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Comparison of External Exposure of Central and Eastern-European States as a Factor Threatening Financial Security of Their Economies

Analiza porównawcza zewnętrznej ekspozycji państw Europy Środkowo-Wschodniej jako czynnika zagrażającego bezpieczeństwu finansowemu ich gospodarek

• Abstrakt •

Gospodarki państw Europy Środkowo-Wschodniej cechują dość silne międzynarodowe powiązania ekonomiczne i finansowe, wskazujące na ich uzależnienie od zagranicznego kapitału i koniunktury na światowych rynkach, oraz skutkujące wrażliwością na zewnętrzne szoki. Odporność gospodarek państw EŚW ograniczyło dodatkowo ich względnie szybkie i silne otwarcie się na proces globalizacji i europejskiej integracji. Wszystkie poddane analizie państwa posiadają niemałe zadłużenie zagraniczne (sięgające 55–139% PKB), dość mocno ujemną międzynarodową pozycję inwestycyjną netto (stanowiącą 25–71% PKB), wysokie pasywa zagraniczne (na poziomie 85–350% PKB), wysoki stopień otwarcia (eksport oraz import towarów i usług sięgający 41–94% PKB), niemałe zaangażowanie zagranicznego ruchliwego kapitału portfelowego (nawet do 32% PKB), czy silne finansowe wsparcie z unijnego budżetu jako beneficjentów netto (ze skumulowaną wartością otrzymanych funduszy z budżetu UE w latach 2004–2015 na poziomie 21–42% PKB). Pamiętać przy tym należy, że Litwa, Łotwa, Estonia, Słowenia i Słowacja są członkami strefy euro,

• Abstract •

Central and Eastern-European countries are strongly linked to the international economic and financial systems, which results in their dependence on foreign capital and on the upturn in the global markets. This situation also makes them vulnerable to external shocks. Resilience of the economies of CEE countries was additionally diminished by their relatively quick and uncompromising opening up to the process of globalization and European integration. All the economies subject to scrutiny have quite a substantial external debt level (reaching 55––139% of GDP), their net international investment position is quite strongly in the negative (constituting 25–71% of GDP). They are also characterized by high level of foreign liabilities (85–350% of GDP), a significant degree of trade openness (export and import of goods and services amounting to 41–94% of GDP), considerable rate of foreign liquid portfolio investments (even as much as 32% of GDP). Another common feature is the strong financial support received from the EU budget, with CEE countries being its net beneficiaries (with the accumulated value of funds received from the EU

czyli posiadają walutę międzynarodową, co poprawia ich zdolność kredytową i wzmacnia zaufanie rynków. Nie bez znaczenia dla inwestorów jest też fakt zaklasyfikowania przez MFW całej tej piątki państw oraz Czech do grona gospodarek wysoko rozwiniętych.

Dlatego stwierdzić należy, że polską gospodarkę charakteryzuje względnie silna zewnętrzna ekspozycja w stosunku do posiadanej wiarygodności, wzmagająca jej wrażliwość na szoki i ograniczająca odporność na nie. Tłumaczy ona po części wyższą wycenę premii za ryzyko inwestycyjne w Polsce, co ogranicza jej możliwości i perspektywy rozwojowe w porównaniu do innych gospodarek EŚW. Podkreślić przy tym należy, że przy ocenie zewnętrznej ekspozycji uwzględnić należy zarówno jej specyfikę, ale również osiągniętą stabilność gospodarczą i polityczną, a przede wszystkim ich ocenę przez rynki finansowe.

Słowa kluczowe: zewnętrzna ekspozycja, stabilność finansowa, wiarygodność, bezpieczeństwo finansowe, odporność i wrażliwość na szoki

budget in 2004–2015 at the level of 21–42% of GDP). It should be borne in mind that Lithuania, Latvia, Estonia, Slovenia and Slovakia are members of the Eurozone, i.e. operate an international currency, which improves their creditworthiness and augments the trust of the global markets. What seems not without significance for investors is the fact that the IMF classified these five CEE countries – as well as the Czech Republic – as advanced economies.

In light of the above, it should be stated that the Polish economy is characterized by a relatively strong external exposure relative to the creditworthiness the country boasts. This exposure increases Poland's vulnerability to shocks and makes it less immune thereto. These circumstances partially explain the higher estimation of the risk premium for investments in Poland, which reduces the state's opportunities and prospects of development in comparison with other CEE economies. It should be stressed that when assessing the external exposure one must take into account not only its particular characteristics, but also the economic and political stability of a given country – or, more specifically and importantly, their assessment by financial markets.

Keywords: external exposure, financial stability, creditworthiness, financial security, resilience and vulnerability to external shocks

Accession to the European Union precipitated and intensified the process of external economic and financial dependence of the economies of Central and Eastern Europe (hereinafter referred to as CEE states), which was a consequence of the strengthening trend of globalization and internationalization of enterprises. This relatively quick accession opened up access to foreign markets and sources of funding – however, it did not allow for proper strengthening of internal economic structures. This gave rise to a considerable level of external dependence in CEE states, making them vulnerable to external shocks and weakening their resilience thereto. The purpose of the present study is a comparative analysis of external exposure of Central and Eastern-European states that are members of the

European Union[1], with the particular emphasis placed on the peculiarities of the Polish situation. For the needs of the above study, an analysis of statistical data in selected economic categories was conducted. On the basis thereof, by inductive reasoning, an assessment was made as concerns the advantages and disadvantages of the present external exposure of various CEE states. Moreover, an attempt made to identify the risks pertaining to the current situation.

External Debt

The most popular economic category revealing the level external debt of a state economy is, very simply, its external debt. Due to limited access to external sources of funding and only minor international economic collaboration while part of the Eastern Bloc, CEE states commenced a dynamic process of getting indebted on foreign markets only in the 1990s – that is why their external debts may seem insignificant as compared to other countries, especially mature Western economies. Still, it should be borne in mind that with their considerably lower creditworthiness and overall capacity to service debts (comparted to these of developed economies) and rapidly accumulating external (as well as internal) debt, this external debt is not low at all in absolute terms. It reaches from tens to hundreds of USD billion per state – see Table 1. Due to considerable differences in the size of CEE state economies, a more reliable comparison is between their respective external debt in relation to GDP or between debt *per capita*. The latter is particularly important from the point of view of a statistical tax payer as, after all, the total amount of obligatory contributions to the state depends on, inter alia, the cost of servicing public debt, inclusive of external debt. It turns out that external debt of CEE states, despite their respective short presence on the global "debt market" does not significantly diverge from the debt incurred by other countries in the world. All CEE economies are listed between 25th and 51st position on the ranking of the most externally indebted countries in the world (ranked by debt to GDP ratio, out of 76 countries whose nominal external debt amounted to over USD 20 billion according to the data for 2015 provided by the World Bank; Redo, 2017a). It is no hardly a surprise seeing that the external debt of four CEE states exceeds 100% of their GDP (the case of Latvia, Hungary, Slovenia and Croatia); the debt-to-GDP ratio of six other countries oscillates between 69–93% GDP, and even in

[1] That is, Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia and Hungary.

the relatively least indebted Romania, the amount of external debt reaches 55% of total GDP (see: Table 1).

