### Jolanta Maria CIAK, PhD, Professor of the University in Toruń Institute of Finance, WSB University in Toruń e-mail: jolanta.ciak@wsb.torun.pl

DOI: 10.15290/oes.2018.02.92.02

### CAN WE TALK ABOUT THE SECURITY OF PUBLIC FINANCE IN POLAND? – THE STATE AND PROSPECTS

#### **Summary**

*Purpose* – The pervasiveness and persistence of budgetary imbalances and systematic growth of public debt in Poland and in the majority of modern countries has resulted in the fact that the subject of public finance security is important and topical. The aim of the article is to analyse the state of public finance security in Poland, to characterise selected determinants influencing security and to indicate current and future threats.

*Methods* – Analysis of national and foreign source literature, primary and secondary statistical data (desk research), deductive reasoning.

Approach – The location of public finance security within economic and financial security, indicating the foundations and pillars of national economic security, discussing the determinants of public finance security theoretically and practically, analysis and inference in the scope of three categories of deficit and public debt (of the government budget, public finance sector and *general government*), indicating threats to Polish public finance which, according to the author, affect not only currently but may also affect the future.

Findings – The analysis presented in the article demonstrates that the phenomenon of imbalance in national finance has become an inherent part of the Polish practice of public funds management. The budgetary deficit, which has been present for over thirty years, as well as systematic growth of public debt, result in the fact that the threats of the destabilising role of public finance in relation to the whole financial system and the real economy have become one of the main challenges for Polish authorities. The fact of presenting not very reliable data in public statistics is also worrying. Lowering some economic indicators is not a new problem; in total, in the years 2004–2016 the deficit of public finance sector was underestimated by PLN 158.6 billion.

**Key words**: security of public finance, budget deficit, general government deficit, public debt, public sector borrowing needs

JEL: H62, H63, H74

#### 1. Introduction

The security of public finance constitutes an important and current problem with respect to the commonness and persistence of budget imbalance and the systematic growth of public debt. The presence of public debt and its rapid increase frequently contribute to the fact that "governing" its amount gets out of the public authorities' control. In this context, the issue of the security of public finance takes on a whole new perspective and imposes the creation of new instruments for its protection, which go beyond short-term temporary undertakings and concentrate on first of all the assurance of long-term and sustainable development of the whole socio-economic system. Stable public finance should be its essential element. The aim of the article is to analyse the state of public finance security in Poland and to specify the factors that are threatening it now and may threaten in the future.

# 2. Public Finance Security within the Framework of National Financial and Economic Security

Economic security is a broad concept in financial literature. On the one hand, it implies the actual state in which an economy can develop harmoniously and citizens can enjoy a fair standard of living through an uninterrupted access to resources, outlet market, capital, modern technology or information [Szubrycht, 2006, p. 92]. On the other hand, economic security means the ability of the economic system of a state to use internal growth factors and international economic interdependence that guarantee its unthreatened development [Dziekański, 2016, p. 121]. Nevertheless, in practice every country develops its own model of economic security based on specific pillars [Siemiątkowski, 2015, p. 25].

Setting and guaranteeing an optimal level of public debt (both national and foreign), which would help to limit its negative impact on the functioning of the socio-economic system in a given country, should constitute the foundation for the economic security of a country. It is one of the basic objectives of a country's fiscal policy [Patrzałek, 2008; Ciak, 2002; Ciak, 2012], important for achieving macroeconomic balance.

The diagram below presents the foundations and pillars of a country's economic security.

Financial security defined as a state of absence of threats in the area of public finance, corporate finance, insurance, banking or personal finance of households resulting from the limiting or eliminating of risk constitutes one of the most important elements of economic security [Elementy nauki..., 2007, p. 15].

Financial security also means the ability to obtain funds when they are needed. It is also the state of the absence of threats, which gives the feeling of certainty for the functioning of a given entity and the chance for its development [Redo, Wójtowicz and Ciak, 2018, p. 19].

Regardless of how financial security is defined, it is important to remember that it is inseparably connected with financial stability. It can even be assumed that financial stability constitutes a condition for financial security and vice versa: financial security is a prerequisite for financial stability.

