

ON SEPARATION OF MONETARY AND FISCAL OPERATIONS IN MACROECONOMIC STATISTICS

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Abstract

The aim of the paper is to discuss one of the major topical and controversial issues in contemporary statistics, which is the separation of monetary and fiscal operations in national accounts. This issue revolves mainly around the operation of public financial institutions mandated to carry out monetary as well as fiscal transactions on behalf of governments. After discussing the methodological dimension of the point at issue, the paper numerically demonstrates the impact on final figures given the existing data constraints. Admittedly, substantial changes to the current reporting may modify the aggregates utilized in the analysis of the fiscal sustainability or the economic role of the government as such. The paper demonstrates that the statistical uncertainty about the size of the government sector is a fundamental issue. The impact on the level of government indebtedness may reach up to tens of percentage points.

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INTRODUCTION

Although heated discussions are currently revolving around a soaring inflation rate and accelerating growth of government debts, there is another heavy discussion underway which concerns the delimitation of entities conducting fiscal and monetary policy. The final aim of this effort is to offer users more reliable aggregates suggesting the actual extent of fiscal operations, i.e. government total expenditure, total revenues and debt, which then feed into macroeconomic analysis. For the sake of our discussion, a conceptual distinction between fiscal and monetary policy should be made first.

Under the term 'fiscal policy' we understand the use of public spending and taxation (or any other form of revenues) to influence the economy, with the ensuing accumulation of assets and liabilities. General goals of fiscal policy, apart from the stabilization of the economy, are reallocation of resources and redistribution of income and wealth (IMF, 2014). To carry out fiscal policy, several institutions are established and mandated to collect revenue, to spend public funds or, on the contrary, to raise additional funding to be spent on public policies. For the sake of our discussion, it is to be noted that the economic sphere formed by those institutions quite deviates from the notion of the State, i.e. ministries and other central offices, as they have been establishing specialized institutions more or less attached to them, but yet legally separated from the State (Sennholz, 1987).

Under the term 'monetary policy' we understand a deliberate policy of the central banks aiming to maintain financial and price stability by regulating the money creation process which largely remains with the banking, i.e., money creating sector (McLay, Radia & Thomas, 2014). For this purpose, the central banks make use of the short-term interest rates which are adjusted in a way to accelerate or decelerate the pace at which money is created or liquidated in the accounting systems of financial intermediaries. As the money creation process is largely in the hands of the deposit-taking institutions other than the central banks, the impulse sent out by the central bank is transmitted down to the economy through the banking sector in the first place.

The major issue tackled in this article is how to deal with financial institutions which can be and indeed are involved in both fiscal operations and monetary processes to which Tanzi (2014) refers to as 'shadow fiscal policy'. Such institutions then stand on the edge between two economic sectors, as these are defined in the methodology of national accounts. This concerns the financial sector, dealing with the financial intermediation process and related activities, and the general

government sector involved in fiscal matters. Obviously, if a financial institution is classified in the financial sector while carrying out transactions pertaining to the government sector, the final figures of both sectors are distorted. That is to say that final aggregates of one or the other sector are either over or underestimated in their size.

Before going into greater details, clarification needs to be made as to which entity we have in mind when referring to 'government'. As suggested above, this term conforms to the definitions stipulated in the methodology of national accounts (System of National Accounts 2008, hereinafter 'SNA2008'; European System of Accounts 2010, hereinafter 'ESA2010'; Manual on Government Deficit and Debt 2021, 'MGDD2019') whose aggregates play a primary role in the monitoring of fiscal sustainability. The notion of 'government' goes far beyond the perimeter of the State, encompassing institutions conducting public policies such as municipalities, public schools, public hospitals, public transport companies and many others, not least even those engaged in financial activities may fall within the perimeter of the government (Rybáček, 2020; Sennholz, 1987).

Although the sector classification of most public institutions is quite well established in the relevant methodological guidelines (MGDD, ESA), this is not always the case with public banks. These units are legally entitled to carry out banking businesses, accepting deposits and providing loans, whereby contributing to the transmission of monetary policy effects. However, public banks are at the same time routinely involved in the management of the public financial scheme, in the provision of soft (subsidized) loans sourced from government grants, in the operation of guarantee schemes established by the state or local governments. The problem then arises of whether or not the economic results of the institutions in question shall add to the macro aggregates describing the economic behaviour of fiscal policy.