Table 1. External debt of CEE states (as at the end of 2015)

	Billions of USD	% GDP	per capita USD	Short- -term	Long- -term	FDI*	External debt of general government sector**
	1=4+5+6	2	3	4	5	6	7
CEE 11	1 010,6	79%	9 787	18,4%	56,6%	25,1%	34,7%
Latvia	37,6	139%	18 996	52,4%	36,8%	10,8%	20,0%
Hungary	157,2	129%	15 971	9,9%	47,0%	43,1%	31,9%
Slovenia	48,9	114%	23 717	18,1%	74,1%	7,9%	51,5%
Croatia	49,4	101%	11 754	8,1%	79,9%	12,0%	35,0%
Estonia	20,9	93%	15 907	50,1%	31,4%	18,5%	7,6%
Slovakia	73,2	84%	13 494	24,8%	54,8%	20,4%	39,4%
Bulgaria	38,0	76%	5 288	22,6%	41,1%	36,3%	16,0%
Lithuania	30,8	75%	10 618	35,4%	53,0%	11,6%	50,1%
Poland	330,0	69%	8 686	11,1%	64,5%	24,3%	41,3%
Czech Republic	126,2	68%	11 962	32,0%	43,2%	24,8%	22,5%
Romania	98,5	55%	4 969	12,6%	63,0%	24,4%	34,7%

* external debt arising from direct investments made by a foreign company in business interests in a given country

** external part of the public debt (and more strictly speaking, the debt of general government sector)

Source: own analysis on the basis of World Bank data.

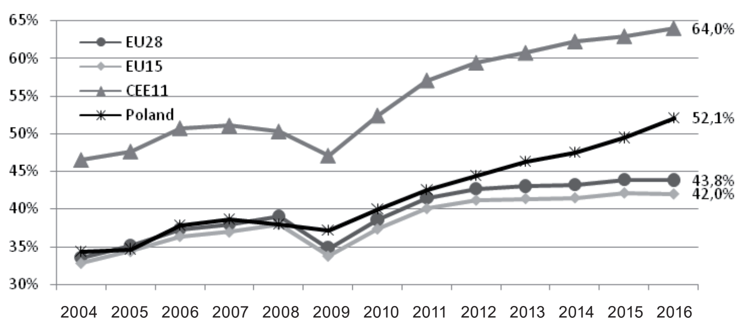
The most externally indebted economy among CEE states is that of Latvia. Its external debt at the end of 2015 reached 139% GDP; what is more, over 52% of that debt is of short-term nature. Only 20% thereof is the debt of the general government sector, which additionally augments the risk and vulnerability of this economy. The situation is similar in Estonia, where the external debt is somewhat lower (93% GDP); but it is characterized by an equally risky debt structure (50,1% is short-term debt and only as much as 7,6% is the general government sector debt). In the case of the next two most externally indebted states, Hungary and Croatia respectively, the share of short-term debt is very low (it does not exceed 10%) and the share of debt of the general government sector is higher which can exert a stabilizing effect. (However, as evidenced by the recent bankruptcy of Greece such effect can be alleviating only to a limited degree.) Compared to such data for other CEE states, the external debt of Poland does not seem to be that

high (still, it should be emphasized that it amounts to as much as 69% GDP) and its structure is relatively safe. The share of short-term debt is only 11,1%, while the debt of the general government sector amounts to as much as 41,3% of the total. When calculating the amount of external debt per capita, Poland with the result of USD 8,7 thousand has the third lowest debt per capita value among the CEE states (see diagram 1).

Trade Openness

A relatively high external debt of CEE states despite their short history as free-market economies stems from openness of those states to international cooperation and to foreign capital from the very beginning of the transition process,. Consequently, the ratio of value of exports and imports relative to GDP (see: Diagram 2) is high, which makes their respective economies highly dependent on the situation in the foreign markets and sensitive to any disturbances there. The economies of 11 CEE states jointly export 64% of their overall GDP – for the EU15 countries, this amounts to only 42% of their overall GDP. Furthermore, in the case of CEE states this ratio seems to have spiked since the crisis of 2008. At this point what should be underlined is the high, and still growing in some states, incidence of VAT theft in the form of carousel fraud which artificially raises the exports statistics (European Commission, 2016; Keen, 2013; Poniatowski, 2016). However, the trade openness of CEE countries was higher (for years) than the already high level of trade openness characterizing the EU15 countries, the latter in turn showing greater openness than other major economies outside EU.

Diagram 1. Exports of goods and services in Poland compared to European Union averages in the years 2004–2016 (% GDP)

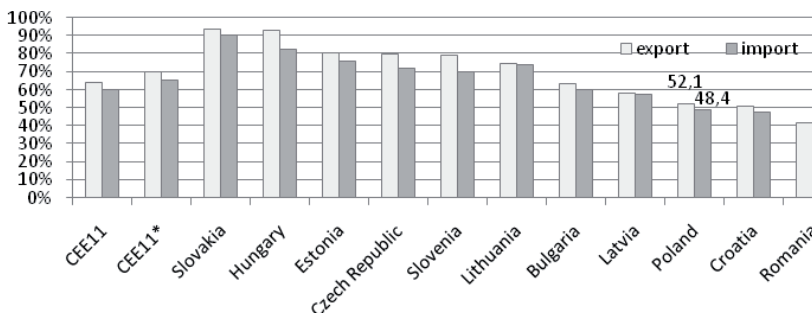


Source: own work on the basis of data provided by Eurostat.

It should be noted that the trade openness of Poland is lower than that of the majority of CEE states, and more in line with the average for the EU15 economies (see: Diagrams 1 and 2). Nonetheless, since the crisis of 2008 statistics show its stronger growth and steadily increasing difference to the EU15 average. As was noted above, this situation seems to be strongly connected to difficulties in VAT collection and the relatively high estimate of the VAT gap for Poland (fourth worst in this respect among CEE states, after Romania, Lithuania and Slovakia). This is evidenced by – among others – the lack of nominal growth of VAT revenues in 2012–2016 despite both nominal and real growth of GDP (Redo, 2017b). It is consistent with the ongoing (since 2012) growing divergence of the Polish exports to GDP ratio from the average of the EU15, as illustrated in Diagram 1.

