Public Finance, the Public Sector and the General Government Sector

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Abstract

The aim of this paper is to bring a contribution to the clarification of the terms such as public finance, public sector or government which are widely used in economic analysis or in public finance management. In the Czech environment, those terms are understood differently across statistical, legislative or accounting domains. The paper illustrates a nuanced understanding currently existing. Apart from the illustrations of varying use, the content of terms in question and their mutual relation are explained and analysed from the point of view of a relevant statistical methodology. The paper concludes offering a more robust content of the term "public finance" in relation to the statistical data which are generally used as an illustration of public finance development.

Keywords	***JEL code***
Public finance, public sector, government sector	*E02, E60*

INTRODUCTION

The aim of this paper is to bring a contribution to the clarification of the terms widely used in economic analysis and in public finance management. Here, we are referring to the terms such as public finance ("veřejné finance"), public institutions ("veřejné instituce"), public sector ("veřejný sektor") on the one hand, and the government sector ("vládní sektor") or government finance ("vládní finance") on the other hand. Although an apprehension and an application of those terms in the Czech economic literature and national legislation is often arbitrary, from the statistical point of view they represent different stages of aggregation, clearly separated, and providing users with different kind of information. Given the above, we consider it highly necessary to clarify the meaning of those statistical concepts.

Not least, disparate views on which entities aggregates concerned actually represent may hamper discussions on public finance performance as well as its analysis and public finance management. So-called Maastricht criteria might serve a perfect example. By signing the Maastricht treaty, the Czech Republic is obliged to stick to the fiscal rules requiring to maintain government ("vládní") deficit under 3 percent of GDP and debt not more than 60 percent of GDP.[3] Quantification of relevant figures is closely linked

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3 For the sake of our discussion, we can ignore an exceptions from this rule.

to the treatment of public/government finance and to the national accounts´ delimitation of public/government sector managing public/government financial means. Although "the Maastricht criteria" are commonly presented as public finance indicators, they do not fit the definitions of the public sector in national accounts.

Making a difference between both concepts is of key importance not only for the public finance management, but also for theoretical considerations and empirical research on how public/government finance affects economic performance and business cycle, on the range of redistribution through political mechanism or even on inflationary/deflationary pressures originating in the public sphere. Methodology of statistical data underlying empirical research in this area goes mostly unnoticed by researchers. This purely methodological paper is meant to at least partly fill this gap. This need is further highlighted by the evolution which the methodology has gone through lately. Recent trend manifested itself in an expansion of the government sector taking gradually still larger share within the public sector´s sphere.

1 TERMINOLOGY IN USE

Historically, authors did not make much difference between the terms such as state, government or public; they were rather considered synonymous. For example, aiming to calculate the national income, economists and statisticians like William Petty, Gregory King or Adam Smith used the term "public finance" ("veřejné finance") referring to the budget of central authority. Similar holds true for Keynes, who approached the impact of government on the economy in terms of cash flow (revenue and expenditure) of the state.[4] In his famous book "Macroeconomics", Mankiw (1992), when discussing the government deficit and debts, also refers to the state rather than any other (public) entity (p. 337).

P. A. Samuelson and W. D. Nordhaus (1991) addressed such a too narrow understanding to public finance. When discussing the performance of public finance, Samuelson and Nordhaus identified that term not only with the state budget and the state debt, but they also paid attention to various budget deficits at other levels of government. In the section on government debt,[5] borrowed funds are discussed in relation to budget deficits defined as government or public debt ("vládní, či veřejný dluh").

Let us take a look at the Czech economic literature. In widely-used textbook on public finance, Hamernikova and Maaytova (2010) define public finance as "economic relations and operations carried out between institutions of public administration and other institutions in economic system".[6] According to this definition, "public finance" would statistically cover only institutions classified in the branch of public administration. In other words, institutions falling in the area of social security, public defence and the like would fall outside the definition of public finance or the public sector.

Inadequacy of similar views is further highlighted by the fact that statistical treatment is steadily getting wider. The definition of public finance, as of today, captures wide array of institutions managing tax revenues, public property or institutions engaged in information technologies (the Czech Television, the Czech Radio), culture (the National Theatre or the National Museum), education (grammar schools, high school or public universities), healthcare (especially public hospitals) or even financial business (the Czech Export Bank or the Czech-Moravian Guarantee and Development Bank). Recent trends thus reveal a need to understand public finance in a much broader sense.

