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The external debt overhang problem as a threat to global financial security

Key words: debt overhang, external debt, global stability, global financial security, emerging markets, sudden stop

Introduction

The aim of the study is to analyze the external debt's level in countries all over the world and to indicate that credibility is one of the most important factors which limit countries' access to external financing, its cost and determine vulnerability of those countries to shocks. On the basis of the analysis of statistic data an international comparison was made with the use of the inductive reasoning methodology. The study also overviews the threats triggered by the external debt overhang issue, not only in the case of indebted countries but also for financial security of global economy.

According to International Monetary Fund (IMF) data, global debt of the nonfinancial sector at the end of 2015 reached USD 152¹ trillion (which is 225% of world GDP²), where 2/3 comes from private sector debt. Even though it is stressed that public debt is not

the main concern, it must be noted that the public debt overhang weakens private sector³ and reduces the effectiveness of deleveraging process, especially in the context of financial recession⁴. The increase in public debt makes higher the treasury bonds' yield and the cost of capital, which consequently causes the decrease in creditworthiness and payment capacity of private entities. Feedback takes place between the amount of public and private debt (and their changes). What was shown by the crisis of 2008, public aid for excessive indebted banks and enterprises leads to the increase in public debt and, as a result, leads to the increase in the market cost of the capital and causes faster growth of private sector's debt and lower payment capacity.

It must be noted that excessive debt (both in private and public entities) results in lower economic growth also outside of the crisis period (e.g. Krugman 1988⁵,

¹ This data is related to debt of 113 countries which correspond to 94% of global GDP (IMF, *Debt. Use It Wisely*, "Fiscal Monitor", October 2016).

² IMF, Debt. Use It Wisely...

³ IMF, From Banking to Sovereign Stress: Implications for Public Debt, "IMF Policy Paper", 2015.

⁴ Jordà O., Schularick M., Taylor A.M., *When Credit Bites Back*, "Journal of Money, Credit and Banking", No 45, December 2013, pp. 3–28.

⁵ Krugman P., Financing vs. Forgiving a Debt Overhang, "Jo-

Sachs 1989⁶, Cecchetti et al. 2011⁷, Baum et al. 2013⁸, Reinhart et al. 20129, Reinhart, Rogoff 201010). The increase in debt of the private sector increases the probability of financial crisis^{11,12}. On the other hand, the increase in public debt increases the risk of debt servicing problems (sovereign crises). Both of these risks cause the increase of risk premium requested by investors. Even though it might happen that a high indebted country will not experience that during prosperity by taking advantage of the effect of the bigger appetite for risk on financial markets - underestimated risk, it must be noted that in the case of financial or economic turmoil or simply change of investment strategy, this country will be highly exposed to the sudden stop phenomenon - a significant limitation in access to external capital and hike of its cost. It relates especially to developing economies which highly depend on external financing (of debt and development). Thus, in a non-crisis period, the most indebted countries develop slower, too. Markets, while making investment decisions, are currently taking into account the fact that the higher debt service cost contributes to faster debt growth (or slower payment); thus limits future perspective of economy development and its resistance to crisis. There is no agreement on the debt level which is excessive and limits economic growth, and makes the economy more sensitive to shocks¹³. Without a doubt, it is agreed that this limit differs for different countries and depends on various factors which can be labelled under one capacious but inaccurate term of economic credibility. In the case of stronger and more stable economies which are relatively big - that is have greater, deeper and more liquid finan-

urnal of Development Economics", No 29 (3), 1988, pp. 253-68.

cial market – investors are willing to accept higher debt. Apart from higher creditworthiness of these countries or the need for diversification, investors must wait out the crisis somewhere. Developing countries, which are less credible than Western countries, are subjected to less stable access to external financing and its higher cost which increase their risk premium (and, as consequence, lower investment and consumption), and limit development as well as increase sensitivity to shocks. As IMF research indicates, it is especially observed in the case of financial crises which cause greater and long-lasting drop in production than other crises, especially in developing economies where cumulated 5-year production drop (caused by financial shock) is twice as big as in developed economies¹⁴.