However, one should emphasize that sensitivity of the Polish market to external shocks is already considerable (though in comparison to other CEE states, its trade openness is lower). Exports of goods and services in Poland was measured at 52,1% GDP, with the value of imports to Poland amounting to 48,4% of GDP value (see diagram 2).

Diagram 2. Trade openness of CEE states – exports and imports of goods and services relative to GDP in 2016



* arithmetic mean for the 11 CEE countries

Source: own analysis on the basis of the Eurostat data.

Such results imply a strong dependence of sales, employment (and unemployment) and budget revenues on the situation in the foreign markets as well as the level of the fully floating exchange rate in Poland – all of this is reflected in the valuation of the risk premium for investments.

Exchange Rate Stability

It should be borne in mind that among the 11 CEE states, five have introduced the Euro currency (Lithuania, Latvia, Estonia, Slovenia and Slovakia), which is the dominant transaction currency in Europe (in particular as concerns invoicing exports); Bulgaria has a fixed exchange rate to Euro (*currency board*), and Croatia actively stabilizes the exchange rate of its own currency to Euro (Cieślik et al., 2015; ECB, 2016). The Czech Republic used to apply the same solution, but resigned from it at the beginning of April 2017. Thus the Polish economy, together with that of Hungary and Romania (and recently also the Czech one) remain additionally vulnerable due to strong uncertainty associated with the exchange rate and its relatively high fluctuations (see Diagram 3). This shortens the planning horizon and exacerbates the investment risk in Poland.

Diagram 3. PLN to EUR exchange rate in the period of January 1999–August 2017

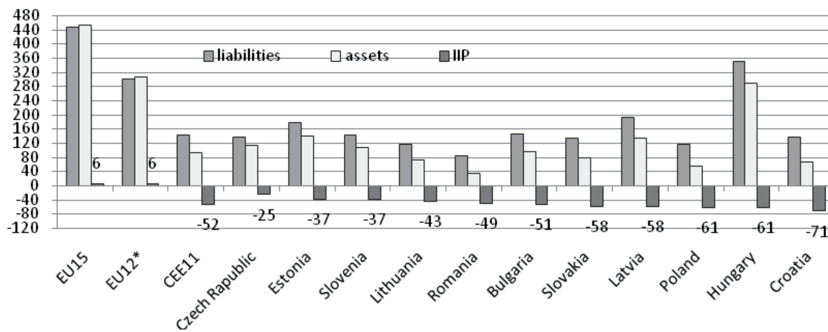
Source: own work on the basis of data provided by the European Central Bank.

After the collapse of the exchange rate for PLN at the end of 2008 (as a result of the financial crisis) this currency, paradoxically enough, became more stable that in the previous years (see Diagram 3). One should still be aware, however, of the major (albeit gradual) depreciation of PLN also in the period of 2001–2004, and then a successive 4-and-a-half-year period of its steady strengthening, up to the exchange rate of 3,21 PLN/EUR in July 2008. Over the entire 18-plus years of existence of Euro, this gives about 21% divergence of the exchange rate up and down from the average of 4,0881 PLN/EUR for the entire period 1999–2017 – thus the fluctuation amplitude of the PLN to EUR exchange rate reaches over 42%.

Net international investment position (NIIP)[2]

It cannot be overstated that the problem of external exposure of an economy is much broader, and cannot be reduced solely to external debt and international trading dependencies. International interconnections of enterprises and financial institutions as well as their activity on foreign markets result in them (as well as individual households and State Treasury) holding investments in foreign states. This applies to both Polish entities investing abroad and foreign entities operating and investing in Poland. For obvious reasons, investments of the latter category are much higher, what results in Poland's total external liabilities amounting to EUR 493 billion, which is 116% of the GDP. The value of these liabilities is twice as high as that of Polish external assets (EUR 234 billion, that is 55% GDP – see Diagram 4 and Table 2).

Diagram 4. External assets and liabilities of CEE states and their net international investment position at the end of 2016 (in relation to GDP, in %)



* UE12: UE15 without Luxemburg, Netherlands and Ireland

Source: own work on the basis of data provided by the Eurostat.

Consequently, the net international investment position of Poland is a strongly negative figure – at the end of 2016 external liabilities exceeded external assets by EUR 259 billion, that is 61% of the Polish GDP. It is one of the most negative positions among the CEE states – see Diagram 4. What is symptomatic is the fact that all CEE states are burdened with negative NIIPs, whereas 8 of the UE15 states recorded a positive NIIP at the end of 2016 (Eurostat). One must also stress the highly conspicuous and almost 60-fold difference in the total values of exter-

[2] NIIP is the difference between external financial assets and external liabilities of a given state economy.

nal assets and almost 36-fold difference in the values of total external liabilities between the group of EU15 and CEE11 states (in favour of the EU states). However, these difference were even greater as little as 10 years ago (see Table 2).

Table 2. Change in the level of external assets and liabilities of CEE states and their respective NIIP in the period 2005–2016 (in EUR billion and as % of GDP)

	liabilities				assets				IIP			
	EUR billion		% of GDP		EUR billion		% of GDP		EUR billion		% of GDP	
	2005	2016	2005	2016	2005	2016	2005	2016	2005	2016	2005	2016
CEE11*	637	1 704	91	144	325	1 093	46	92	-311,8	-611,6	-44	-52
EU12**	24 220	37 898	239	301	23 337	38 660	231	307	-882,4	762,0	-9	6
EU15	33 224	61 167	306	449	32 241	61 932	297	454	-982,6	764,8	-9	6
Bulgaria	NA	69,7	NA	147	NA	45,4	NA	96	NA	-24,3	NA	-51
Czech Republic	97,3	243,2	89	138	71,3	199,7	65	113	-26,0	-43,5	-24	-25
Estonia	19,3	37,5	171	179	9,8	29,7	87	142	-9,5	-7,8	-85	-37
Croatia	36,6	63,3	100	138	16,1	30,9	44	68	-20,5	-32,3	-56	-71
Latvia	16,3	48,1	119	192	8,7	33,5	63	134	-7,6	-14,6	-56	-58
Lithuania	16,9	45,4	80	117	8,0	28,7	38	74	-8,9	-16,7	-42	-43
Hungary	131,1	393,2	145	350	49,4	324,2	54	288	-81,7	-69,1	-90	-61
Poland	190,5	492,7	77	116	83,3	233,9	34	55	-107,2	-258,8	-44	-61
Romania	49,3	144,0	61	85	26,1	61,1	33	36	-23,2	-82,9	-29	-49
Slovenia	26,5	57,5	91	145	23,3	42,6	80	107	-3,2	-14,9	-11	-37
Slovakia	53,6	109,5	136	135	29,6	62,9	75	78	-23,9	-46,6	-61	-58

* data for 2005: without Bulgaria
** UE12: without Luxemburg, Netherlands and Ireland, whose results skew the dataset for EU15 states (highly overestimated value of external assets and liabilities)

Source: own analysis on the basis of data provided by the Eurostat.