FIGURE 1 Foundations and pillars of a country's economic security ECONOMIC SECURITY ABILITY TO SELF-INTERNATIONAL **ECONOMIC** COMPETITIVENESS OF DEVELOP AND MAKE SOVEREIGNTY THE ECONOMY PROGRESS (INDEPENDENCE) The ability of the economic system to create a sufficient Such a state of development of number and quality of the national economic system technological innovations and international economic Long-term ability of ensuring foundations of modern the economy to withstand relations that ensures the ability production, a system for international competition to cope with external pressure increasing employees' that could lead to disorders in qualifications and creating development a favourable atmosphere for investment RELATIVELY SUSTAINABLE BUDGET AND SUCH A LEVEL OF PUBLIC DEBT WHICH ALLOWS AN APPROPRIATE RATE OF A COUNTRY'S ECONOMIC DEVELOPMENT PARTICIPATION IN INTERNATIONAL ECONOMIC STRUCTURES FORMALISING RELATIONSHIPS WITH

Source: [Redo, Wójtowicz and Ciak, 2018, p. 17].

It is undeniable that chronic fiscal imbalance resulting in the growth of public debt and the increase of a market-risk premium overstating the market cost of capital is one of the symptoms of breaching public finance security. Maintaining this security requires specifying the optimal, and in this way secure, level of public debt and the acceptable dynamics of its growth. Public debt should not affect economic balance [Gołębiowski, 2008, p. 371].

THE ENVIRONMENT

Within public finance security the following threats can be distinguished: those connected with revenue collection and execution of public expenditure, the threat of high deficit or public debt, of low demand for securities (in the country and abroad), and threats in connection with a low international rating, which could cause the increase of the cost of public debt now and in the future [Redo, 2017; Redo, 2016; Ciak, Płókarz, 2016].

However, the lack of threats to public finance security means that a country is not able to perform its basic functions correctly despite all kinds of disturbances resulting from business cycles, external disturbances, or the negative influence of other countries.

Stanisław Owsiak presents an interesting approach to public finance security, differentiating between strategic security and operational security. According to the aforementioned author, strategic security can be understood as:

- 1. maintaining a balance between government revenue and expenditure in the mid-term and long-term, or at least keeping control over public sector deficits and over the level of public debt;
- 2. protecting the economy and society from excessive indebtedness of the state in the country and abroad so that the country does not fall into debt;
- 3. protecting the economy and society from excessive foreign debt, which is connected with foreign exchange risk and interest rate risk;
- 4. protecting the economy and society from inflation caused by expansionary fiscal policy, an irresponsible explosion of public expenditure politically motivated by a government oriented towards preserving power;
- preventing excessive burdening of future generations with current debts, which may lead to hidden redistribution of income between generations and consequently influence economic growth and development negatively;
- 6. preserving credibility on the national and international lending market;
- 7. preserving society's confidence in state institutions.

Public finance security in operational terms is ensuring the ability to finance current tasks of the state and to regulate financial liabilities on an ongoing and timely basis [Owsiak, 2017, p. 985].

# 3. Budget Deficit and Public Debt as Determinants of Public Finance Security

A budget deficit demonstrates excessive expenses. The issue of a budget deficit is of particular importance for the correct functioning of the whole national economy and individual entities, public ones in particular. The inevitability of budgetary deficits in many developed countries makes them particularly interesting for economists, financiers, politicians, and public opinion [Ciak, 2006, p. 48].

A deficit can be assumed in the Budget Act or it can occur as a result of mistakes or because of independent factors. It may be connected with the unfavourable economic situation of a country or with a deficit in payment transactions with foreign countries [Ciak, 2002, p. 29]. Its long-lasting existence cannot be positively evaluated, particularly when it is connected with the fast growth of public debt. Consequently, each budget deficit should be controlled in terms of its size and the period of time in which it exists.

A budgetary deficit existing over a longer period of time is not positive. Constant surplus of expenditure over revenue limits the scope of manoeuvre of fiscal authorities in the area of fiscal policy [Ciak, 2012, pp. 41–50;

Lucas, 1998; Brauninger, 2005; Rankin, Roffia 2005]<sup>1</sup>. Therefore, the effects of a long-lasting deficit must be evaluated in terms of short- and long-term influence on the structure of global demand, production, and production output (including labour force supply). However, in particular circumstances, it may be consciously used by a government as an instrument for pursuing a specific economic policy.