In another well-known Czech economic book (Holman, 2016), public finance is defined as the state budget together with budgets of municipalities (p. 598).[7] After mentioning this, the size of the public sector is illustrated by the share of total expenditures of the general government sector, as defined in ESA2010, on GDP. Then, the aggregate on the total government expenditures is further referred

[4] Auerbach, Kotlikoff, Leibfritz (1999).
[5] Samuelson and Nordhaus (1991, pp. 383–417).
[6] Authors´ translation from the Czech original.
[7] Authors´ translation from the Czech original.

to as "public expenditures". Narrow definition of the public sector is thus accompanied by illustration with data representing much wider concept than original definition set out in the book. Similarly in Spevacek (2012), the development of so-called public finance is demonstrated by the use of data describing the general government sector as defined in national accounts.

The discrepancy between terminology and the real content of illustrative data can be hardly overlooked. For the sake of complexity, we should mention that lack of consensus between economists on the definition of public finance (and related terms) is recognized by public finance economists themselves (Hamernikova-Kubatova, 1999, p. 18). At this stage, we can only reiterate that it is not an ambition of this paper to provide exhaustive definitions, but to describe the relations between relevant concepts, their mutual relations and to show a certain kind of leeway with which they are used.

To do so, let us move on to the Czech national legislation. Act No. 23/2017 Coll. regulating the Rules of Budgetary Responsibility lays down, with reference to the EU legislation, rules for public institutions in the public institution sector (par. 1) which take care of sound public finance (par. 2).[8] This act represents implementation of the Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States. Still, the definition stated in the act is not straightforward.

Paragraph 3 of the Act defines "public institutions in the public sector" which is, however, not defined in the Directive. The Act No. 23/2017 Coll. uses the term "institution of the general government sector" only for so-called "other economy unit" (par. 3, clause "m"), which meets characteristics of the institution classified in the general government sector. However, it is not entirely obvious from the wording of the Act whether the term "the general government sector" and "the public sector" are considered identical, i.e. synonymous, or not.

Further, two separate parts devoted to the public budgets are contained in the State Final Account of the Czech Republic. Concretely, we are referring to the part B (Economic development and public budgets) and part F (Economic report on other public budget components and on funds of the state budgetary organisation). It can be drawn on the text that only the state budget, the National fund, the former National Property Fund, extrabudgetary funds, public social security and local authorities (municipalities, regions, etc.) are considered parts of the public finance. The term "public budgets" thus encompasses only units using budgetary system (data on cash basis).

At the same time, the text in the part B draws the reader´s attention to the fact that the text presents data on the public finance as defined in the international standard Government Financial Statistics 2014 (GFS2014). It is worth mentioning in this respect, that both GFS2014 and the previous GFS2001 are harmonised with the manual ESA2010 (and ESA1995 respectively) in the basic concepts. This implies that all these systems present data covering the economic behaviour of units classified in the general government sector and on the accrual basis.

As in the previous cases, the conception in the State Final Account constitutes rather narrow definition of the public finance in comparison to other accounting systems discussed below and statistical models. To sum up, the term "public finance" is not firmly defined in the Czech legislation. Furthermore, the Act No. 89/1995 Coll. on the State Statistical Service further contributes to certain confusion in the use of terminology. In paragraph 9 on the use of administrative data, the Act states that the Czech Statistical Office can use individual data of public institutions classified, for statistical purposes, in the public sector. It further indicates, that this relates to quantification of deficit and debt on both quarterly and annual basis in line with the requirements of the European Community. In fact, this provision relates to the institutions treated as part of the general government sector which are generally referred to as government institutions.

Recently, we can also come across the term "a consolidated group of the state".[9] This concept captures a group of units specifically designed for the sake of consolidation of the state. Technically, it consists

[8] The interpretation from the Act No. 23/2017 Coll. is translated by the authors.
[9] The final data on the consolidation of the State are published on the website of the Ministry of Finance.

of a group of units classified in the general government sector representing the state and state enterprises which might be classified not only in the same sector as these "core" institutions, but also in the sectors of non-financial and financial corporations. This implies that this concept stands somewhere between other consolidated levels of public institutions such as the general government or the public sector.