Membership in the European Union led to a considerable deepening of international financial dependencies in all CEE states. In the 2005–2016 period, external assets and liabilities grew – both nominally and in relation to GDP – in each of these countries. The economy that recorded the biggest growth in these categories was Hungary, in particular when it comes to its assets. Interestingly enough, in 2005–2016 the total value of external assets of the CEE11 states grew more (by 236%) than did the value of their external liabilities (by 167%). In light of the very low original level of external assets of many of these states, this difference did not suffice to offset their overall negative IIP. However, the net negative position has deepened by a relatively little margin – from 44% to 52% of GDP

of CEE11 states. In the analyzed period, only Romania and Slovenia recorded quicker growth of external liabilities than of external assets (both nominally and in relation to GDP). However, it does not change the fact that in all CEE11 states external liabilities exceed external assets, and the total liabilities are higher by more than a half thnn external assets (EUR 1,7 trillion *vis a vis* EUR 1,1 trillion – see Table 2). It should be also noted that Poland accounts for 21% of the overall external assets of CEE states and for 29% of their total external liabilities (2016).

Foreign Portfolio Investments

From the point of view of external exposure (read: sensitivity of a given economy to disturbances in foreign markets), what is essential is the portion of external assets and liabilities characterized by lower stability and higher vulnerability to turmoil – the foreign portfolio investments. Hence in the next section we'll compare the proportions and structure of foreign portfolio investments of CEE states (see: tables 3 and 4 and diagram 5).

As can be presumed, external portfolio investments assets of CEE states (EUR 92,7 billion at the end of 2013, amounting to 8,7% of the total GDP of CEE countries) are much lower than their external portfolio investment liabilities (EUR 297,2 billion so 27,8 % of GDP value). However, the value of both is extremely low in relation to assets and liabilities of this type of the EU15 countries – value of the CEE assets is 171-fold lower (EUR 15,8 trillion for the EU15), while that of liabilities – 64 times lower (EUR 19 trillion). This confirms the lower level of wealth, activity on foreign markets, credibility, level of development of financial markets as well as capital absorption capacity (see columns 1 and 2 in Tables 3 and 4). However, even in this case one can observe the consequences of facilitated access to international markets as a result of the accession to EU. It is evidenced in a much more rapid growth of both external portfolio assets of CEE states (by 80%) and of their external portfolio liabilities (by 50%) in 2003–2013 in comparison with the rate for the EU15 states (see column 6 in Tables 3 and 4).

Table 3. Value and structure of external portfolio investments of CEE states (status as at the end of 2013) and rate of change relative to 2003 – assets

	% of GDP	In EUR billion	equity	Debt instruments		change between 2013/2003 (in %)
					*general government**	
	1	2	3	4	5	6
EU15	126,9	15 811 330	39%	61%	2,4%	235
CEE11	8,7	92 660	37%	63%	0,9%	424
Slovenia	31,8	11 418	24%	76%	1,0%	2 072
Estonia	29,0	5 485	43%	57%	7,7%	273
Slovakia	27,5	20 412	9%	91%	0,0%	1 381
Latvia	18,1	4 129	29%	71%	2,0%	275
Czech Republic	12,1	19 119	43%	57%	0,7%	180
Bulgaria	11,8	4 939	13%	87%	0,0%	777
Lithuania	9,4	3 305	47%	53%	0,0%	1 537
Croatia	8,0	3 464	49%	51%	0,0%	471
Hungary	6,1	6 160	79%	21%	4,6%	745
Poland	3,0	11 874	69%	31%	0,0%	360
Romania	1,6	2 355	37%	63%	0,0%	21 409

* share of debt instruments of the *general government* sector in total debt instruments

Source: own analysis on the basis of the Eurostat data.

The structures of external portfolio assets for both groups of states resemble one another. Less than 40% is invested in equity instruments, and slightly more than 60% in debt instruments, with only a negligible part of the latter being invested in government securities (see columns 3–5 in Table 3). On the other hand, in the case of external portfolio liabilities of the CEE countries what is noticeable is a significantly lower share of securities (17%) than of debt instruments (83%). Additionally, government securities are clearly dominant (87,3%) among the debt instruments for the CEE economies – see columns 3–5 in Table 4.

Table 4. Value and structure of external portfolio investments in CEE states (status as at the end of 2013) and rate of change relative to 2003 – liabilities

	% of GDP	In EUR billion	equity	Debt instruments		change between 2013/2003 (in %)
					*general government**	
	1	2	3	4	5	6
EU15	152,7	19 025 938	41%	59%	38,5%	254
CEE11	27,8	297 201	17%	83%	87,3%	380
Hungary	49,1	49 865	17%	83%	84,8%	227
Slovenia	45,0	16 167	6%	95%	92,4%	691
Slovakia	32,9	24 427	1%	99%	86,3%	714
Poland	32,0	126 503	24%	76%	97,7%	462
Lithuania	26,2	9 171	3%	97%	99,9%	552
Croatia	24,7	10 751	5%	96%	77,0%	219
Czech Republic	22,7	35 762	16%	84%	57,1%	518
Latvia	14,9	3 394	8%	92%	83,3%	632
Romania	11,7	16 819	14%	86%	97,7%	472
Estonia	10,7	2 018	41%	59%	6,0%	107
Bulgaria	5,5	2 324	10%	90%	46,4%	64

Source: own work on the basis of data provided by the Eurostat.

The above is an understandable consequence of considerably smaller securities markets in the Central and Eastern Europe, with incomparably lower capitalization (with the exception of the Warsaw Stock Exchange, shown in Table 5), combined with high borrowing demands of the local government (with the exception of Estonia) in conditions of lower economic credibility.

