

MEASUREMENT OF MARKET MECHANISM, HOW BIG IS GOVERNMENT?



Vaclav RYBACEK, Ph.D.*

Abstract

Statistical measurement of government has become, along with the growing extent of government interventionism, one of the main challenges for statisticians. Higgs has dealt with some aspects of how the size of government is commonly expressed (Higgs, 1991; Higgs, 2015). Aim of this comment is to add other relevant facts of methodological nature leading to the underestimation of government in statistics. We consider this issue essential even though rather ignored in the mainstream literature. As it is illustrated in the text, the size of government is apt to be underestimated in official statistics due to the immeasurability of number of interventions, lacking information and the inappropriate treatment of market mechanism suffering from lack of recognition in the relevant studies.

MEASUREMENT OF MARKET MECHANISM, HOW BIG IS GOVERNMENT?

Higgs has addressed very important issue of the measurement of government in official statistics (Higgs, 1991; Higgs, 2015); this issue is rather ignored in the mainstream literature, even though its importance for the empirical economic research is essential. This issue would merit closer attention as the current methodological

* Jan Evangelista Purkyne University in Usti nad Labem, Pasteurova 3544/1, 400 96, Czech Republic, Phone:+420608925200, E-mail: vaclav.rybacek@centrum.cz

approach leads to the underestimation of the statistical size of government. The reasons will be discussed later in the text whose main purpose is to put this issue into broader perspective and to add further important aspect leading to the undervaluation of actual size of government, i.e. the understanding to market in the methodology.

Generally, the size of aggregate economic agent is conceivable to be measured in the three ways. First, it can be expressed solely in terms of flows meaning that the size of government reflects the scope of transactions carried out as a result of the government's involvement in economic activities in the roles of producer or intervener. Second, the size can be calculated on the basis of stocks. In other words, the size of government reflects the amount of scarce resources under the control of government. Or, third, the size of government can be expressed as a mixture of both flows and stocks.

Let's begin with the first way of measuring, i.e. as aggregate of particular economic flows which is dominant approach nowadays. Actual size of government measured in terms of flows could be marked as "total costs of government operation" imposed on the society. Such a measure can capture economic transactions ranging from wages of government employees, purchases of inputs to transactions between two private units or higher prices paid by consumers as a consequence of import tariffs.

When it comes to the second possibility, i.e. to express the size in terms of stocks of assets owned by government or number of employees in the public sector, this seems inferior to the previous approach as interventions are not necessarily conditioned by the ownership of economic means. Thus, to calculate the share of public assets on total value might give an indication what the size of government is, but this will not reflect actual power of government over the society.

The second possibility seems to be in line with Hayek's view on how the public sector should be defined (Hayek, 1982, chap. 14, p. 47), as a scarce resources being under the control of government institutions. However, this way of delimitation of the public sector might be extended to both flows and stock, which represents the third way outlined at the beginning of this text. The reason is that government can affect the performance of economy by both the direct possession of economic means and by regulation or redirecting flows into production according to its preferences.

The current approach is dominated by the first method, i.e. to analyse a selected group of flows as government consumption expenditures or total government revenues or outlays. It implies that immeasurable effects of government are omitted as well as the extent of government ownership of scarce resources. It should be recalled at this stage, as Tullock clearly shows that not all costs of government intervention can be measured (Tullock, 1967). Misallocation of resources due to government regulation may lead to higher prices², loss in productivity as resources are redirected to less efficient productions, cost of inflation, ensuing frictional unemployment, whereas calculation of all these costs is practically impossible due to lack of relevant information. So the current methodology stands halfway through to capture the total costs of government operation.

MARKET IN THE METHODOLOGY

On the top of that, even if we were able to quantify reliably all the effects of all the government interventions, the inappropriate

² In this case, we would have to go to the level of individual transactions and to investigate which transaction price or what part of given price must have been paid by the will of government.

treatment of market in the methodology would keep us far from capturing of government in its entirety. As Reich in his treatment on national accounts tartly notes, the statisticians ignore theory (Reich 2001, 104); then the results of their effort, i.e. macro aggregates, are divorced from reality to an unknown extent. This disregard of theories holds undoubtedly true when it comes to understanding and the delimitation of market (therefore of government too) in the methodology.

To establish a dividing line between market and non-market sphere is a key issue for a variety of reasons. The economic power of government has been expanding beyond the scope given by the budget. This is not only the case of the mounting scope of government regulation giving rise to large compliance costs on the side of regulated units, but also establishing “off-budget” special purpose entities which operate as government agent, i.e. under government instructions. This way of going beyond budget has become very popular possibility method how to extend economic power of government. However, the current methodology does not keep up with this trend and it allowed to some government agents not to be included in indicators of the size of government.

Let’s compare the methodological approach with theory. According to Kirzner, market behaviour is featured by risk-taking, entrepreneurial alertness, competitive pressures (Kirzner, 1992) leading to innovations, economical progress, decrease in nominal or real prices of goods and services. But the authors of methodology face the fact that these characteristics of market (behaviour) are hardly measurable. Thus they make the life of statisticians easier and relevant rules more operational by the assumption that market behaviour is characterized first by the type of ownership (public or private) and, more importantly, by pricing method.