2 DELIMITATION OF PUBLIC AND GOVERNMENT INSTITUTIONS IN INTERNATIONAL DOCUMENTS

The Council Directive 2011/85/EU mentioned above is entirely based on the concepts stipulated in the national accounts´ methodology, i.e. the general government sector in the first place. Data depicting the behaviour of the general government are taken as basis for monitoring of public finance. The following quotation is illustrative in this respect: *"To be effective in promoting budgetary discipline and the sustainability of public finance, budgetary frameworks should comprehensively cover public finances. For this reason, operations of those general government bodies and funds which do not form part of the regular budgets at sub-sector level and that have an immediate or medium-term impact on Member States' budgetary positions should be given particular consideration*" (section 25 of the Directive 2001/85/EU). From this perspective, financial means going through the general government accounts can be thus understood as public finance.

This treatment leaves open a question whether or not also financial resources of governmentally controlled corporations shall be treated as part of public finance.[10] This kind of units are referred to as public corporations taking various legal forms like state enterprises, public joint-stock companies (e.g. public transport companies) or public limited liability company (e.g. technical services). They often remain classified outside the general government sector; they do not thus add to "public finance" as derived from the generally accepted definitions.

Here we come to the one of the potential sources of certain leeway in use of the terms in the Czech environment. In the Czech translation of the Council Regulation (EC) No. 479/2009,[11] the English term "government" ("vládní") is translated into Czech as "public" ("veřejný"). Consequently, the term "public" ("veřejný") is generally used for a narrower statistical concept of "government" (vládní"), while a broader statistical concept of "public sector" defined in the ESA2010 does not actually have a Czech equivalent. As a result, the term "public" ("veřejný") is somewhat confusingly used to describe both the general government and the public sector.

Looking at other European legislative acts, we realize that the term "public" ("veřejný") has been too serving as an equivalent of the general government sector ("vládní"). The following acts can be mentioned as examples – Commission Regulation (EC) No. 264/2000 of 3rd February 2000 on the implementation of Council Regulation (EC) No. 2223/96 with respect to short-term public finance statistics, or the Government Finance Statistics 2001 and 2014 drawn up by the International Monetary Fund.

At the end of this section, let us briefly mention how the public sector, or public finance respectively, is treated in the international accounting standard for the public sector (hereinafter IPSAS). In IPSAS, the public sector covers also so-called government business enterprises (hereinafter GBE) running their business on the profit-seeking basis. Delimitation of the public sector in IPSAS is thus very similar to that in the national accounts´ methodology. However, the latter further draw a line between public enterprises operating on the market and non-market basis whereas only the latter is part of the consolidated group (the general government sector). It is just this different approach to consolidation which makes a key difference between IPSAS and ESA (Dabiccio, 2015).

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10 This view if pursued e.g. in the Fiscal Monitor published by the International Monetary Fund (2018).

11 On the on the application of the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community.

3 PUBLIC SECTOR AND GENERAL GOVERNMENT SECTOR

As we have tried to show above, the statistical concepts shape the general understanding to the scope of public finance and public sector. In this section, we will thus more clearly define these groups of institutional units as defined in the national accounts´ manuals.[12] The public sector covers the general government sector as well as non-financial and financial (quasi-)corporations. This implies two important aspects. First, particular group of publicly controlled institutional units is left out of the government sector as they supposedly operate on the market basis. Second, it is the concept of control which determines the scope of the public sector.

The notion of control consists in the ability of government institution *"to determine the general policy or programme of that entity"* (par. 20.18, ESA2010). It is worth recalling that the public sector is not a part of the core sector accounts nor has a code number in the code list of institutional sector. The actual content of the public sector is graphically illustrated by Table 1.