Table 5. Capitalization of stock exchanges in CEE states (in EUR billion and as % of GDP*; status as at 18.08.2017**)

		In EUR billion	% of GDP
Poland	GPW	321,0	75,7
Czech Republic	PSE	45,3	25,7
Romania	BVB	35,8	21,1
Hungary	BSE	25,2	22,4
Croatia	ZSE	19,6	42,8
Lithuania, Latvia, Estonia	Nasdaq Baltic	13,0	15,4
Slovenia	LJSE	5,3	13,3
Bulgaria	BSE-Sofia	4,9	10,3
Slovakia	BSSE	4,7	5,8

* GDP value as at the end of 2016

** in the case of the stock exchanges in Zagreb and Bratislava, data as at the end of July 2017

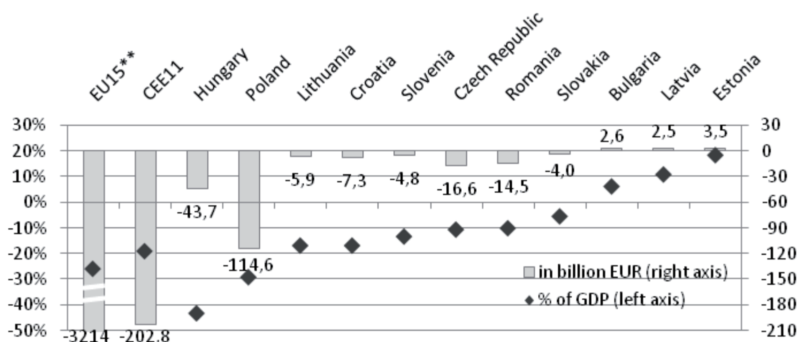
Source: own work based on data published by individual stock exchanges and the Eurostat.

It should be underlined that capitalization of the Warsaw Stock Exchange is over twice as high as the total capitalization of all other stock exchanges of the analyzed states, which implies, apart from some obvious advantages for the Polish economy, also certain dangers in the form of higher variability of currency rates and stronger dependence of the economy on foreign portfolio capital. Both of these factors are reflected in the higher estimate of investment risk for Poland, especially in light of the share of foreign investors trading securities on the Warsaw Stock Exchange having reached 52–54% in the recent years (WSE).

Among the CEE states, the highest share of external liabilities in the form of liquid portfolio investments is demonstrated by Hungary (49% of GDP) and Slovenia (42% of GDP), followed by Slovakia (33% of GDP) and Poland (32%). On the other hand, the lowest end of the spectrum is represented by Bulgaria, Estonia, Romania and Latvia where this value oscillates around 10 percent of GDP (see Table 4). What is worth noting is that although the overall value of external portfolio investment assets of the CEE economies is over 3-fold lower than that of liabilities, not all of these countries have a negative balance of external portfolio investments. This means that, to still maintain such overall ratio for CEE11, the net portfolio investments balance of some of them is extremely negative. Unfortunately, Poland does belong to this particular group, and nominally possesses the most negative balance of external portfolio investments among the CEE states (EUR –115 billion – see Diagram 5) – when ranked by net balance of portfolio investments relative to GDP, Poland has the second most negative balance of

portfolio investments among the CEE economies (right after Hungary). It ranks eighth in the entire EU28 in terms of this ratio, after Luxemburg, Spain, Austria, Hungary, Sweden and France (Eurostat).

Diagram 5. Value of external net portfolio investments* of CEE states (in EUR billion and in relation to GDP; status as at the end of 2013)



* external portfolio assets minus external portfolio liabilities

** to avoid significant flattening of the graph, the diagram does not depict the bar representing the total value of external net portfolio investments for EU15 (EUR -3,2 trillion)

Source: own analysis based on The Eurostat data.

A positive balance of portfolio investments at the end of 2013 was observed for Estonia (EUR 3,5 billion, that is 18% of GDP), Latvia (EUR 2,5 billion, amounting to 11% GDP) and Bulgaria (EUR 2,6 billion, or 6% of GDP value).

Official Reserve Assets

The data on portfolio investment balance presented above, and especially the level of external portfolio liabilities is of utmost importance when it comes to assessing both vulnerability of a given economy to external turmoil and the adequacy of official reserve assets of a state in the face of its external exposure. External portfolio liabilities of Poland amounted to EUR 126,5 billion at the end of 2013 – and were higher by 64% than the Polish official reserve assets at the time (EUR 77,1 billion, NBP). Detailed information published by the NBP does nothing to soothe one's worries: 58,8% of total external liabilities in Poland (that is EUR 278 billion) are denominated in PLN (as at the end of 2015). If investors wanted to withdraw from Poland only the portion of invested external liabilities that is denominated in PLN (what is quite likely and relatively easy to do with such a high level of

external portfolio liabilities), they would have to convert it first. With the value of foreign exchange reserves three times lower than the values of external liabilities denominated in PLN (amounting at the end of 2015 to EUR 82 billion[3]), such a move could seriously undermine Poland's external solvency and credibility, and lead to violent fluctuations of the currency exchange rate. This in turn would considerably reduce the state's capacity for debt rollover, while also shrinking the opportunities for development of the Polish economy (thus leading to the *sudden stop* phenomenon; Redo, 2017a).

Here it should be underlined that also the value of official reserve assets in relation to GDP is (for the CEE countries not part of the Eurozone) the lowest in Poland (see Table 6). At the end of 2015m the reserve assets amounted to 19,9% of the Polish GDP, whereas in Hungary, Croatia and Czech Republic they were higher by about a half (and thus reached the value of 27–34% of their respective GDPs). In Bulgaria, this value was higher still – reserve assets amounted to 44% of its GDP. Only Romania had the level of reserve assets approximating the one observed in Poland (21,7% GDP).

Table 6. Official reserve assets (in USD billion, 2015)

	Eurozone membership	Official reserve assets	
		In USD billion	% of GDP
CEE11	5/11	277,6	21,7
Bulgaria	NO	22,2	44,1
Czech Republic	NO	64,5	34,8
Croatia	NO	15,0	30,7
Hungary	NO	33,1	27,2
Romania	NO	38,7	21,7
Poland	NO	94,9	19,9
Latvia	YES	3,4	12,8
Lithuania	YES	1,7	4,1
Slovakia	YES	2,9	3,3
Slovenia	YES	0,9	2,0
Estonia	YES	0,4	1,8

Source: own work on the basis of data published by the World Bank.

[3] Foreign exchange reserves are securities denominated in foreign currencies as well as deposits and cash in foreign currency (banknotes, bank deposits, bonds, treasury bills) - in other words, these are the official reserve assets without gold, SDR, reserve positions in the IMF and other reserve assets (Redo, 2013).