Debt overhang problem cause greater and longer crisis duration; that is why it is essential to monitor private and public level of debt and, in case of high and dynamically growing debt especially in developing economies, its reduction is crucial. The weight of excessive debt may be lowered in two ways: through economic growth and inflation (macroeconomic deleveraging) and debt payment (balance sheet deleveraging). Thus today, between deflation and low economic growth, all activities stimulating growth and controlling the financial situation of both public and private (especially banking) sectors as well as encouraging debt reduction are essential. Economic reforms, which have been postponed for decades, strengthen economic competition and improve fiscal policy. It is important to, on one hand, support economic growth (and lower debt) and, on the other hand, strengthen flexibility of fiscal policy, that is its ability to support economic development in order to create a fiscal buffer in case of future crises which will enable smoother and faster recovery¹⁵. All activities increasing effectiveness of economic policy are nowadays of essential importance due to sustaining low interest rates which deprive monetary policy of its main tool for economic stimulation and also due to acquired public debt level which stops the possibility of fiscal expansion in order to mitigate and overcome crisis (especially in the case of emerging economies exposed to the sudden stop phenomenon).

Fiscal policy might be useful in two ways here: by using fiscal incentives stimulating economic growth and enabling easier access to capital and lowering its cost (through strengthening banks by recapitalization,

⁶ Sachs J.D., Conditionality, Debt Relief, and the Developing Country Debt Crisis, [in:] Developing Country Debt and the World Economy, University of Chicago Press, 1989.

⁷ Cecchetti S.G., Mohanty M.S., Zampolli F., *The Real Effects of Debt*, "BIS Working Paper", No 352, 2011.

⁸ Baum A., Checherita-Westphal C., Rother P., *Debt and Growth: New Evidence for the Euro Area*, "Journal of International Money and Finance", No 32, 2013, pp. 809–21.

⁹ Reinhart C.M., Reinhart V.R., Rogoff K.S., *Public Debt Overhangs: Advanced-Economy Episodes Since 1800*, "Journal of Economic Perspectives" No 26 (3), 2012, pp. 69–86.

¹⁰ Reinhart C.M., Rogoff K.S., *Growth in a Time of Debt*, "NBER Working Paper", No 15639, 2010.

¹¹ IMF, Debt. Use It Wisely...

¹² Jordà O., Schularick M., Taylor A.M., When Credit Bites Back...

¹³ Bruggeman A., van Nieuwenhuyze C., Size and Dynamics of Debt Positions in Belgium and in the Euro Area, "Economic Review", June 2013, pp. 57–77.

¹⁴ IMF, Debt. Use It Wisely...

¹⁵ IMF, Debt. Use It Wisely...

purchase of assets or guarantees, and through improved financial capability and creditworthiness of economic entities which can be done by subsidies or guarantees for debtors - this enables extension of repayment periods and improves the financial liquidity, or by direct crediting of profitable entities which do not have access to the market financing). As IMF results show, effectiveness of above fiscal activities increases along with flexibility of fiscal policy¹⁶. Economies with fiscal buffer are able to conduct countercyclical fiscal policy during a crisis, when fiscal multipliers seem high, without overestimating the market cost of the capital which is especially visible in emerging economies when sudden stop in capital inflows occurs. Experience shows that the following are essential: time (speed of action), proper order (banks first, then big entities, last households), avoiding the moral hazard problem (help to those wellmanaged), narrowly directed conditional aid (to avoid moral hazard problem and increase effectiveness), directed tax incentives, expenditures (directed subsidies, loans, transfers) and guarantees (the least expensive). However, as IMF indicates, the use of the above tools causes the issue of abuse (moral hazard problem)17 and delays necessary restructuring18.

The most indebted countries

The USA has the highest foreign debt. Its debt amounts to USD 18 trillion (2015, tab. 1, column 3). The following places are reserved for other powerful economies (United Kingdom: USD 8tn, France and Germany: USD 5tn, Netherlands and Luxembourg: USD 4tn, Japan: USD 3 tn). Foreign debt of 17 countries exceeds USD 1 trillion (the end of 2015), and the following 29 countries have foreign debt of over USD 100bn. Due to these amounts, foreign debt is currently a global issue which limits development possibilities for the entire global economy. Foreign debt of 76 most indebted countries (over USD 20bn) indicated in tab. 1 amounts to USD 73.8 trillion – that is the equivalent of global GDP (99.5%).