For the sake of clarity, this text remains focused on the case of public banks in the EU countries, although a wide range of public financial institutions normally exist and operate in developed economies, ranging from banks and insurance companies to investment funds. Even if we focus only on the public banks, the principles and the methodological rules discussed below can be applied to any public financial institution, thus the scope is not limited to public banks only. By focusing on public banks, we will thus deal with licensed public institutions routinely engaged in export promoting activities (export banks) or in assisting certain economic branches, territories or business seg-

ments (typically small and medium enterprises) in their economic development (development banks). The choice of the EU countries is obviously motivated by the fact that the aggregates concerned play an indispensable part in the safeguarding of the functioning of the European monetary union.

We will make an attempt to not only contribute to this ongoing debate but also to indicate the existing and potential impact of changes in the reporting on the fiscal aggregates. In the text below, we will address the substance of this issue by referring to the underlying statistical concepts. Then we will proceed to demonstrate the quantitative impact on the final figures. In conclusion, the potential paths out of the current debate and existing discrepancies will be outlined.

LITERATURE REVIEW AND ECONOMIC BACKGROUND

In the area of official statistics, the issue of the statistical reporting of bank institutions in fact started with the last revision of the manuals on national accounts. Manual ESA95 maintained the link between the list of licenced monetary and financial institutions (the MFI list) and the delimitation of the financial sector (par. 2.48 ESA95) covering all financial intermediaries. In effect, all institutions having a license authorizing them to carry out a financial activity were to be classified, by definition, in the financial sector. It was thus implicitly assumed that all licensed institutions indeed carry out financial intermediation and bear the risk associated with this business. However, the revised manual ESA2010 relaxed the link to the MFI list, respectively to licenses, and by having done so opened a room for re-assessing the size of both sectors in question.

When discussing the sector classification of financial institutions, the main issue thus revolves around the definition of financial intermediation, respectively to the fact of who is taking the risk of the intermediation business. Financial intermediation is defined as an activity containing acquisitions of financial assets and incurrences of liabilities by engaging in financial transactions on the market (ESA 2010, par. 2.56). Further in the text, manual ESA 2010 defines financial intermediaries as an institution placing itself at risk by engaging in financial intermediation. Moreover, it does not fall within the boundaries of financial intermediation where the activity is limited to small groups or persons. If this is the case, no financial intermediation takes place (ESA 2010, par. 2.62).

The fundamental importance of risk-taking and risk-management for defining financial intermediation is also highlighted in academic literature where it is con-

sidered a key area of financial intermediation (Scholtens & Wensveen, 1999; Allen & Santomero, 1997). Concurrently, risk-taking behaviour is further accentuated as an essential part of the monetary transmission mechanism (Beck, Colciago & Pfajfar, 2014). Risk-taking channel refers to the fact that profit-seeking banks are responsive to changes in the monetary policy setting where low interest rates over a longer period of time tend to cause growth in bank lending as banks become more willing to take higher risk. Statistics thus made a step toward the theoretical conception of financial intermediation where the risk-taking is an essential part, not granting a licence.