Official reserve assets of the other five CEE countries are significantly smaller and, with the exception of Latvia, amount to as little as 2–4% of their respective GDPs. It is one of the advantages of belonging to the Eurozone – Eurozone states have after all the aid guarantee of the European Central Bank as concerns assuring the solvency of their economies (*Protokół*, nr 4). Therefore, these countries can keep a substantially lower level of foreign currency reserves, which enables them to avoid alternative costs related to maintaining high level of such reserves. It also permits them not to incur the cost of sterilization action and instead offers an opportunity for increased profitability on their investments (Redo, Siemiątkowski, 2017).

Balance of Financial Transfers to/from the EU Budget

When talking about foreign capital connections of CEE states, one should also point out their dependence on the European Union funds. Membership in the EU – now a bit over 10 years old – considerably relieved the national budgets of these countries with respect to financing infrastructure, research and development, strengthening competitiveness of business enterprises, environment protection, development of the human capital, activation of the unemployed and, finally, subsidizing agriculture. Currently, the continuity of the above-mentioned policies is called into question in light of the possible decrease to the Union's budget (which has been argued for years by its biggest net payers). This scenario seems to be close to becoming reality in connection with Brexit. These circumstances increase the risks associated with the future state of affairs in public finances in the CEE states, with the possibility of the national public institutions having to take over at least part of the burden of financing the afore-mentioned actions. Overall, this increases the investment risk in the economies most heavily dependent on the European Union funds, especially in the case of the biggest net beneficiaries – such as Poland. Despite Poland occupying the middle position among CEE states in terms of accumulated value of funds received from the EU budget in 2004–2015, it has since 2009 been definitely the biggest net beneficiary – not only among CEE states but in the entire EU. The accumulated net value of the Union's support in 2004–2015 (when corrected for membership premiums paid by Poland) amounted to EUR 87 billion, which is more than 20% of the Polish GDP (see Table 7).

Table 7. Accumulated value of funds received from the EU budget by CEE states in 2004–2015 and the accumulated net balances* of financial transfers to/from the EU budget (in EUR billions and as % of GDP)

	Accumulated value of funds received from the EU budget in the years 2004–2015		Accumulated net balance of financial transfers to/from the EU budget in the years 2004–2015	
	EUR billion	% of GDP	EUR billion	% of GDP
Lithuania	15,7	41,9%	12,1	32,5%
Hungary	43,2	39,4%	32,5	29,7%
Latvia	9,1	37,3%	6,8	27,8%
Bulgaria**	14,5	32,0%	10,9	24,1%
Estonia	6,6	32,4%	4,7	23,2%
Poland	125,7	29,2%	87,0	20,2%
Romania**	35,6	22,2%	23,8	14,9%
Slovakia	18,6	23,7%	11,6	14,8%
Czech Republic	37,7	22,3%	21,9	13,0%
Slovenia	7,9	20,6%	3,7	9,6%
Croatia***	1,5	3,4%	0,4	0,9%

* net balance being the difference between the funds transferred from the European Union budget and the membership premiums paid by a given member state
** these amounts also include pre-accession funds received in 2004–2006
*** the amounts cover only the period of membership in the EU, that is 2013–2015

Source: own work on the basis of data published by the European Commission, 2004–2015 and The Eurostat.

It is worth noting that the European Union increasingly frequently speaks of a possible cessation of granting of funds to its members in the case of any threats to the rule of law – such as the threats thereto stemming from the recent political events in Poland. This situation is not without influence when it comes to assessment of the investment risk premium in Poland.

Net Errors and Omissions in Balance of Payments

Taking into account CEE states' great demand for foreign capital necessary to finance the process of catching up in their economic development, as well as to roll over substantial debts (not only the external or public one), we should point out one more problem: the highly – as compared to other CEE countries – negative figure of net errors and omissions in the balance of payments (see Table 8). As

is pointed out more and more frequently, this statistic reflects the proportions of illicit capital flows from a given economy (see eg.: the report of Global Financial Integrity, 2017). This phenomenon has been exacerbated in some of the countries since 2008, what might be interlinked with other negative phenomena (as, for example, increase in the VAT or CIT gap) that have emerged or worsened as a result of deteriorating conditions of operation of enterprises. In contrast, some states significantly intensified their actions aimed at rationalizing and improving their financial condition in the wake of a post-crisis economic downturn. (In Europe, impact of the financial crisis was further worsened by the bankruptcy of Greece). It also seems that what counted in favour of such transformations at that time was a higher tolerance of the international community and of national authorities for actions alleviating the repercussions of the crisis. Some countries adopted controversial solutions and economic policies in response to the crisis – such as lowering interest rates to unprecedentedly low levels, as well as the launch of quantitative easing of money, with simultaneous increase in public debt.

Table 8. Net errors and omissions in CEE countries in the 2004–2013 period (as % of GDP and as % of value of exports of goods and services)

	% of GDP		% of value of goods and services exports	
	average in the period of			
	2004–2007	2008–2013	2004–2007	2008–2013
Slovakia	0,4	-3,2	0,4	-3,9
Croatia	-3,2	-2,3	-8,1	-6,0
Poland	0,2	-1,8	0,7	-4,5
Hungary	-1,6	-0,5	-2,5	-0,6
Bulgaria	-3,1	-0,4	-12,9*	-0,6
Czech Republic	-0,5	-0,3	-0,9	-0,4
Romania	0,5	-0,2	2,0	-1,0
Latvia	-0,4	-0,1	-1,1	-0,3
Lithuania	-0,1	0	-0,1	0
Slovenia	-1,2	0	-1,8	-0,1
Estonia	-0,3	0,3	-0,5	0,3

* average value for the period 2006–2007

Source: own analysis based on data published by the Eurostat.

Poland for several years (2008–2013) occupied the third worst position among the CEE states – right after Slovakia and Croatia – ranked by net errors and omissions in relations to GDP. What is more, in the period 2008–2013 only Slovakia, Poland and Romania noted a deterioration in the average balance of errors and omissions (expressed as % of GDP) as compared to the 2004–2007 data. The most severe worsening was observed in Slovakia and Poland (see: Table 8). It should be added that Romania has the biggest VAT gap in the entire European Union, Slovakia is in the fourth worst position and Poland – the seventh worst (European Commission, 2016; Redo, 2017b). This points to rapid (especially recently) increase in the dynamics of operations of business enterprises in these three countries – all of them aiming to reduce the tax burden and/or improve their respective financial situation. Simultaneously, it also evidences the problems with efficiency of operations of the national treasury administration and limited control over private capital flows in the favourable international conditions of deepening globalization.