A long-lasting budgetary deficit results in public debt, which is now an immanent feature of the majority of countries with a market economy. Defined as all liabilities of public authorities due to the surplus of expenditure over revenue from previous periods, it becomes a burden for future generations. Undoubtedly, the accelerating growth of public debt in the world, including the countries of the European Union, has been observed in the last few years. As numerously emphasised in the source literature, public debt in particular countries has been growing too easily, and, simultaneously, it has not been given enough prudential priority [Ciak, 2012, p. 271].

One of the consequences of public debt is a debt trap, which means the necessity to contract new liabilities in order to cover already accumulated ones (by issuing treasury securities or direct bank loans in national and foreign financial institutions). Disorganisation of the whole economy can result from a debt trap [Redo, Wójtowicz and Ciak, 2018, p. 36].

## 4. Budgetary Deficit and Public Debt in Poland – Diagnosis of the Situation

Table 1 presents the state budget deficit, public finance sector deficit, as well as *general government* deficit in the years 2000–2016.

Analysing the data in table 1 the following can be concluded:

Firstly, differentiation in values (real ones and in relation to GDP) of the three categories of deficit, namely: in the state budget deficit, public finance sector, and *general government* deficit.

Secondly, the public finance deficit in Poland, also in the time of a good economic situation, made the fiscal policy less flexible when the crisis broke out in autumn 2008 and led to record high deficits in the public finance sector in the years 2009–2011, which exceeded the Treaty 3% of GDP. High deficits were observed in the years 2001–2004 as well.

Thirdly, in consequence, an excessive deficit procedure was imposed on Poland twice – in 2004 for the first time, in 2009 for the second time.

<sup>&</sup>lt;sup>1</sup> These issues are described and discussed in detail in the source literature. Most economists agree with the thesis that a budget deficit has its impact on the economic situation of a given country. However, descriptions of interdependencies between budget deficit, public debt, and other macroeconomic variables differ depending on the author.

TABLE 1
The state budget deficit, public finance sector deficit and general government deficit in Poland in the years 2000–2016

Specification	Budgetary deficit (state budget deficit)		Public finance sector deficit		General government deficit (ESA 2010)	
	PLN billion	% GDP	PLN billion	% GDP	% GDP	
2000	- 15.4	-2.1	- 21.5	-2.9	-3.0	
2001	-32.4	-4.1	-38.2	-4.9	-4.8	
2002	-39.4	- 4.9	- 46.2	-5.7	-4.8	
2003	-37.0	-4.4	- 45.3	-5.4	-6.1	
2004	-41.4	-4.4	- 41.9	-4.5	- 5.0	
2005	-28.4	- 2.9	- 29.6	-3.0	-4.0	
2006	- 25.1	-2.3	- 22.2	-2.1	-3.6	
2007	- 16.0	-1.3	1.7	0.1	- 1.9	
2008	-24.3	- 1.9	- 20.6	-1.6	-3.6	
2009	-23.8	-1.7	- 50.1	-3.7	-7.3	
2010	-44.6	-3.1	- 85.1	- 5.9	-7.3	
2011	- 25.1	-1.6	- 56.3	-3.6	-4.8	
2012	-30.4	- 1.9	-37.6	-2.3	-3.7	
2013	- 42.2	-2.5	-48.4	- 2.9	- 4.1	
2014	- 29.0	-1.7	-39.6	-2.3	-3.5	
2015	-42.6	-2.4	- 44.0	-2.4	-2.6	
2016	-46.2	- 2.5	- 46.1	- 2.5	-2.4	

Source: [Redo, Wójtowicz and Ciak, 2018, p. 49].

Fourthly, high deficits in Poland existing for a long time resulted in dynamic growth of public debt and an increase of annual borrowing needs of the State Treasury (gross and net) for its servicing. The sale of treasury securities has amounted to PLN 120–200 billion a year.