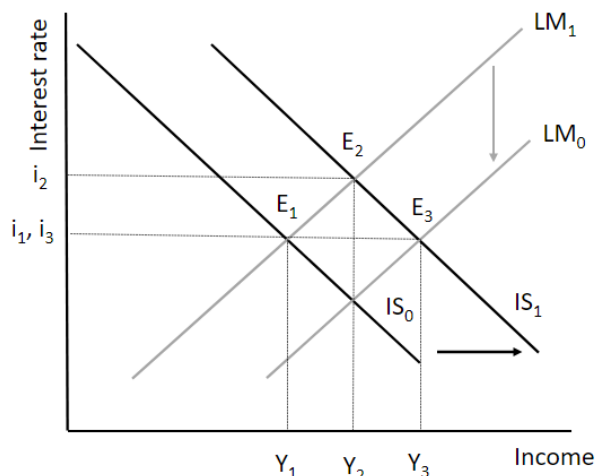
Risk-taking behaviour is therefore crucial for the appropriate classification. As Tanzi (2014) rightly noted, governments have been, however, increasingly tempted to use 'shadow fiscal policy' which does not show in the official figures. This may involve granting guarantees or an increasing control over actions of public institutions, such as banks. Concerning the latter, using public banks for a fiscal policy purpose may shift a significant part of debt from the state to the public institutions concerned (Tanzi, 2014), leaving the user of macroeconomic figures with an incomplete picture of the overall government indebtedness and its sustainability. To mitigate an adverse impact of 'shadow fiscal policy' on the explanatory power of the fiscal aggregates, the above-mentioned changes in the statistical methodology were introduced. While rightly addressing the expansion of fiscal policies beyond the border of the general government sector, the statistical uncertainty about the explanatory power of the aggregates currently published has increased following this methodological change. As this issue still remains rather unnoticed, the aim of this paper is to contribute a better understanding of the issue and its potential statistical consequences.

From the economic theory perspective, we are dealing with the issue of how to distinguish between fiscal and monetary operations. The importance of this separation is self-evident, as monetary and fiscal policy are considered independent tools for the moderation of economic development and cyclical movements. There is a vast body of literature on whether fiscal and monetary policy act actually independently or not⁴, this issue is however beyond the scope of this paper. For the sake of our discussion and to demonstrate the importance of the separation of monetary and fiscal policy for macroeconomic analysis, we can use standard IS-
⁴See Sargent and Wallace (1991), King (1995), Buchanan and Wagner (2000), or the studies related to the functioning of the European monetary union: Alfons, Alves and Balhote (2019), Bertella, Rego, Neris Jr., Silva, Podobnik and Stanley (2015) or Canzoneri, Cumby & Diba (2010).

LM framework. In the standard IS-LM framework, fiscal or monetary expansion brought about by relevant fiscal and monetary institutions will, other things being equal, manifest itself in the rightward shift of either the

IS or LM curve, propelling the growth in GDP (horizontal axes) with differing impacts on interest rate (vertical axes).

Figure 1: Monetary and fiscal expansion in the IS-LM model



Source: Own elaboration.

It is tacitly assumed that each curve can be moved in any direction by the operation of either fiscal or monetary policy. As the IS curve captures the goods market, the measures of fiscal policy are believed to be far more effective in influencing the level of spending on this particular market, leading to shifts of the curve right- or leftwards. For the money market represented by the LM curve, it is however the monetary policy which has a capacity to bring the curve into a new position. All in all, from the perspective of economic policy, shifts in the IS curve are caused by fiscal policy measures while shifts in the LM curve are induced by monetary policy measures. So says the theory, however what if there are institutions capable of being involved in the conduct of both policies? How are we to distinguish them in statistics to find out how fiscal and monetary policy respond to recent economic development?

INSTITUTIONAL UNIT AND INSTITUTIONAL SECTOR

Let's start our discussion by referring to the basic statistical concepts. Macroeconomic statistics present the economic behaviour of whole groups which are delineated depending on the economic behaviour of individual units. As stipulated in the SNA, the term 'institutional unit' denotes an entity entitled to act independently of other entities or a person that owns and controls it. Among the key features to be men-

tioned, an institutional unit can own economic goods or assets and dispose of them, incur liabilities on its own account and take economic decisions for which "it is held to be directly responsible and accountable at law" (par. 4.2, SNA2008). Equally important is however the fact that one institutional unit can be classified in its entirety only in one economic sector⁵. This entails that once an entity is identified as an institutional unit, the methodology does not allow for the split of that unit in two or more economic sectors. The definition of institutional units thus directly determines the extent of a particular economic sector.

Although at first glance it may seem that the definition of institutional units provides clear guidance, the practical assessment must deal with various borderline cases. This revolves around the extent of control and risk and rewards associated with the operation of a unit in question (ESA2010, paragraph 2.22). If the extent of control goes beyond a regular practice so that the controlling unit poses an influence over daily business, e.g., by deciding on individual transactions, then the independence may be questioned (MGDD2019, chapter 1.2.3.1, par. 24). This is the case of a plethora of economic units operating in the economy conducting and implementing the government policies where the government is the majority owner.