What seems to be consistent with the above are the considerably improved current accounts balances of the CEE countries – a trend visible from 2009, with significant betterment noted especially for 2013 (see Table 9). In 2013–2016, as many as 8 out of the 11 CEE states had a positive average balance of their current accounts. Both this data and the interpretation thereof should be approached with caution as the issue of quality of contemporary statistics comes into play here, which additionally increases investment risk assessment done for the economies in question.

Table 9. Current accounts balance in CEE countries (% of GDP)

	average in 2004–2008	average in 2009–2012	average in 2013–2016	2016	average in 2004–2016
CEE11	-6,68	-3,00	0,17	0,63	-3,44
Latvia	-15,42	0,77	-1,00	1,47	-6,00
Romania	-10,59	-4,92	-1,33	-2,33	-5,99
Bulgaria*	-22,93	-2,64	1,36	4,20	-5,10
Lithuania	-10,79	-0,82	0,48	-0,89	-4,26
Slovakia	-8,51	-3,04	0,61	-0,73	-4,02
Estonia	-11,89	0,93	1,36	2,66	-3,87
Poland	-5,01	-4,56	-1,07	-0,30	-3,66
Croatia	-6,44	-1,84	2,68	2,60	-2,22
Czech Republic	-2,98	-2,41	0,25	1,10	-1,81
Hungary	-7,35	0,51	3,48	4,84	-1,59
Slovenia	-3,15	0,42	4,99	5,30	0,45

* in case of Bulgaria – without the 2004–2006 period

Source: own work on the basis of data published by the Eurostat.

It cannot be ignored, however, that even despite the suspicion of underestimating the current accounts deficit of Poland, it still has noted – in each consecutive year since 2009 – the current accounts balance worse than average for the CEE states (before that period, the reverse held true).

Conclusions

The above analysis of the selected economic characteristics proves that, despite their short so far participation in the global free market, the CEE states are strongly linked to the international economic and financial systems, which results in their dependence on foreign capital and situation in international markets. This also makes them vulnerable to external shocks. Resilience of the economies of CEE countries was additionally diminished by their relatively quick and uncompromising opening up to the process of globalization and European integration. All the economies analyzed have quite a substantial external debt level (reaching 55–139% of GDP) and their net international investment position is quite strongly in the negative (constituting 25–71% of GDP). They are also characterized by high level of foreign liabilities (85–350% of GDP), a significant degree of trade openness (export and import of goods and services amounting to 41–94% of

GDP), considerable rate of foreign liquid portfolio investments (even as much as 32% of GDP). Another common feature is the strong financial support received from the EU budget, with CEE countries being its net beneficiaries (with the accumulated value of funds received from the EU budget in 2004–2015 at the level of 21–42% of GDP).

When analysing the above data for individual states, it should be borne in mind that Lithuania, Latvia, Estonia, Slovenia and Slovakia are members of the Eurozone, i.e. operate an international currency, which improves their creditworthiness rating and augments the trust of the global markets. What seems not without significance for investors is the fact that the IMF classified these five CEE countries – as well as the Czech Republic – as advanced economies. This creditworthiness, which is guaranteed by belonging to the Eurozone, being subject to the monetary policy pursued by the European Central Bank as well as operating with an international currency, is reflected in those economies being trusted and being taken interest in by investors. Furthermore, it is reflected by their level of ratings, by the estimation of CDS spreads or of the government bond yields, determining the market level of capital cost and the accessibility of external sources of funding (Redo, 2017c) – see table 10. Not without significance for investors is also the fact that recognized international organizations (such as, for example, IMF, 2016) classified these five CEE countries – as well as the Czech Republic – as advanced economies. This latter group of states currently includes the greatest economic world powers as well as all the EU15 countries. Poland, as well as the remaining five CEE states is categorized as an emerging market and/or as a middle-income economy. These characteristics are shared by these countries with – among others – Venezuela, Argentina, Ukraine and Turkey.

Table 10. Ratings of Central and Eastern Europe countries-members of the EU (as at 18.08.2017), CDS spreads for 5-year government bonds (status as at February 2017) and yields for 10-year government bonds (as at August 2017 and as average for the May 2015 – August 2017 period)

	rating			CDS spreads (basis points)	Yields of 10-year government bonds (%)	
	S&P	Moody's	Fitch		August 2017	average for V.2015–VIII.2017
Romania	BBB-	Baa3	BBB-	97	3,86	3,57
Croatia	BB	Ba2	BB	184	2,87	3,37
Hungary	BBB-	Baa3	BBB-	116	3,05	3,29
Poland	BBB+	A2	A-	71	3,33	3,12
Bulgaria	BB+	Baa2	BBB-	119	1,70	2,17
Slovenia	A+	Baa3	A-	88	1,09	1,33
Lithuania	A-	A3	A-	58	0,31	0,90
Latvia	A-	A3	A-	58	0,85	0,80
Slovakia	A+	A2	A+	42	0,83	0,78
Estonia	AA-	A1	A+	55	-	-
Czech Republic	AA-	A1	A+	39	0,83	0,60

Source: own analysis on the basis of data provided at tradingeconomics.com, by Deutsche Bank Research and the Eurostat.

The characteristics presented in Table 10 seem to confirm that membership in the Eurozone positively influences the image of a given economy and the assessment of its creditworthiness in the eyes of foreign investors and institutions. The CEE economies that adopted the Euro have – despite their relatively high external exposure as shown above – higher ratings, lower CDS spreads or lower government bond yields. Furthermore, they were classified by the IMF as highly advanced economies (although it is obvious that what lies behind these assessments is rather a broadly interpreted overall economic and political situation of these states than the above-selected strict economic categories). Sill, one must realize that this difference in perception has a measurable bearing on the market cost of capital, accessibility of external sources of debt financing and the process of compensating for the gap in economic development. All in all, it impacts the prospects of future development and investors' interest in a given state.