Taking into account the figure below (table 2), it can be noted that the borrowing needs also include items that belong to the group of needs, though they constitute sources of needs financing (the values with a minus sign). This can limit the transparency of the statistical data concerning the values.

Analysing the data from table 2, it is noticeable that the national and foreign debt buy-back constitutes the basis for the borrowing needs. Its share in the years 2012–2016 was considerable and changeable, and it amounted to 77.8% in 2012, 63.5% in 2013, 64.8% in 2014, 66.4% in 2015 and 65.6% in 2016, respectively.

TABLE 2
Borrowing needs of the state budget in the years 2012–2016
(PLN billions)

Specification		2013	2014	2015	2016
I. Gross borrowing needs of the state budget		157.2	122.6	159.9	169.4
II. Debt buy-back – national debt – foreigndebt	131.4 114.1 17.3	99.8 84.1 15.7	79.4 60.3 19.1	106.1 84.4 21.7	112.3 89.2 23.1
III. Net borrowing needs of the state budget including:	37.3	57.4	43.2	53.8	57.1
<ul><li>state budget deficit:</li></ul>	30.4	42.2	29.0	42.6	46.2
<ul> <li>European funds budget outturn:</li> </ul>		-6.2	0.3	3.2	12.6
<ul> <li>refund of Social Insurance Fund (FUS) of the loss of contributions for Open Pension Funds(OFE):</li> </ul>		10.7	8.3	3.1	3.2
- credits and loans granted:		12.1	9.2	5.4	1.4
<ul> <li>prefinancing of tasks funded by EU funds:</li> </ul>		-0.05	$\mathbf{v}^3$	-0.4	$\mathbf{V}^4$
<ul> <li>payments in connection with the participation of the State Treasury in IFI¹:</li> </ul>		0.4	0.2	0.3	0.4
<ul> <li>public sector liquidity management:</li> </ul>	-3.9	0.3	-0.1	-8.5	-3.1
– EU funds management:		_	_	9.9	-2.9
<ul><li>privatisation revenues:</li></ul>		-1.7	-0.3	0.0	0.0
<ul> <li>revenues from national entities for the payment of granted foreign credit:</li> </ul>	- 0.06	- 0.06	-0.06	-0.06	- 0.06
- other inflows and outflows:	-0.1	-0.3	-3.2	1.7	-0.6

<sup>&</sup>lt;sup>1</sup> IFI – International Financial Institutions

The (-) values indicate a reduction of borrowing needs of the state.

Source: own elaboration based on: NIK (Supreme Audit Office) Reports for the years 2012–2016 [NIK, 2013; NIK, 2014; NIK, 2015; NIK, 2016; NIK, 2017].

It should be emphasised that within the gross borrowing needs there are no costs of the public debt servicing. Those costs constitute government budget expenditure. Taking the years 1999–2017 into consideration, it is noticeable that they amounted to from PLN 12.5 billion (in 1999) to PLN 46.2 billion (in 2016). The chart below shows the public debt servicing costs in the abovementioned period of time.

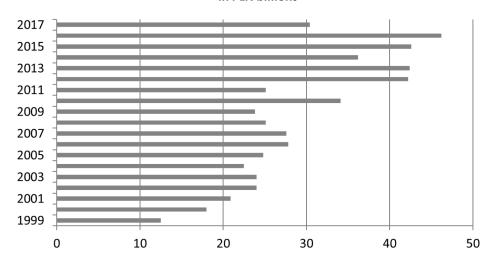
Taking the above chart into consideration, it can be concluded that public debt servicing costs in the examined period varied. On average they amounted to PLN 28.96 billion. The costs of public debt servicing generally exhibited a growing tendency and in the years 2012–2013 reached the amount of PLN 42 billion (thus slightly exceeding total revenue derived from personal income tax

<sup>&</sup>lt;sup>2</sup> value: PLN – 7 mln

<sup>&</sup>lt;sup>3</sup> value: PLN – 4.5 mln

<sup>4</sup> value: PLN - 43.4 mln

CHART 1
Public debt servicing costs in the years 1999–2017
in PLN billions



Source: own elaboration based on the Ministry of Finance data.

for that period). Simultaneously, in the following years (2014–2016), an increase in the costs of the public debt servicing manifested itself and it only resulted from drastically low interest rates in the world after the crisis in 2008 (the low interest rates meant lower interest repayment instalments of the foreign part of the public debt) also in Poland (but not until 2013) and from a sudden decrease in the debt as a consequence of taking about PLN 150 billion from the Open Pension Funds (OFE) in 2014. In 2016 the highest costs of the public debt servicing of PLN 46.2 billion were noted.