It must be noted that the above list includes both rich and big countries as well as small and developing countries. Thus, it is worth looking at the relations between foreign debt and their GDP which shows the weight of debt from the perspective of a single economy, but also it more accurately portrays the scale of threats for creditors, countries bonded economically or international financial markets in the case of insolvency of a single country of which foreign debt amounts to its several GDPs. Luxembourg has extremely high foreign debt. It amounts to 66 of its GDPs (tab. 1, column 1). As one of the leading financial centers in the world and a tax paradise, it is (very often fictional) location of many companies of which financial interlinks generate external debt. Among countries with the highest foreign debt in relations to GDP are major financial centres such as Singapore or Hong Kong, Mauritius or countries with lower taxes such as Cyprus or Ireland (tab. 1, column 1).

Table 1. External debt of the most indebted countries* (at the end of 2015; rating; 2.07.2017).

			rating			
		% GDP	No.**	USD bn	per capita (USD)	7.04.2017 S&P
		1	2	3	4	5
1.	Luxembourg	6 598%	6.	3 747	6 578 924	AAA
2.	Mauritius	1 325%	38.	155	122 545	bd
3.	Malta	998%	48.	97	225 181	A-
4.	Ireland	855%	8.	2 424	522 075	A+
5.	Cyprus	540%	46.	106	90 700	BB+
6.	Netherlands	526%	5.	3 9 4 9	233 121	AAA
7.	Singapore	438%	16.	1 281	231 512	AAA
8.	Hong Kong	421%	15.	1 300	177 991	AAA
9.	United Kingdom	286%	2.	8 187	125 699	AA
10.	Switzerland	251%	11.	1 681	203 038	AAA
11.	Belgium	250%	17.	1 136	101 007	AA
12.	Greece	247%	23.	480	44 389	В-
13.	Portugal	219%	27.	436	42 050	BB+
14.	Finland	207%	24.	480	87 658	AA+
15.	France	206%	3.	4 980	74 840	AA
16.	Mongolia	183%	73.	22	7 280	В-
17.	Iceland	180%	68.	30	91 440	A
18.	Sweden	179%	18.	888	90 630	AAA
19.	Austria	172%	20.	647	74 848	AA+
20.	Panama	168%	50.	88	22 327	BBB
21.	Spain	165%	10.	1 973	42 480	BBB+
22.	Norway	157%	21.	606	116 682	AAA
23.	Denmark	156%	26.	469	82 512	AAA
24.	Germany	145%	4.	4 893	59 906	AAA
25.	Latvia	139%	64.	38	18 996	A-
26.	Ukraine	131%	44.	119	2 629	В-
27.	Hungary	129%	36.	157	15 971	BBB-
28.	Italy	124%	9.	2 257	37 158	BBB-
29.	Slovenia	114%	57.	49	23 717	A

¹⁶ IMF, Debt. Use It Wisely...

¹⁷ IMF, Debt. Use It Wisely...

¹⁸ IMF, *Revisiting Japan's Lost Decade*, "Regional Economic Outlook: Asia and Pacific-Global Crisis: The Asian Context", 2009.

Table 1. - continue

			rating			
		% GDP	No.**	USD bn	per capita (USD)	7.04.2017 S&P
		1	2	3	4	5
30.	Australia	105%	14.	1 409	59 224	AAA
31.	Canada	102%	12.	1 591	44 377	AAA
32.	Croatia	101%	56.	49	11 754	BB
33.	New Zealand	98%	34.	171	37 226	AA
34.	United States	98%	1.	17 710	55 101	AA+
35.	Estonia	93%	74.	21	15 907	AA-
36.	Slovak	84%	53.	73	13 494	A+
37.	Kazakhstan	83%	39.	154	8 761	BBB-
38.	Serbia	83%	67.	31	4 342	BB-
39.	Bulgaria	76%	63.	38	5 288	BB+
40.	Paraguay	75%	76.	20	3 061	BB
41.	Lithuania	75%	66.	31	10 618	A-
42.	Belarus	70%	62.	38	4 032	В-
43.	Jordan	70%	71.	26	3 456	BB-
44.	Poland	69%	31.	330	8 686	BBB+
45.	Czech Rep.	68%	41.	126	11 962	AA-
46.	Japan	67%	7.	2 945	23 197	A+
47.	Tunisia	67%	69.	29	2 542	BB-
48.	Lebanon	66%	65.	31	5 281	В-
49.	Malaysia	66%	33.	194	6 405	A-
50.	Chile	65%	37.	156	8 673	AA-
51.	Romania	55%	47.	98	4 969	BBB-
52.	Turkey	55%	30.	396	5 035	BB
53.	Ghana	55%	75.	21	754	B-
54.	Sri Lanka	53%	59.	44	2 095	B+
55.	Uruguay	53%	70.	28	8 291	BBB
56.	Costa Rica	44%	72.	24	4 998	BB-
57.	Morocco	44%	60.	44	1 275	BBB-