⁵Agriculture intervention fund is the only exception permissible. The reasoning behind this is that the assets owned by the intervention fund are managed on the market basis, while the fund itself operates on the non-market basis (MGDD2019).

If this is the case and a unit lacks independence it is to be carefully assessed by statisticians. For public banks, this issue grew in importance along with increasing involvement of those institutions in fiscal matters⁶. Here we are getting to the bottom of the major issues tackled in this paper. Are public banks acting more like financial intermediaries or as fiscal agents? Does the management of public funds embody the financial intermediation process at all? Let's take a look at the relevant definition. Not to get caught in details, let's refer to several methodological provisions.

According to SNA (par. 6.158), financial intermediation involves the management of financial risk and liquidity transformation. Acquisition of financial assets in various forms may be financed in several ways ranging from deposit-taking to issuing of bills, bonds and other securities. Importantly, if a unit manages funds contributed to it by the government with a pre-defined purpose such as allocation of support to small and medium enterprises, these operations fall outside the scope of financial intermediation. First, these funds were not raised on the market. Second, governments rarely expect a market rate of return. Third, there are limits on the potential use of these funds. All in all, operations of the unit bear resemblance to that of captive financial institutions which cannot act independently from the controlling unit, and it is to be consolidated with its parent company (ESA2010, par. 2.23).

If the management of public funds is a predominant activity of a public bank or if this bank transfers the risk of its operation to the State, the bank gets much closer to the definition of a government unit. To set out only those provisions relevant to the issue dealt with in the paper, these are those established by a legal process and providing mainly non-market output (ESA2010, par. 2.111). Those units are meant to provide goods and services to the benefit of the society as a whole, primarily by redistributing national income and wealth. Thus, it is evident that public banks can be engaged in both financial intermediation and redistribution, and the decision of whether the financial intermediation or redistribution prevail might not be straightforward.

To sum up, the key questions to be answered in order to record a unit's transactions and positions appropriately are thus the following:

- 1) Can a public bank be considered as a separate institutional unit entitled to run its business independently?

⁶ Recently, public financial institutions have become intensively involved in the management of large-scale guarantee or loan schemes launched by European governments in the wake of the Covid-19 crisis.

- 2) If so, does it bear the risk of its business or its risk being transferred to the State via guarantees or recurrent transfers from the state budget to cover losses?
- 3) What part of the business might be attributed to fiscal operations and what part to financial intermediation?

Among indicators suggesting the answers, profit or losses run in the past or default rate on existing loans might be put as examples. Notwithstanding existing indicators, answering these questions remains not only highly complicated but also controversial as there is no unanimous agreement between statistical authorities on the application of the existing rules and permissibility of the treatment of public banks as government units. Hence, the pertaining ambiguities when it comes to the treatment of public banks pose uncertainties in terms of the explanatory power of some of the key macroeconomic indicators.

SEPARATION OF MONETARY AND FISCAL POLICY IN STATISTICS, TRANSACTION APPROACH

Compilers of national accounts have become increasingly aware that some financial institutions are involved in the realization of government policies (fiscal operations) by managing public funds, administering government loans, operating guarantee schemes or investing into particular branches of the economy, with the pertaining transactions escaping the government aggregates. In addition, the most recent SNA-ESA revision relaxed the requirement that all money-creating institutions⁷ must be grouped into one particular sub-sector (with the code S122) of the financial sector. This opening of a Pandora's box not only allows for public banks to be classified elsewhere in the accounts but might also be viewed as an acknowledgement that the line drawn between fiscal and monetary operations has never been fully clear.

Although the methodology made several steps in the right direction to embrace fiscal operations more fully, clear-cut interpretation and thorough application of the existing rules is still lacking and there is only limited agreement on how the final aggregates should be impacted. In this respect, central bankers prefer the relevant aggregates to capture all institutions involved in the monetary transmission mechanism (monetary and financial institution in their entirety) as well as financial

⁷ Listed on the MFI list which is held by the central banks for monetary policy purposes.

institutions affecting the financial stability; fiscal policy analysts need to dispose of figures embracing all the risk emanating from the operations of economic institutions which might pose a financial burden on the public finance, such as public banks and other public financial institutions.