It should be emphasised that according to the provisions of the Budget Act for 2017, a lower level of the costs of PLN 30.4 billion was planned, and for 2018 – PLN 30.7 billion respectively. It can be seen that in the abovementioned years the total cost of the debt servicing amounted to PLN 30 billion, which exceeds the costs of the Family 500+ programme.

On the other hand, public debt in Poland exceeds neither the Treaty nor the Constitutional (the 1997 Act) level of 60% of GDP (table 3).

Among the most important conclusions that can be drawn from table 3 and from the information connected with this, the following can be mentioned:

Firstly, differentiated values of the three types of debt, namely: the public debt, *general government* debt, and state debt, both in value terms and in the relation to GDP.

Secondly, in 2016 the *general government* debt slightly exceeded the level of PLN 1 trillion.

TABLE 3
The level of public debt, general government debt, and State Debt
in the years 2000–2016

Specification	State debt		Public debt		General government debt	
	PLN billion	% GDP	PLN billion	% GDP	PLN billion	% GDP
2000	266.8	35.7	280.3	37.5	272.3	36.5
2001	283.9	36.4	302.1	38.7	291.2	37.3
2002	327.9	40.5	352.4	43.5	338.7	41.8
2003	378.9	44.8	408.3	48.3	394.1	46.6
2004	402.9	43.2	431.4	46.2	420.3	45.0
2005	440.2	44.7	466.6	47.1	460.0	46.4
2006	478.5	44.9	506.3	47.3	502.3	46.9
2007	501.5	42.3	527.4	44.4	524.4	44.2
2008	569.9	44.6	597.8	46.5	595.4	46.3
2009	631.5	46.4	669.9	48.8	678.3	49.4
2010	701.9	48.6	747.9	51.7	767.8	53.1
2011	771.1	49.2	815.3	52.0	847.7	54.1
2012	793.9	48.7	840.5	51.6	875.1	53.7
2013	838.0	50.6	882.3	53.3	922.8	55.7
2014	779.9	45.4	826.8	48.1	864.0	50.2
2015	834.6	46.6	877.3	48.8	919.6	51.1
2016	928.7	50.1	965.2	52.1	1006.3	54.4

Source: [Redo, Wójtowicz and Ciak, 2018, p. 50].

Thirdly, the public debt in Poland is currently much higher than at the beginning of the 21<sup>st</sup> century (in the years 2000–2016 it increased from PLN 280 billion to PLN 965 billion).

Fourthly, till and including 2008, the public debt exceeded *general government* debt; after that year the reverse tendency can be observed.

Fifthly, reducing the public debt, *general government* debt and the state debt in 2014 resulted from taking the money from the Open Pension Funds (OFE) (cancelling their bond part).

Sixthly, the public debt-to-GDP ratio has constantly amounted to 50% of GDP for fourteen years, though it increased in the examined period.

The indicated statistical data and their short analysis lead to the conclusion that different means of "manipulating" published statistics in the area of the public debt are used [Redo, Wójtowicz and Ciak, 2018, p. 222].<sup>2</sup> Annual significant budgetary deficits in Poland cause a dynamic increase of the public debt

and despite the fact that official statistics of the debt have remained at the same level of about 50% of GDP for twelve years, it has been taken into account in the premium required by investors for risky investments for years.

#### 5. Conclusions

Taking the statistical data concerning public finance in Poland (deficit, debt, the costs of public debt servicing, and borrowing needs) mentioned in the article into consideration, it can be stated that an imbalance in the state's finance has anchored itself in the Polish practice of managing public funds. The systematic increase in the public debt observed for over thirty years makes the threats resulting from the destabilising role of public finance in relation to the whole financial system and the real economy one of the main challenges for Polish public authorities.