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The analysis of countries' external debt statistics in						
relations to their GDP shows that, apart from major						
financial centres, the wealthiest developed countries						
have the biggest external debt. Thanks to their cred-						
ibility, they have become more and more in debt over						
the past decades (to the level of over 100 or 200% of						
GDP) and, despite high debt burden (not only foreign),						
they still possess much higher creditworthiness than						
other less indebted developing economies. It is a privi-						
lege of wealthy, stable economies which have interna-						
tional currencies. Even though this credibility rating is						
not visible in the case of some countries which suffered						
after the crisis in 2008 (table 1, column 5), thanks to						
confidence in the financial markets they could increase						
their debt to so high level. It is worth noting that until						
2009, Greece had a rating of A (and in 2003–2004 A+),						
Portugal AA and Spain AAA.						

The lowest foreign debt among Western countries is the one of Japan: 67% GDP. In the case of others,

			rating			
		% GDP	No.**	USD bn	per capita (USD)	7.04.2017 S&P
		1	2	3	4	5
58.	Vietnam	40%	51.	78	848	BB-
59.	South Africa	39%	42.	124	2 256	BB+
60.	Russia Federation	39%	22.	518	3 598	BB+
61.	Colombia	38%	45.	110	2 291	BBB
62.	Brazil	37%	19.	665	3 200	BB
63.	Mexico	37%	28.	418	3 288	BBB+
64.	Indonesia	36%	32.	310	1 204	BB+
65.	Peru	35%	54.	66	2 101	BBB+
66.	Thailand	33%	40.	131	1 934	BBB+
67.	Israel	30%	49.	89	10 673	A+
68.	Argentina	29%	35.	171	3 930	B+
69.	Korea, Rep.	29%	29.	396	7 825	AA
70.	Philippines	26%	52.	77	769	BBB
71.	Venezuela	24%	43.	124	3 975	CCC
72.	Pakistan	24%	55.	65	347	В
73.	India	23%	25.	479	366	BBB-
74.	Bangladesh	20%	61.	38	238	BB-
75.	Egypt	14%	58.	48	522	B-
76.	China	13%	13.	1 418	1 034	AA-

^{*} with nominal foreign debt of over USD 20bn

Source: self-reported data on the basis of The World Bank, Gross External Debt Position, Quarterly External Debt Statistics/SDDS (http://databank.worldbank.org/data/home.aspx) and S&P Global, Sovereign Risk Indicators, Updated As of April 07, 2017 (https://www.spratings.com/sri/).

it amounts to 100% of GDP and more. The second half of the table 1, with foreign debt of tens of percent, includes only developing economies (apart from Japan). Their illusory better statistics are accompanied with lower credibility (with the average rating of B). It is reflected that the debt level is a significant enough barrier for their economic development, as it greatly limits access to foreign capital and increases risk premium, lowers stability of development financing and debt roll over, and thus country's investment attractiveness. Too often, while making international comparisons, differences in evaluation of economical credibility are forgotten, which, in the context of globalisation, are the key factor for evaluation and interpretation of levels and changes of economic indicators. In the case of a strong and stable economy, investors are ready to forget about temporarily worse statistics which does not cause the capital's outflow, drop in the exchange rate (and increase the burden of servicing and repayment of

^{**} placed in the ranking of the biggest debtors according to the nominal level of foreign debt.

foreign liabilities and imports) and deceleration of new capital's inflow (causing liquidity problems of the country, banks or companies), as it is the case for developing countries. What is more, their situation comes back to normal after such turmoils a lot faster; the course of shocks is smoother and their duration is shorter. It can be confirmed by the return of capital into the US financial market in the beginning of 2009 which, without a doubt, mitigated the crisis of 2008. Not only developing economies are poorer and have less of national capital, they also have limited access to foreign financing, can borrow lesser amounts and have to pay more for it, which makes it difficult to make up for development arrears and deepens the distance from developed economies. Unfortunately, those countries suffer far greater in the case of crises and it is much more difficult for them to overcome issues associated with those crises.