The current approach working with the share of own revenues to production costs (SNA 2009, 438) could be reformulated that “the

higher prices set by producers, the more of market behaviour they show". In reality just the opposite is true, on the genuine markets prices and profit margins show a tendency to decline. This approach leads to paradoxical situation in which not all institutions operating under instructions of government, whose liabilities are guaranteed by government, which actually face no competitive pressure or risk of bankruptcy, are counted out of aggregates showing the size of government because mainly the way of pricing matters instead of hardly measurable qualitative features of market mentioned above.

Putting the price setting into foreground, there are number of financial institutions, providers of material goods and services like car producers, public transport companies or public healthcare producers, which are considered as market producers even if not operating on the real market and they are, as such, excluded from figures in question. More precisely, the approach mentioned in the previous paragraphs gives rise to treatment of the institutions providing especially semi-public goods as non-government units³, i.e. as units belonging to corporate sectors and only transactions of government with those institutions are counted in the size of government (Stiglitz 1989). Other than that, the figures on government do not cover central bank either even though this institution undoubtedly conducts government policy in the field of monetary policy.

THE CHOICE OF DENOMINATOR

When measuring the size of government in relative term, the choice of denominator is crucial. Nominal GDP, which is

³ This is also the case of central banks conducting monetary policy but being excluded from government sector figures.

normally chosen for this purpose, might lead to misleading conclusions. Over last decades, GDP has been deviating from its original purpose to measure the taxable capacity of economy for the needs of public finance managers especially in war times. In addition, GDP has been getting more abstract including wide range of imputed final goods and services as research and development expenditures, imputed rents, consumption of fixed capital or the estimation of the size of shadow economy⁴. GDP simply covers economic values which cannot be redistributed at all making the measuring the size of government imperfect.

To compare the nominal size of government with denominator covering values having nothing to do with redistributive power of government makes little sense; this practice will inevitably lead to undervalued figures on the size of government. Although it satisfies the needs of political marketing aiming to show government as small as possible, it is much less suitable for making reliable economic analysis. It is worth mentioning that the shortcomings in official data mentioned above belong to those normally unnoticed by economists and analysts; it is also worth mentioning that the list of imperfections mentioned above is obviously not exhaustive⁵.

CONCLUSION

Taken all these aspect into account, we can conclude that the current methodological approach in national accounts leads to an undervaluation of the size of government. The fundamental problem with the methodology is a lacking solid definition of

⁴ By definition, the value created in the shadow economy cannot be subject of redistribution of incomes and wealth.

⁵ Among others we can mention the method of calculation of government output (Holcombe, 2004) and its relation to measurement of economic growth (Rao, 1989).

market. In fact, there are only hints separately placed in the methodology at what market is. At the same time, the need to make the rules operational drives the methodology from both theory and reality (Lachmann, 1973, p. 21). This represents another reason for serious underestimation of the size of government.

To illustrate the main point of this text, we can offer different set of figures than officially presented. Using the most recent national account's data for the Czech Republic, we come to the conclusion that the size of government is 20 % (final consumption expenditures/GDP) or 40 % (total revenues/GDP) or 42 % (total expenditures/GDP) of GDP. According to the stock figures, the public sector owns 52 % of non-financial assets and employs 21 % of workers. It has become apparent that the number of government employees itself does not adequately represent the size of government and its actual economic influence over flows and resources in society.

When recalculating the nominal GDP as covering a part of economy which is actually a subject to government regulations and redistribution mechanism, i.e. consumption of fixed assets, imputed rents and shadow economy, the share of government consumption in GDP rose to 23 %, the share of total revenues reached 62 % and the highest value was achieved in the case of total expenditures - more than 65 % of GDP. This can be interpreted so that almost two thirds of values generated in taxable part of economy are going through the public finance budget. This picture shows a much less pleasant but a more truthful reality.

References

- Hayek, Friedrich August. 1982. *Law, Legislation and Liberty*. Routledge & Kegan Paul Ltd.
- Higgs, Robert. 1991. Eighteen Problematic Propositions in the Analysis of the Growth of Government. *The Review of Austrian Economics*, Vol.5, No. 1 (1991): 3-40.
- Higgs, Robert. 2015. How Big is Government in the United States? *The Independent Review*, v. 20, n. 2 (Fall): 317-319.
- Holcombe, Randall. 2004. National Income Accounting and Public Policy. *The Review of Austrian Economics*. Vol. 17, No. 4: 387-405.
- Kirzner, Israel. 1992. *The Meaning of market process*. Routledge.
- Lachmann, Ludwig. 1973. *Macro-Economic Thinking and the Market Economy*. The Institute of Economic Affairs.
- Rao, Bhanoji. 1989. Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time-Series Data: Comment. *The American Economic Review*, vol. 79, No. 1 (March): 272-280.
- Reich, Utz-Peter. 2001. *National Accounts and Economic Value - A Study in Concepts*. Palgrave Macmillan UK.
- Stiglitz, Joseph. 1989. On the Economic Role of the State. In *The Economic Role of the State*. Arnold Heertje, ed. Exfort: Basil Blackwell. Pp. 9-85.
- Tullock, Gordon. 1967. The Welfare Costs of Tariffs, Monopolies and Theft. *Western Economic Journal*, vol. 5, no. 3 (June): 224-232.
- United Nations. 2009. *System of National Accounts 2008*. New York. <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>