The particularly rapid growth of public debt in Poland both in absolute terms and in relation to GDP was observed after 2000. As a consequence of this, the debt has increased by three and a half times in the last sixteen years and its share of GDP has increased by almost 20%. What is particularly worrying, budgetary deficits of even PLN 40–50 billion were noted in Poland even in good economic times.

It is also disturbing that the data presented in public statistics are not always reliable. From the information presented by NIK it is clear that the problem of underestimating some economic indicators (i.e. deficit of the public finance sector or the amount of public revenue) is not new. The Minister of Finance has frequently miscalculated the amount of deficit of public revenue. In the years 2004–2016 the public finance sector deficit was underestimated by PLN 158.6 billion in total, which is PLN 12.2 billion a year on average, in relation to the actual data<sup>4</sup> [NIK, 2017, p. 263].

A few threats to Polish public finance, which in the author's opinion can be seen now and will be seen in the future, are presented below. An excessive expansion of public expenditure in Poland resulting in permanent deficits in the state budget and a dynamic increase in the public debt cause and may cause the following:

<sup>&</sup>lt;sup>2</sup> The examples can be: manipulation of the statutory scope of the public finance sector, the definition of public debt, rules of designating the exchange rate for conversions or of differences in recording operations as well as of the method of GDP calculating.

 $<sup>^3</sup>$  The first deficits in the state budget were observed at the beginning of 1980s [Ciak, 2002].

<sup>&</sup>lt;sup>4</sup> It resulted from considering the funds transferred from the state budget to FUS by the Minster of Finance due to compensation of contributions lost in favour of the Open Pension Funds as public revenue. It is incompatible with Article 7 Item 2 of the Public Finance Act [Ustawa, 2009], which requires establishing public revenue and expenditure after eliminating financial flows between entities of the sector.

- 1. decline in economic credibility including the state's financial credibility;
- 2. increased costs of public debt servicing and simultaneous faster growth of the public debt – in recent years the costs of public debt servicing have frequently exceeded the level of the budgetary deficit, which means that if the public debt did not exist, the primary balance of the state budget would have been positive in the last 9 years (a budget surplus would have appeared);
- as a consequence, poor allocation of public revenue (redirecting public expenditure towards unproductive categories, leading to limitations in financing education, healthcare, or public investments which can have a positive impact on future economic growth) and/or the necessity to raise taxes (or keep them at a level higher than preferred);
- 4. in the situation of limited financial possibilities of the domestic market, dependency on external financing is growing, which increases the investment risk and makes the Polish economy less resistant to different types of shock;
- 5. complications in the area of effective management of the public debt in Poland;
- 6. stronger pressure exerted on the public budget balance, which makes achieving budget surpluses less possible and increases the risk of excess over the reference values defined both in the Maastricht Treaty (3% of GDP for the *general government* deficit) and in the Fiscal Package (0.5% of GDP for structural deficit);
- 7. imposing an excessive deficit procedure on Poland for the third time, which will result in a decline in the credibility, stability, and resistance of the Polish economy to external shocks;
- 8. a relaxation of discipline in fiscal policy and strengthening a less "serious" approach to financial issues not only among politicians but also in the whole society, which may "lull" vigilance and lower the low (in some circles) financial and economic awareness of the citizens;
- the problem of underestimating some economic indicators by the Minister of Finance (i.e. the level of the public finance sector deficit or the amount of public revenue), which causes a lack of credibility and trust in published statistical data;
- 10. an incentive to further "manipulating" of the provisions of the Public Finance Act and of the definition of public debt; that is, changes which eliminate the necessity to make efforts to enhance the security of public finance and, what is more important, contribute to the threats facing the financial and economic security of the country.

### References

Brauninger M., 2005, *The Budget Deficit, Public Debt and Endogenous Growth*, Journal of Public Economic Theory, December 2005, Vol. 7 (5).