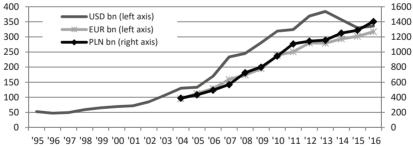
It is worth noting that Poland is one of the biggest debtors among developing countries, both nominally (USD 330bn) and in relations to GDP (69%, tab. 1), and its external debt is continuously growing (fig. 1).

A lower level of foreign debt in USD for 2014–2015 might be misleading, as it is a consequence of the appreciation of American dollar at that time. Poland's foreign debt in euro or Polish zloty is becoming greater and greater every year (fig. 1).

Paradoxically, there is an advantage in the situation described above. As the level of foreign debt in Poland ranks as the 7th among developing countries and 31st among all countries, in the case of solvency crisis there is hope that it is in best interest of a number of creditors and related entities to help Polish economy.

Affiliation with other highest nominal foreign debtors among developing countries, thus less stable countries, might be a stabilising factor in itself. According to the saying too big to fail, it seems that these countries can expect better understanding among creditors and investors, as possible external bankruptcy of bigger nominal debtor would cause huge losses within the global system. Of course, the situations looks a lot different now, when creditors are mostly dispersed investors, in contrast to a few decades ago, when those mostly consisted of governments. A determining factor can be indicated as the structure of foreign debt and creditors. It must be noted that these relations may be illusive or work only until a certain point in time (a decrease of credibility or relations of yield to risk assessed subjectively by investors, independent from situation in the country, as caused by, for example, a change of investors' sentiment in the international financial markets). A good example for such vigilance is the case of Lehman Brothers bank's bankruptcy in 2008.

Figure 1. Poland's external debt in the years 1995–2016 (USD bn, EUR bn, PLN bn)



Source: self-reported data on the basis of NBP, Statystyka bilansu płatniczego. Zadłużenie zagraniczne Polski (www.nbp.pl).

When it comes to nominal foreign debt, Poland ranks as 7th after China, Brazil, Russia, India, Mexico, Korea and Turkey; in relations to GDP (excluding tax havens), it ranks as 15th among developing countries with the highest debt (tab. 1). It accounts for relatively limited ability to incur new liabilities by Polish companies and Treasury, or banks; thus, it increases investment risk in Poland, overestimates market cost of capital, decreases consumption and investment, so it limits development possibilities.

Foreign debt as a threat to national and global financial security

It is worth noting that foreign debt is a great burden for the entire global economy. Despite of the frequency of this phenomenon and the increasing acceptance for its growing level, it must be remembered that the annual debt servicing costs of almost USD 74 trillion (76 economies included in tab. 1) results in uneffective allocation of income, lower global consumption and

investment, higher risk, more expensive capital, lower level of wealth among people all over the world. Such high debts cause potential threat for financial stability of indebted economies, their creditors and debt markets. This multitrillion (and still growing) global imbalance feeds the next speculative bubble and global crises, strengthens turmoil and its frequency. It is of interest to global economy to control further growth of foreign debts, especially of developing countries and, more importantly, taking real action towards its deleveraging:

- without a doubt, it is necessary to reduce debt, extend the payment deadline to a few decades and lower interest rates,
- creditors must allow less restrictive character of economic policy in an indebted country (instead of forcing the restrictive policy), to support economic growth and allow generation of income for debt servicing and its relative decrease, that is to give real hope for at least partial reduction of debt which should encourage debtors to take action (current solutions discourage debtors to take action – these solutions do not give any hope for real overcoming of the debt),
- government and/or international guarantees for banks and investors are needed, in order to strengthen financial stability of rolling over the debt (not only foreign or these of the most indebted developing economies).