Concurrently with the changing definitions of sectors, the statisticians started to take a closer look at individual transactions or groups of transactions of like nature which we will refer to as the 'transaction approach'. The transaction approach reflects that the transactions of units in the financial sector are expected to be carried out at arm's length. Market behaviour is enforced by the existence of a competitive environment where transactions are performed at economically significant prices (ESA2010, par 20.19), regularly adjusted in reaction to the operation of market forces. The purpose of charging market prices is obviously the seeking of profits. As the logic of the market further suggests, if the market participant does not generate sufficient profit or suffer losses, the company will leave the market.

For public banks, the situation is however often slightly different. In carrying out fiscal operations, they do not compete with other private financial institutions, they simultaneously charge prices below the market as a reflection of the deliberate policy of government, which in turn covers eventual losses. In light of the requirement to operate as a market competitor, the issue here is obvious. When putting social economic policy of government in practice, do public banks compete with other private commercial banks? In realizing the social and economic policies, do they operate as an ordinary market participant? The answer is obvious that they do not. Had they been providing their services at market prices, the goal of government social and economic policies wouldn't be reached.

The existence of those non-market fiscal operations thus just mirrored the fact that public banks are routinely mandated to remedy presumed market failures where the commercial financiers are e.g. unable or unwilling to provide financing to certain groups⁸. In this context, one may also ask if and how it is conceiva-

⁸This may also pose a problem for the effective implementation of monetary policy, if a unit does not finance itself on the market or does not follow alterations to the basic interest rate set by central banks. This is often the case as the companies in question are established to remedy so-called market failures on the financial markets. Loan or guarantee schemes operated by public banks are therefore intended for higher risk-profile debtors who wouldn't otherwise get funding on the market. This entails a higher rate of default experienced by the public bank, an artificially lower interest rate and redistribution of money in society.

ble for market failures to be addressed by use of market forces. If the answer is negative, as we would logically expect it to be, the operations conducted at the request of government aiming to correct market-failure can hardly be viewed as a part of the market, irrespective of the legal form of the implementer.

The methodology however offers a tool for how to deal with this situation. Let's suppose that a public bank is part of the financial sector but carrying out some of the fiscal operations mentioned above. In this case, it is necessary recognize the actual economic (fiscal) nature of certain transactions of the bank, so that so-called re-routing of transactions can be applied. Re-routing is one of the examples of the re-arrangement of transactions, as it is defined in paragraphs 1.72 – 1.78 in ESA 2010. By applying this method, compilers can go beyond the notion of institutional unit to recognize the ultimate risk-taker of transactions carried out between two units.

To further illustrate the issue, rerouting is applied when a transaction between two units (a public bank and an enterprise) is carried out on behalf or at the request of a third unit (government) which bears the associated risk. This might be the case where the ministry provides a fund to a public bank to be administered to final loan recipients as a part of the general economic policy of the government. Or, when a public bank administers a loan from a foreign development bank while the government is the final beneficiary who is at the same time liable for repaying the loan. In these cases, particular revenue/expenditure or assets/liabilities of the public financial company are to be rerouted through the accounts of another unit/sector (ESA2010, par 1.73-1.75).

It is thus conceivable to reroute through the government sector, with the bank itself remaining classified in the banking sector, that part of a public bank's business showing clear signs of fiscal operations. For this to be done, an analysis shall provide clear evidence that the underlying transactions are made on behalf of the government with the risk being borne by the government. This eventuality can ensure that the financial sector aggregates illustrate the actual extent of the financial intermediation, while the government sector aggregates the redistribution of income and wealth.

However, for rerouting to be applied, certain conditions are to be met. First, the part of the business to be rerouted must be clearly identifiable. Second, a complete set of accounts should be available, enabling the rerouting of all associated transactions, including costs of employees administering the transac-

tions which are subject to rerouting. Clearly, here we go beyond the concept of institutional unit by applying the concept of quasi-corporations as defined in the methodology (ESA 2010, par 2.13(f)). Even though the methodology foresees the eventuality of re-routing, yet it is applied in a rather limited number of cases, due to conceptual controversies and practical obstacles stemming usually from lack of complete data.