- Ciak J., 2002, Polityka budżetowa, TNOiK, Toruń.
- Ciak J., 2006, Występowanie deficytów budżetowych jako problem państw o gospodarce rynkowej, [w:] Konkurencyjność polskiej gospodarki wobec procesu integracji europejskiej, Kołosowska B., Dynus M., Patyka J. (red.), Toruń.
- Ciak, J., 2012, Źródła finansowania deficytu budżetu państwa, CeDeWu, Warszawa.
- Ciak J., Płókarz R., 2016, International Rating as a Creditworthiness Measure of a State, Torun International Studies, No 1(9), DOI:  $h\Sigma p://dx.doi.org/10.$  12775/TIS.2016.010.
- Dziekański P., 2016, Bezpieczeństwo ekonomiczne wyzwaniem współczesnego regionu próba oceny syntetycznej, Kultura Bezpieczeństwa, nr 16, electronic document, access mode: [http://kultura-bezpieczenstwa.pl/wp-content/uploads/2015/07/P.-Dzieka%C5%84ski1-KB16.121-140.pdf].
- Elementy nauki o finansach. Kategorie i instrumenty finansowe, 2007, Jajuga K. (red.), PWE, Warszawa.
- European Commission, 2015, Trade for All. Towards a more responsible trade and investment policy, Luxembourg, October, electronic document, access mode: [http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc\_1538 46.pdf].
- Gołębiowski G., 2008, *Dług publiczny*, [w:] *System finansowy w Polsce*, Pietrzak B., Polański Z., Woźniak B. (red.), t. 2, PWN, Warszawa.
- Lucas R.E., 1988, On the mechanics of economic development, Journal of Monetary Economics, 22.
- NIK, 2013, Analiza wykonania budżetu państwa i założeń polityki pieniężnej za 2012 r., Warszawa.
- NIK, 2014, Analiza wykonania budżetu państwa i założeń polityki pieniężnej za 2013 r., Warszawa.
- NIK, 2015, Analiza wykonania budżetu państwa i założeń polityki pieniężnej za 2014 r., Warszawa.
- NIK, 2016, Analiza wykonania budżetu państwa i założeń polityki pieniężnej za 2015 r., Warszawa.
- NIK, 2017, Analiza wykonania budżetu państwa i założeń polityki pieniężnej za 2016 r., Warszawa.
- Owsiak S., 2017, Finanse publiczne. Współczesne ujęcie, Wydawnictwo PWN.
- Patrzałek L., 2008, *Polityka budżetowa*, [w:] *Polityka gospodarcza*, Winiarski B. (red.), PWN, Warszawa.
- Rankin N., Roffia B., 2005, *Maximum sustainble government debt in the overlapping generations model*, The Menchester School Working Papers, 71.
- Redo M., 2016, Sustaining government budget deficits as a cause for the cost of public debt service increase in Western European countries in the 1995–2015 period, Torun International Studies, No. 1 (9), DOI: http://dx.doi.org/10.12775/TIS.2016.005.

- Redo M., 2017, Bezpieczeństwo finansów publicznych wpływ ekspansji fiskalnej na koszty obsługi długu publicznego w Polsce na tle państw Europy Środkowo-Wschodniej, [w:] Bezpieczeństwo ekonomiczne państwa. Uwarunkowania, procesy, skutki, Jackiewicz A., Trzaskowska-Dmoch A. (red.), CeDeWu, Warszawa.
- Redo M., Wójtowicz K., Ciak J.M., 2018, Bezpieczeństwo finansów publicznych, CeDeWu, Warszawa.
- Siemiątkowski P., 2015, *Uzależnienie finansowe jako zagrożenie bezpieczeństwa ekonomicznego państwa*, Wydawnictwo Naukowe UMK, Toruń.
- Szubrycht T., 2006, *Współczesne aspekty bezpieczeństwa państwa*, "Zeszyty Naukowe Marynarki Wojennej", R. XLVII, nr 4 (167), s. 87–98. bwmeta1.element. baztech-article-BWM9-0001-0016.
- Ustawa z dnia 27 sierpnia 2009 r. o finansach publicznych (Dz.U. nr 157, poz. 1240 z późn zm.).
- Ustawa z dnia 2 kwietnia 1997 r. Konstytucja Rzeczpospolitej Polskiej (Dz.U. nr 78, poz. 483).