0.11 GDP; EA: −0.10 GDP) until 2006 (nEA: −0.17 GDP; EA: −0.2 GDP). Since 2007 we have observed the divergence of the trajectories for both groups of countries and the dispersion of net balance of PI/GDP across the countries of the euro area (EA: −0.23 GDP) and the CEECs (nEA; −0.15 GDP), which was increasing year to year to reach respectively: EA: −0.28 GDP; nEA: −0.16 GDP in 2011.

The analysis of data describing the relation of total FDI and short-term capital to TL (Figure 2) shows that the changes in their percentage share in the countries of single currency are relatively uniform, with the exception of 2008 when it dropped by 7 p.p. compared to 2007.

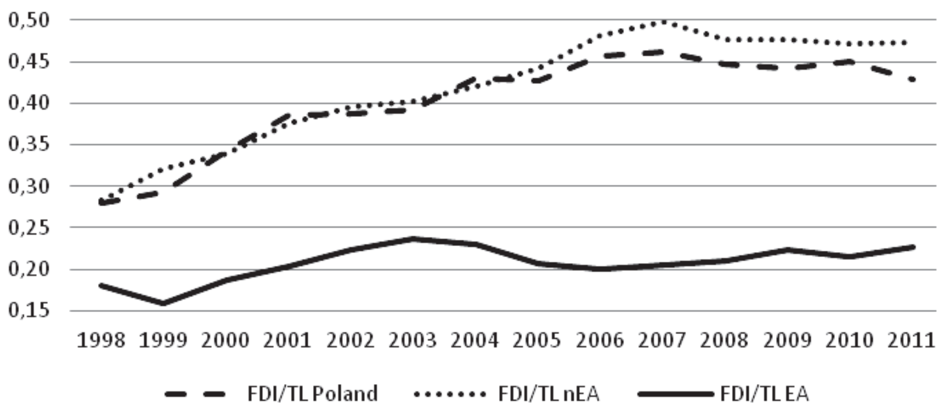

Figure 3. Share of FDI in equity in the euro area countries and in CEECs in the years 1998–2011

Source: author's estimates based on NBP and IMF data [www. nbp.pl; www.imf.org].

In selected CEECs countries over the decade from 1998 to 2007 this category of capital increased by 20 p.p., which may evidence positive perception of political and economic perspectives of this group of countries. Since 2004 the difference to the countries from the euro zone has been ca. 10 p.p. on average. Poland does not differ significantly from the average for the CEECs. The collapse in 2008 in this group of countries was 4 p.p. We should stress that the FDI represents the biggest share of this financial position in total liabilities with the average share in the CEECs of 47.0% compared to 21.0% in the euro zone over the period 2004–2011. When analysing data concerning the share of FDI in the capital structure (*FDI/EQI*) we may note that between 2004 and 2011 the ratio was almost 90% in the group of selected CEECs while in the euro zone economies it was ca. 52% of total equity (*EQI/TL*). It is illustrated in Figure 3.

The analysis of the structure of IIP liabilities in countries included in the study can be supplemented with the identification of debt to total liabilities ratio (*DEBT/TL*). As we can see from the below presented data, average share of debt in total liabilities in the CEECs systematically decreases from 68% in 1998 to 46% in 2007 to stabilise finally in the following years around 49% (Figure 4). We need to stress that in the times of crisis of 2007–2010 financial markets reported shift from equity investment towards less risky debt securities.