The issue of debt has been dynamically growing since the 70's of the past century as it is currently one of the biggest threats to national and global financial security. As a significant part of debts is of foreign source, its increase intensifies the issue of international relations and financial dependancy of economies, thus limits autonomy and effectiveness of national economic policies. Growing external debt also lowers creditworthiness of a given economy and its entities, and servicing of such debt causes uneffective allocation of income as it lowers consumption, investment and absorption of global economy. As a result, social-economic development is decreased¹⁹ and the wealth level of future generations is limited. Continuously increasing cost of debt intensifies social dissatisfaction and seems to cause radicalisation of views, creates base for populism and acceptance of previously intolerable behavior leading to disengagement in the sense of responsibility of debt repayment,

change of hierarchy in an existing value system. As an example, confiscation by insolvent Venezuelan government of an US General Motors factory in Valencia in 2017, or confiscation of 47.5% of deposit value from bank clients in Cyprus in 2013 (over 100 thousand euros), conditioning international aid. Although even in the 80's of the past century, Peru and then Nigeria, Philippines and Venezuela independently lowered the servicing payments of foreign debt (to 10-30% of export) which, to surprise of the majority, was received by bank creditors with peace²⁰. Unpredictable behavior of the growing number of creditors creates real risk of global financial paralysis. It is surprising that, over so many decades of growing number of even high indebted developing countries, no cartel of the biggest debtors was created, maybe thanks to which it would be easier to deleverage the most indebted countries, with a real advantage for absorption and development of global economy. It must be noted that the debt overhang problem loosens discipline in the economic policy among many countries and thus accelerates the process of rising debts.

Although the biggest debtors are among highly developed countries (external debt of 15 of them - each of them - exceeded USD 1 trillion), the debt overhang problem concerns mostly developing countries which have significantly lower creditworthiness, higher sensitivity to external shocks and lower resistance to them. It increases the probability of a sudden stop in capital inflows, which additionally increases investment risk, causes more expensive (also outside of crisis period) capital cost and limited access to external financing and without those these economies are unable to roll over their debt, finance development and decrease distance to developed countries²¹ which already deepens differences in the wealthy level. It comes as no surprise that continuous debt discourages developing economies to take any actions, even though their debt is still increasing. It is also recognized among highly developed economies which consequently weakens international activities leading to providing a real solution to debt overhang problem. It also decreases their effectiveness.

¹⁹ Dynus M., *Globalny kryzys zadłużeniowy – analiza przyczynowo-skutkowa*, "Zeszyty Naukowe WSB we Wrocławiu", Nr 8 (8), 2007.

²⁰ Głuchowski J., *Międzynarodowe stosunki finansowe*, PWE, Warszawa 1997, pp. 171–173.

²¹ Dynus M., *Zadłużenie zagraniczne Polski – problem wielu rozwijających się krajów*, "Roczniki Naukowe WSB w Toruniu", Nr 5 (5), 2006.

Conclusions

Foreign debt is increasing decade after decade and amounts to global GDP. It contributes to intensification of a number of financial dependancies on the international scale which results in more frequent global crises. Without a doubt, the biggest debtors can be found among the biggest economies – their external debts reach even a few dozen of their GDPs. Paradoxically, they are not the ones suffering the most because of shocks; weaker economies of developing countries with higher dependancy on external financing of debt and development suffer far greater. Their lower credibility causes the strongest deceleration in the inflow of foreign capital and hike of its cost, which increases everyday risk of its functioning, even outside of crisis.

Poland is one of the biggest debtors among developing countries, both nominally and in relations to GDP. It proves relatively strong dependancy of Polish economy on external financing and strong exposure to external shocks. It corresponds to higher estimation of investment risk in Poland and lower credibility of its entities, not only in contrast to Western economies, but also countries of Central and Eastern Europe, which is reflected in higher level of capital cost in Poland and limited access to this capital²² as well as relatively high risk of a sudden stop phenomenon. Lower credibility (due to an increasing debt, not only foreign but also its servicing cost) lowers stability of economic entities in Poland, their possibilities and development perspectives, which in consequence contributes to lower financial safety level of Polish citizens and lower level of wealth of future generations.

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