Additionally, although the controversy over the sector treatment of public financial unit can be overcome by the application of re-routing, the extent of rerouting might however affect the eventual classification of the unit itself, if certain conditions are met. This may occur when the transactions so reported constitute the majority of the company's flows and positions. In other words, if the involvement in fiscal operations constitute a major part of the business, so that the majority of the company's flows and positions is reported in the government accounts, the public company itself should be part of the government aggregates as its output is largely non-market (SNA2008, par 6.98).

It is of note that the subject of our discussion can be extended to tackle the statistical treatment of the central bank itself. In spite of reasonable doubts about the existence of actual independence (Buchanan & Wagner, 2000; King, 1995), the statistical methodology acknowledges that the independence is well established and the central banks' operations are therefore, by definition, not included in the general government aggregates⁹. On the other hand, central banks operate as the banks of the state, routinely carrying out operations on behalf of the state such as pooling of cash in the public sector, managing the state's foreign ex-

⁹It is of note that this treatment makes the central banks the only public non-market producers reported in this manner. In all other cases, public non-market producers are to be counted in the general government indicators in full (ESA2010, par. 2.43).

change reserves, etc. Against this background, the central banks can carry out, and actually do carry out a wide range of fiscal operations on behalf of the state which won't be left behind in future discussions on the statistical treatment of fiscal operations.

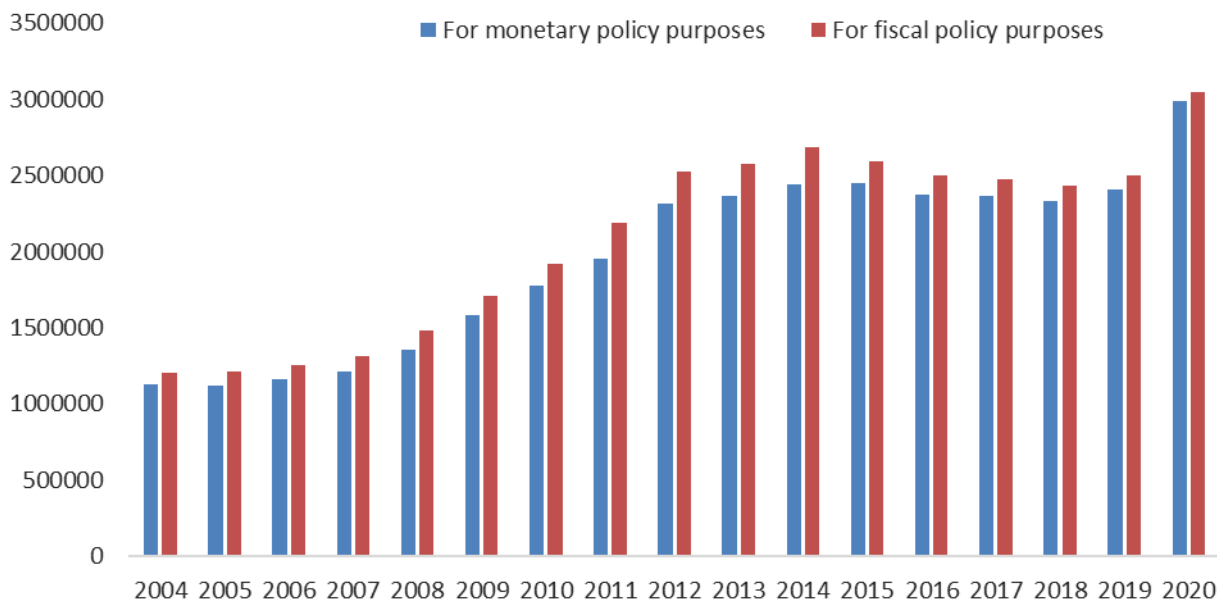
To sum up, the complexity of the relations between the government and the financial sector pose one of the main challenges for statisticians nowadays. As we have attempted to show, the important aim is to capture appropriately the extent of the monetary and fiscal sphere of the economy by recognizing that public banks can serve as conduits in implementing social and economic policies of governments. To do so, we need to clearly distinguish commercial and fiscal operations which serve the government's purposes to arrive at a picture of government aggregates which will not be misleading or distorted.