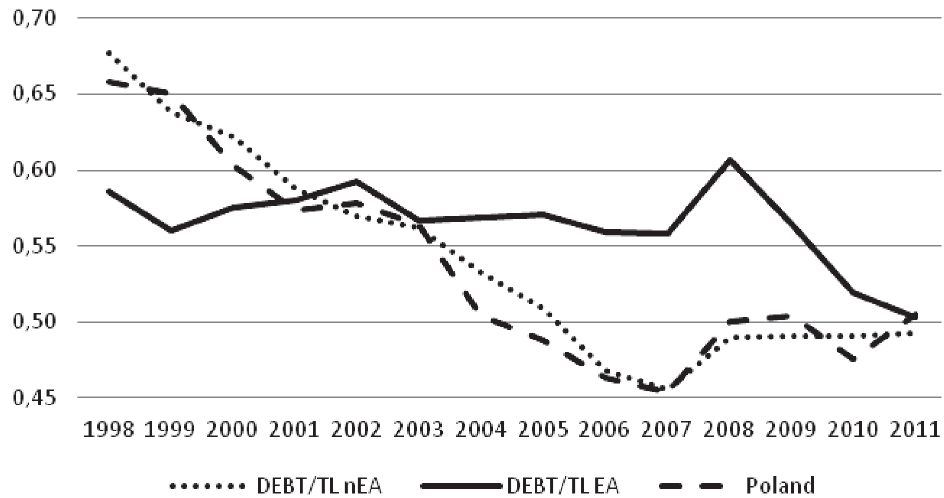

Figure 4. Share of debt capital in liabilities in euro area countries and in the CEECs in the years 1998–2011 (%)

Source: author's estimates based on NBP and IMF data [www. nbp.pl; www.imf.org].

Summing up: over the period 1998–2011 both the euro area countries and the countries which are not its members recorded significant changes in IIP structure. Characteristically, the turning point for the present IIP structure in analysed countries was 2000. While in the case of equity until 2011 we could clearly see its systematically increasing share in the countries from outside of the euro area, the pattern for debt was reverse. As of 2008 the share of debt in liabilities dynamically decreased from 61.0% in countries members of the monetary union and approached the share of debt in countries from outside of the euro zone in 2011 reaching 50.0%.

In Poland net balance of short-term capital may be on the negative side in 20072010. Portfolio capital was inflowing into Poland during the latest financial crisis. It means investors decided that financial market in Poland was stable and relatively profitable. In 2008 portfolio capital rapidly flew out of Poland. Over the same period the share of other net foreign investment in GDP increased by 8.3 p.p. compared to 2007. The above observations are complemented with the analysis of decomposed Poland's IIP liability positions both in terms of their structure and dynamics over the period 2003–2013. The structure of liabilities of Poland's IIP showed relatively stable share of its individual components over the period covered by the study. Foreign direct inward investment represented the biggest share and on average accounted for 42.3%. Another significant financial item was portfolio investments (PI), which represented on average ca. 26.7% in the analysed period. Since 2003 we can observe their systematic increase with the exception of 2008 (20.5%) when they rapidly shifted away from Poland to reach 29.3% in total liabilities at the end of 2013. Attention should also be paid to the analysis of data concerning other foreign investments. Their average annual share in IIP liabilities was 30.3% (it was the highest in 2003 – 39.3%, and the lowest in 2006 – 25.7%). Other foreign investments (OI) include granted commercial loans, financial borrowings, cash in current accounts and deposits made in Poland and not included in other categories. The moment Poland joined the European Union, the share of OI was relatively high (over 30%). Then its share decreased in favour of portfolio investments and FDI. Figure 5 presents the dynamics of Poland's IIP liabilities where we can see that other investments (OI) rapidly increased to 35% in 2008 and in the following years on average amounted to ca. 29.5%.