Finally, it should be underlined that Poland has – next to Croatia and Hungary – the most negative NIIP (net international investment position) among the CEE

countries, a rather considerable external debt (although Croatia and Hungary are burdened with much larger ones), high external portfolio liabilities and very low level of external assets in the form of portfolio investments (the latter holds true for all three countries). These countries are strongly financially dependent on the EU budget (especially Hungary and Poland) and show a highly negative figure of net errors and omissions (in particular Croatia and Poland). What is more, they heavily depend on exports and imports, all in the conditions of – in the case of Poland and Hungary –a floating exchange rate regime. In this situation, the official reserve assets at the level of 20% of GDP (the lowest among the CEE states still outside the Eurozone) do not seem to constitute a sufficient financial hedge, which has been noted for years by the financial markets and correspondingly reflected in the demanded investment risk premium. It is further confirmed by the Polish, Hungarian and Croatian government bonds offering 3-fold higher yields than the Czech, Slovakian and Latvian ones. Compared to Lithuanian ones, the difference is even bigger. These yields strongly determine the market cost of capital in those countries (especially in light of large-scale issuance of government bonds in Poland amounting to PLN 120–190 billion per year for decades now; Ministerstwo Finansów, 2016), which triggers the process of crowding out of the private sector. Furthermore, it should be emphasized that having an incomparably large –against the average for the CEE countries – stock exchange, whose capitalized value amounts to EUR 321 billion (76% of GDP) and which notes high involvement on the part of foreign investors only exacerbates the dependence of the Polish economy on foreign capital. Consequently, this impacts also the global perception of the economic and political condition of the country and finally – the sentiment in the international financial markets. Overall, this situation adds to economic uncertainty and increases variability of the exchange rate.

In light of the above, it should be stated that the Polish economy is characterized by a relatively strong external exposure relative to the creditworthiness the country boasts. This exposure increases Poland's vulnerability to shocks and makes it less immune thereto. These circumstances partially explain the higher estimation of the risk premium for investments in Poland, which reduces the state's opportunities and prospects of development in comparison with other CEE economies. It should be stressed that when assessing the external exposure one must take into account not only its particular characteristics, but also the economic and political stability of a given country – or, more specifically and importantly, their assessment by financial markets, reflected in credit ratings, CDS quotes or in government bond yields.

* * *

Despite the doubts cast over their reliability and objectivity after the financial crisis of 2008, these tools still constitute the basis for decisions made by majority of investors. Hence, these figures determine the scale of inflow of foreign capital to a given economy, and thus also its cost and stability of an investment. These means that they are also impacting the level of developmental opportunities as well as the ability of emerging economies to roll over rather large debts as they try to catch up to Western European EU member states in terms of wealth. What is not without significance in assessing the risks of the current external exposure of the Polish economy is the fact of Poland remaining outside the Eurozone, liquidation of financial back-ups guaranteed by OFE [Private Pension Funds] assets, the conflict around the Constitutional Tribunal, the reform of the judiciary system as well as the disputes with the European Commission (related not only to the issue of rule of law).

Finally, it should be added that among the 11 CEE states the Czech Republic has the lowest external debt (68% of GDP) and one of the lowest levels of dependence on the Union's budget (overall 22% of GDP in 2004–2015), a negligibly negative balance of errors and omissions (on average -0,3% of GDP per annum in 2008–2013), relatively low level of foreign portfolio capital invested in the state economy (23%) and can boast the second best – in terms of its capitalization – stock exchange in the region and the second highest level of official reserve assets (35% of GDP). Although the Czech Republic has not adopted the Euro, it is ranked among the highly advanced economies by the IMF. Furthermore, the Czech Republic has the highest credit rating among all CEE countries, the lowest CDS spreads and, what is particularly important from the perspective of the state budget and all other business entities (as it impacts their creditworthiness and the ability to service their debts), the cost of capital that is among the lowest, right from the beginning of the Czech membership in the European Union. As is presented in Table 10, the yield of Czech ten-year government bonds was in the last two years the lowest among all the CEE states and several times lower that the yields in half of these economies – including Poland. The yield of Polish government bonds was at that time more than five times higher than of the Czech ones. If the Polish bonds offered the same yields as the Czech ones, the cost of servicing the public debt (amounting to, respectively, PLN 29 and 32 billion in 2015 and 2016) by the state budget would be reduced by more than PLN 20 billion annually. Such a change would correspondingly lower the deficit and slow down the accumulation of public debt (Redo, Wójtowicz, Ciak, 2018) – in other words, lower yield could compensate for the increase in expenditures associated with the so-called "500+" program.

References:

Cieślik, E., Jankowska, E., Górniewicz, G., Piotrowicz, A., Redo, J., Redo, M.,
Siemiątkowski, P. (2015). *Ekonomiczne aspekty integracji wybranych państw Europy Środkowo--Wschodniej*. Toruń: Wydawnictwo Naukowe UMK. DOI: 10.12775/TIS.2015.100.

European Central Bank. (2016), *Convergence Report*, June.

European Commission. (2014–2015). *EU Budget. Financial Report*, the issues for the years 2004–2015.

European Commission. (2016). *Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report*, August.

Global Financial Integrity. (2017). *Illicit Financial Flows to and from Developing Countries: 2005–2014*, April.

International Monetary Fund. (2016). Debt. Use It Wisely. *Fiscal Monitor*, October.

Keen, M. (2013). The Anatomy of the VAT. *IMF Working Paper*, *No. 13/111*, May.

Ministerstwo Finansów. (2016). *Dług publiczny. Raport Roczny 2016*.

Poniatowski, G. (2016). Problem nieściągalności VAT w Polsce pod lupą. *Zeszyty mBank – CASE*, *No. 142*.

Protokół (nr 4) w sprawie statutu Europejskiego Systemu Banków Centralnych i Europejskiego *Banku Centralnego*. (2012). Dz. Urz. UE C 326/230, 26.10.2012.

Redo, M. (2017a). *The External Debt Overhang Problem as a Threat to Global Financial Security* (forthcoming).

Redo, M. (2017b). *The Issue of VAT Gap in Poland in Contrast to the European Union Member States as a Threat to Financial Security of the State* (forthcoming).

Redo, M., Siemiątkowski, P. (2017). *Zewnętrzne bezpieczeństwo finansowe państwa*. Toruń: Nicolaus Copernicus University of Toruń.

Redo, M., Wójtowicz, K., Ciak, J. (2018). *Bezpieczeństwo finansów publicznych*. CeDeWu.

Redo, M. (2013). Istota i znaczenie oficjalnych aktywów rezerwowych w gospodarkach rozwijających się. *Zeszyty Naukowe Wyższej Szkoły Bankowej we Wrocławiu*, *37*.

Redo, M. (2017c). *Bezpieczeństwo finansów publicznych – wpływ ekspansji fiskalnej na poziom kosztu kapitału w Polsce na tle państw Europy Środkowo-Wschodniej*. In: A. Jackiewicz, A.

Trzaskowska-Dmoch, *Bezpieczeństwo ekonomiczne państwa. Uwarunkowania, procesy, skutki*. Warszawa: CeDeWu.