Table 1 The public sector and its constituents

<table>
<tr><th colspan="4">General government sector</th><th colspan="3">Public corporations</th></tr>
<tr><td rowspan="2">Central government (S.1311)</td><td rowspan="2">State government* (S.1312)</td><td rowspan="2">Local government (S.1313)</td><td rowspan="2">Social Security Funds (S.1314)</td><td rowspan="2">Public non-financial corporations (S.11001)</td><td colspan="2">Public financial institutions</td></tr>
<tr><td>Central bank (S.121)</td><td>Other public financial corporations (S.12001)</td></tr>
</table>

Note: * not relevant for the Czech Republic.
Source: Own processing

Aggregates for the public sector in the Czech Republic are regularly published by the CZSO in the form of the satellite accounts which is methodologically compatible with national accounts´ definitions. Moreover, the final aggregates are presented on the consolidated basis, i.e. internal flows within the consolidated entities are eliminated.[13] Final balance of the public sector is referred to as "public surplus/deficit", debt of the public sector than as "public debt". Debt is thus defined in line with the methodology ESA as sum of debt instruments (deposits and currency, debt securities and loans) on the asset side of the balance sheet. Nevertheless, its valuation at market prices makes an important difference compared to the definition of debt in the EDP statistics.

As Table 1 further demonstrates, the general government sector constitutes only that part of the public sector capturing on those public institutional units operating on the non-market basis. To specify in greater detail, ESA defines this group of units *"which are non-market producers whose output is intended for individual and collective consumption, and are financed by compulsory payments made by units belonging to other sectors, and institutional units principally engaged in the redistribution of national income and wealth"* (par. 2.111, ESA2010). Furthermore, the government sector includes all public corporations and quasi-corporations which are not entitled to act independently from government institutions, public institutions predominantly financed from government institutions or public units in liquidation.

To illustrate both entities numerically, the public sector consisted of 19 216 economic units at the end of 2017. The general government sector itself counted 18 042 economic subjects of different legal forms whereas 617 were included in the central government, 17 414 in the local government and 11 units were

[12] The position of national accounts data is dominant in this area; we thus consider as logical and even necessary to departure our discussion from the structural approach of the system of national accounts.
[13] The purpose of consolidation is not to inflate the share of revenues and expenditures in terms of GDP (O´Connor, Weisman, Wickens, 2004).

classified in the social security funds. All in all, the general government sector does not cover 1 143 public non-financial corporations running their business on the market basis as defined in the methodology and 7 public financial corporations.

It shall be mentioned that the determination of market behaviour remains an open question in the methodology. Currently, the manuals enumerate a number of criteria to be applied in this respect. As the treatment of market behaviour constitutes a key moment in the definition of the government sector and implicitly "public finance", let us make a few more remarks on this issue. First, although we are dealing with the macroeconomic statistics, an assessment of market behaviour of a particular unit is made at the level of institutional unit. The very first step is to decide whether a particular public producer does meet the criteria to be an independent institutional unit, as it is defined in the paragraph 2.12 ESA2010.

If a unit is recognized as institutional unit, other criteria shall be applied. The first group is related to qualitative aspects of the operation. It concerns of existing institutional environment in which a given activity is carried out. The methodology requires compilers to check the existence of private competitors, economic advantage of public producer due to regulation, granted guarantees on the value of assets or debts, and the like. If those qualitative characteristics are not met, a unit shall be classified in the government sector. If not, then compilers have to proceed to check so-called quantitative criteria. Quantitative criteria focus on the share of own revenues on the production costs. It simply states that revenues from non-government institutions including subsidies provided equally to all producers engaged in similar activities shall exceed 50 percent so that public unit can be considered as market public producer classified outside the government sector.

By application of the rules mentioned above, the methodology of national accounts, contrary to the rules stated in IPSAS, divides the public sector into market and non-market parts. This also causes conceptual and quantitative difference between final balance and debt of the public sector and the government sector. The non-market part serves a basis for the public finance management as is the case of EDP statistics. However, then we run into trouble how to interpret the public sector in its entirety, or rather how to reconcile these concepts with the term "public finance", i.e. whether it should be attributed to the public sector or the government sector, as is currently the case.

4 TOWARD ROBUST DEFINITION

To sum up the discussion above, we can illustrate nuanced approaches by Table 2.

Table 2 The treatment of public sector in statistical system, accounting and legislation

	System of national accounts	National legislation and economic texts	IPSAS
State	Part of the central government sub-sector	Central budgetary institutions	
Government institutions	General government sector	Public institutions	
Public institutions	Public institutions		Public institutions

Source: Own processing

From the methodological point of view, it is worth mentioning that the proportional share of ownership is not reflected in national accounts´ sector classification. This is not the case of IPSAS where a unit is consolidated within the public sector according to the share. In other words, if the share exceeds 50 percent then a public producer is included in the national accounts´ public sector in its entirety. If not, a unit is again wholly classified in the subsector of domestically or foreign controlled corporations.