THE SIZE OF SELECTED PUBLIC BANKS IN EUROPE

Public banks are operating in literally all European countries and a vast number of associated macroeconomic aggregates are being regularly disclosed nowadays. Yet, the methodology of the compilation has reached such complexity that to demonstrate the impact on the final figures is not an easy task. Here we are referring to the issue of differing valuations, consolidation procedures, definition of transactions or debt, etc. Still, by immersing ourselves in the available data sources, we can make an attempt to get an idea of the existing or eventual extent of this issue.

Let's take the official figures published by the Czech statistical authorities as an example. The following charts depict the differences in the size of the government sector and the financial sector where the latter constitutes the main conduit of the monetary policy.

Figure 2: The liability side of the government sector (in bln. CZK), 2004-2020

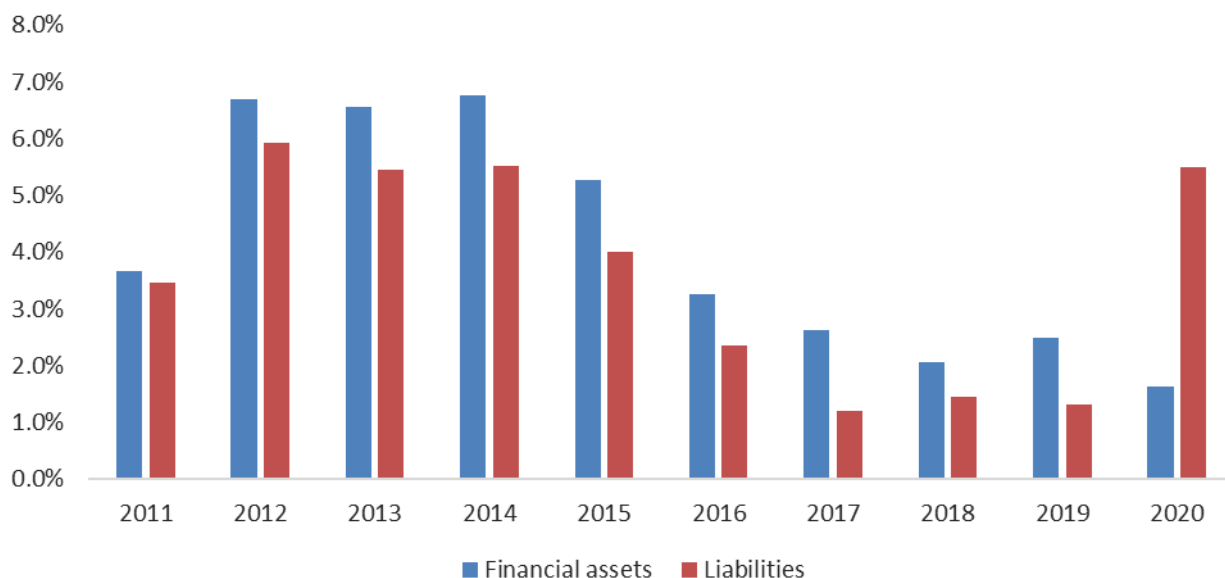


Source: www.czso.cz, www.cnb.cz (Accessed on May 15, 2022).

For the financial sector, let's investigate the share of the sector's financial assets and liabilities as shares of GDP, as illustrated in Figure 2. In the figure below, the values are calculated as differences between the

shares of financial assets and liabilities on GDP for when public financial units are classified in the financial sector and for when they are not.

Figure 3: Financial assets and liabilities of financial sector with Czech Republic, with and without public banks 2011-2020 (% GDP)



Source: www.czso.cz, www.cnb.cz, own calculation (Accessed on July 10, 2022).

We can observe non-negligible differences in the scope of financial intermediation, measured as shares of financial assets and liabilities on GDP, as illustrated in Figure 2. However, compared to other public banks operating in countries other than the Czech Republic, the extent of the issue seems still rather limited, as the size of institutions is comparatively lower. Still, even in the Czech Republic, the differing aggregates convincingly illustrate that the methodology of the statistical description of reality clearly matters.