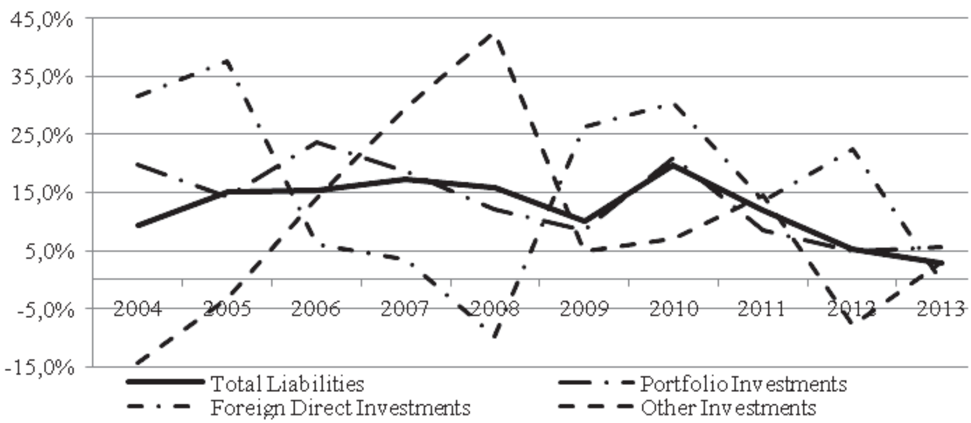

Figure 5. Dynamics of Poland's IIP liabilities changes over the period 2003–2013 (previous year = 100)

Source: author's estimates based on NBP and IMF data [www. nbp.pl; www.imf.org].

In line with previous observations, the biggest changes in Poland's IIP liabilities over time in the period 2003–2013 were reported in portfolio investments and other foreign investments. The share of financial derivatives was neglected in the analysis due to the fact that on average it amounted to 1.4% for assets and 0.7 for liabilities in the period covered by the study. Noticeably, the biggest changeability amongst analysed variables was recorded for portfolio investments and other foreign investments. From Poland's EU accession in 2004 until 2008 other foreign investments were dynamically increasing by over 104.0%. Subsequent increase, following the drop in 2009, took place within 4 years until 2012, which confirms earlier formulated conclusions. Moreover, the analysis of Poland's IIP is complemented with the structure of gross assets. The most significant change in the structure of assets of Poland's international investment position that took place over the period of eleven years between 2003 and 2013 was the increase in the share of Polish outward foreign direct investment by ca. 20 p.p. (from 3.7% in 2003 to 25.2% of assets in 2013). The share of other foreign investments almost halved from 30.9% in 2003 to 16.4% in 2013. Looking at the importance of individual categories in the structure of financial assets of Poland's IIP we can see that portfolio investments outside of the country represented on average 8.6% annually with the exception of step-wise increases before the crisis, i.e. in 2006–2007 when they reached 11.7% and 14%, respectively. To sum up, the analysis of decomposed Poland's IIP liability positions both in terms of their structure and dynamics over the period 2003–2013 showed relatively stable share of its individual components over the period covered by the study.

5. Conclusions

The paper is an overview of basic concepts of economic theories addressing international capital movements. At present, as a result of dynamic changes in the global economy we witness important changes in international capital flows. By taking various forms, these flows reflect the structure of international investment position of individual countries. By analysing the ratios calculated based on collected statistical data we may conclude that there are substantial differences in capital flows and in the structure of IIP between developed and developing countries. The analysis of financial and trade integration of euro zone countries compared to the EU Member States from outside of the single currency area demonstrated that the two groups are at opposite extremes. Over the period 2004–2011, financial integration in countries using the single currency (EA) was on average twice higher compared to the CEECs (nEA). Moreover, in the period 1998-2011, both euro zone members and countries outside of the single currency area reported considerable changes in the structure of IIP. Portfolio investments of countries-members of the monetary union targeting countries from outside of the area were increasing in importance. The crisis which began in 2008 changed the trends in equity – debt relationship. While in the countries outside of the euro zone the share of debt increased, it decreased for monetary union members. In general terms, the value of IIP assets and liabilities increases. Negative balance of financial flows of international investment position to GDP deepened in analysed countries, in particular in the CEECs. Increasing openness to trade, financial development, financial and trade integration are reflected in capital movements among countries. We need to stress that between 2000 and 2011 Poland got strongly integrated with international market in terms of both financial and trade integration with respect to equity EQI.

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