In the consolidation of the state mentioned above, similarly to IPSAS, units controlled by the state are consolidated up to the share of the state.

It can be drawn on Table 2 that the public sector is treated in different way as to the coverage of institutional units. Aggregates of national accounts represent the broadest concept compared to those applied in legislative or economic texts. Evidently, the national accounts´ concept is closer to the system IPSAS. After all, ESA or MGDD are in many aspects inspired by the concept of IPSAS, chiefly in the definition of control. However, the main difference is the reflection of share ownership as described in the previous paragraph.

CONCLUSION

Application of the term "public finance" in national legislation and economic texts is highly fragmented giving impression that different statistical output bears the same explanatory power or that it describes economic behaviour of the same segment of economy. This might lead not only to mistaken decisions but also confusions in discussions of economists when it comes to sustainability of public finance or the adoption of economic policy measures.

It is thus highly desirable to establish more robust definitions in this area and not least to find more appropriate Czech equivalents of English terms. For doing so, mutual cooperation of translators, economists and lawyers would be very valuable. In our text, we have tried to show how the treatment and understanding differ across domains like macroeconomic models, accounting systems or legislation.

To conclude, in our view, as public finance or public budgets shall be strictly understood financial resources, i.e. revenues and expenditures, managed by government institutions classified in the general government sector in national accounts. Identification of the term "public finance" or "public budgets" with the public sector in national account, let alone with the state budget or the state debt, would make current inconsistencies in understanding persist.

References

AUERBACH, A., KOTLIKOFF, L., LEIBFRITZ, W. *Generational Accounting Around the World.* The University of Chicago Press, 1999.

DABICCO, G. The Boundary of the Public Sector in National Accounts Versus IPSAS. *Journal of Statistics*, 2015, Vol. 95, No. 2.

EUROSTAT. *European System of Accounts (ESA 2010).* Luxembourg: Publication Office of the European Union, 2013.

HAMERNIKOVA, B. AND KUBATOVA, K. *Veřejné finance – učebnice* (Public Finance – Textbooks). Eurolex Bohemia, 1999.

HAMERNIKOVA, B. AND MAAYTOVA, A. *Veřejné finance – učebnice* (Public Finance – Textbooks). Wolters Kluwer, 2010.

HOLMAN, R. *Ekonomie* (Economics). C. H. Beck, 2016.

INTERNATIONAL FEDERATION OF ACCOUNTANTS. *Handbook on International Public Sector Accounting Pronouncement.* New York, 2016.

INTERNATIONAL MONETARY FUND. *Government Finance Statistics Manual 2001* [online]. International Monetary Fund, Publication Services, 2001. <https://www.imf.org/external/pubs/ft/gfs/manual/pdf/all.pdf>.

INTERNATIONAL MONETARY FUND. *Government Finance Statistics Manual 2014* [online]. International Monetary Fund, Publication Services, 2014. <https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf>.

INTERNATIONAL MONETARY FUND. *Fiscal Monitor, October 2018* [online]. International Monetary Fund, Publication Services, 2018. <https://www.imf.org/external/datamapper/datasets/FM>.

MANKIW, G. *Macroeconomics.* Worth Publisher Inc., 1992.

MINISTRY OF FINANCE OF THE CZECH REPUBLIC. *The State Final Accounts for the year 2016.* Prague, 2017.

O´CONNOR, K., WEISMAN, E., WICKENS, T. *Consolidation of the general government sector* [online]. Washington: International Monetary Fund, 2004. <https://www.imf.org/external/pubs/ft/gfs/manual/pdf/consol.pdf>.

SAMUELSON, P. A. AND NORDHAUS, W. D. *Ekonomie* (Economics). Svoboda, 1991.

SPEVACEK, V., ROJICEK, M., VINTROVA, R., ZAMRAZILOVA, E., ZDAREK, V. *Makroekonomická analýza* (Macroeconomic analysis). Linde, 2012.