Let's take a look at similar institutions operating in European countries where an overlap between the performance of monetary policy and fiscal operation is observable. As the table below demonstrates, the size of similar institutions in other countries are sizeable meaning that they may change the picture of total government indebtedness and the overall financial risk taken by the government institutions.

Table 1: Total assets of selected public banks in Europe, bn EUR, % of GDP

Name	Country	Total assets (bn EUR)*	Share (in % of GDP)
Bpifrance	France	30.3	1.3
Bulgarian Development Bank	Bulgaria	2.0	1.7
Instituto de Crédito Oficial	Spain	31.8	2.8
KfW Bankegruppe	Germany	546.4	16.2
FMO	Netherlands	9.2	1.2
Proparco S.A.	France	6.3	0.3
OeEB	Austria	1.1	0.3
Cassa depositi e Prestiti	Italy	517.0	31.2
CDC Group	United Kingdom	8.5	0.4

Sources: Annual reports, www.swfinstitute.org (Accessed on July 10, 2022), Eurostat.

It is to be noted that the table presents only an abridged list of institutions which may be relevant in the context discussed in this paper. It is to be borne in mind that there are far more public financial institutions through which governments are able to implement fiscal policies, including investment or pension funds, financial agencies, insurance companies or special purpose entities operating domestically or abroad. However, the account of institutions showed above already clearly suggests that there are sizeable financial institutions whose amended statistical treatment might pose a substantial impact on the final figures, the size of both sectors concerned and all derived indicators.

The issue at stake grows even further for an institution which might be located in another jurisdiction, mandated to carry out fiscal operations on behalf of the government, generally referred to as a non-resident SPE. If this is the case, the proper reflection of their transactions and position in the government accounts of the 'parent' government is to be ensured (IMF, 2021). This means in practice that the technique of rerouting is to be applied and expenditures/revenues as well as debt must add to the corresponding aggregates of the government which has established the unit in question. The existence of those units and the ongoing methodological discussion on their treatment show more evidence of the significance and wide spread of this phenomenon.

CONCLUSIONS

The controversy discussed above constitutes a conceptual issue revealing a number of facts. Firstly, in the aim to distinguish between monetary and fiscal policy operations it is not sufficient to rely on classifying a single (mostly public) economic unit into one sector only. This is so as one (usually public) institution might be involved in the conduct of both monetary and fiscal operations.

Secondly, the current approach in the compilation does not fully reflect this fact and there is no common agreement on how to handle this issue and to proceed further to arrive at consistent and internationally comparable data. This brings a certain uncertainty into the explanatory power of the figures in question, with potential under- or overstatement of the magnitude of monetary or fiscal operations.

Thirdly, by recognizing and dealing with this issue, the sizes of the financial and government sector may change in a not insignificant proportion, affecting key macroeconomic aggregates such as the extent of redistribution in the society, primary balances or debts. Admittedly, proper delineation is thus essential for the sustainability of a government's fiscal position. Even more, the findings of further research analysis which those figures feed into might be affected, such as examinations of the optimal size of government in rela-

tion to economic growth, unemployment, etc. (Chlobanov & Mledenova, 2009).

Fourthly, it is not less important to dispose of figures reliably delineating the realm of fiscal and monetary policies for scrutinizing their mutual interaction and for arriving at sound findings about how they affect each other or which of them prevails. That is to pinpoint the sources of inflationary pressures, the quantification of the reaction functions of both fiscal and monetary policy makers or the assessment of whether a government follows a Ricardian or non-Ricardian fiscal regime.

Simply put, numbers matter. However, they cannot serve two masters with different needs at the same time. The most probable way out of the current overlap in the existing data appears to be a thorough and consistent application of the concept of re-routing. In case

no comprise is found and applied at the level of producers of statistics, and particular institutions will be classified in one economic sector, users will be provided with figures carrying only limited explanatory power related to either fiscal or monetary policy.

LIMITATIONS OF THE RESEARCH

The analysis and illustration is obviously limited by lack of relevant data. The economic results of institutions concerned, when classified in the general government sector, are to be consolidated with other government institutions. Arriving at the final impact on macroeconomic aggregates would require having information on the counterparties of the banks' assets and liabilities. As this is not the case, the results indicated in Table 1 thus show only a rough estimation of the overall impact on government debt.

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