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PUBLIC SECTOR ACCOUNTING

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CHAPTER 2

SPECIFICITIES OF PUBLIC SECTOR ACCOUNTING: INSIGHTS FOR GOVERNMENTAL ACCOUNTING FROM HISTORY AND THEORY

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Summary

Accounting has as long a history as writing. The purposes of accountability and control appear to be constitutive of institutional economic organisation of governments across epochs. Models and examples of public sector accounting (here governmental accounting) can be found in ancient civilisations and the Middle Age. Modern public sector accounting systems have co-evolved with the constitution and evolution of modern states. In this context, public sector accounting design relates to the specificities of modern public administration, featured by management of taxation and public finances, as well as accountability toward sovereigns and parliaments.

This chapter aims to denote these specificities through their historical emergence and main features. The modern government consummates resources acquired through taxation and borrowing, so as to redistribute them at the macroeconomic level. In turn, citizens

contribute with resources to be redistributed by paying taxation and subscribing governmental debt issuance and refinancing (including for monetary base management). Moreover, the government takes non-debt commitments to assure social protection on behalf of its constituencies. This specific financial-economic working by the government differs from that by the business entity, requiring a specific accounting representation. From this perspective, recent reforms driven by new public management (NPM) and new public governance (NPG) – aiming to align public sector and business sector accounting systems - constitute yet another unfolded evolution whose implications shall be assessed over time and in context.

Keywords

financial sustainability of government; public sector specificity; accountability; public sector accounting history; public sector accounting theory

1. Introduction

This chapter aims to provide some insights from history and theory for accounting for the public (governmental) sector in view to better understand the specificities of public sector accounting (here governmental accounting), their origins and reasons.¹

Section 2 provides some illustrative examples from history of governmental accounting. Models and examples can be found in ancient civilisations, including ancient Greece, the Roman Empire, and the Islamic states. For sure, the emergence of modern public sector accounting goes along with the constitution and the evolution of the

¹ From an historical viewpoint, the notions of 'public sector' and 'governmental sector' may be changing. Consequently, this chapter employs the two as somewhat equivalent.

modern state from the feudal state. The modern public administration is then featured by the connection between state sovereignty, fiscal power, and public borrowing.

Section 3 investigates these features which differentiate public sector accounting from business sector accounting. Specificities include: absence of commercial revenues; public debt and monetary base management; public debt management for redistribution purpose; and assurance of social protection (social benefits) through non-debt commitments. In this context, budgets constitute an essential instrument of public sector accounting, assuring both internal control and accountability to citizens and their representatives. A cash basis of accounting is consistent with this budgeting procedure (see Section 3.3 below and Chapter 3).

From this perspective, recent reforms driven by new public management (NPM) and new public governance (NPG) – aiming to align public sector and business sector accounting systems - constitute yet another unfolded evolution whose implications shall be assessed over time and in context.

2. Origins of public sector accounting: examples and insights from history

Accounting has as long a history as writing. The purposes of accountability and control appear to be constitutive of institutional economic organisation of governments across epochs. Book-keeping implies defining and tracing operations, which can be either material (good or services; in-kind) or financial (in cash and credit), while making accountable the people in charge of those operations. According to Dubet and Legay (2010), the core of public sector accounting through modern history has been the fight against misappropriation, fraud and embezzlement; prevention of financial distress; and budgeting including prospective budgeting.

Models and examples of non-business accounting can be found in ancient civilisations and during the Middle Age, especially monasteries and feudal tax management systems. But modern public sector accounting systems have been developed along with the constitution and evolution of modern states. On the one hand, modern states manage an increasingly centralised web of activities, contrary to feudal states which were more decentralised; moreover, modern state treasuries take over management of public finances, including taxation and public debt management. On the other hand, state sovereignty is based upon controlling territories and the subjects who live there. Accounting systems contribute to both financial management and sovereign control by these public administrations. At the same time, the stakeholders - including the subjects themselves - demand the sovereign to be accountable, as for it levies taxes, makes expenditures and asks for credit. Therefore, modern states do, or at least are asked to, enact sovereign authority under the law. Supreme Audit Courts or Offices have been therefore established to supervise public finances on behalf of Parliaments and the citizenship.

This Section provides some illustrative examples from history of governmental accounting through epochs. The rest of the section is organised as follows. Section 2.1 provides examples from ancient civilisations, including ancient Greece and the Roman Empire. Section 2.2 focuses on the Middle Age in Europe and the feudal state. Section 2.3 denotes the development of the modern state in Europe, featuring the connection between state sovereignty, fiscal power, and public borrowing.

2.1 Ancient civilisations

This chapter cannot provide a comprehensive, comparative or retrospective account of public sector accounting across epochs.

For sure, the purposes of accountability and control appear to be constitutive of institutional economic organisation of governments, but local variants are critical for a proper understanding, as for accounting is embedded in socio-economic and institutional contexts which vary through time and space.²

As a technique, public sector accounting (also accounting or governmental accounting thereafter) comprises and performs various techniques concerned with recording of transactions and operations, assuring their classification and traceability. This recording generally involves numerical systems pointing to the material (in kind) or financial (in cash and credit) dimensions of those operations. These recordings and related numbers make accountable the persons in charge of those operations. As a design, accounting relates then to numeracy and eventually mathematics, as well as to socio-economic organisation of an economy and a polity. Managers, gatekeepers, supervisors and stakeholders are all involved in its various historical settings. As a rule, accounting definitely governs the working of public administrations, assuring managerial, control and accountability purposes.

The oldest known system of public sector accounting was developed in central China, in the city of Xian, during the Southern Song Dynasty around 7000 BCE. It served as a budgeting system to control expenditure by the court according to budgeted revenues.³

In Mesopotamia, city states developed public sector accounting systems around 5000 BCE. The financial officials used clay tablets with pictographic characters to record financial transactions. According to Carmona and Ezzamel, "far from being a rudimentary,

² Besson (1901); Legay (2010); Baxter (1957); Binney and Edward (1958); Schneider (1952); Buchholz (1992); Waquet (1990); Zannini (1994), Margairaz (1991); Bezes et al. (2013).

³ Chatfield and Vangermeersch (1996).

accounting practices in both ancient civilisations [such as Egypt and Mesopotamia] displayed remarkable levels of detail."⁴

In Egypt, various civilisations developed over a long period from 3000 to 300 BCE. According to Carmona and Ezzamel (2007, 189), "the royal palace and the temples constituted two influential institutions in the economy of ancient Egypt." State administration was a pillar of ancient Egypt's development. It maintained a sophisticated system of taxation and redistribution in kind. "Once tax was assessed and collected, it was transported to the state granaries, and this process was organised and documented carefully by the scribes".⁵

In ancient India, according to Sihag (2004), during the 4th century BCE, Kautilya developed bookkeeping rules to record and classify operations, emphasized the critical role of independent periodic audits, and proposed the establishment of two distinct offices - the Treasurer and Comptroller-Auditor -, in view to improve control and foster accountability, thus reducing the scope for conflict and fraud.

In ancient Athens (Greece), public administration was disclosing financial statements to the people. The Senate employed provisional budgeting to plan and gather resources required to fund public works or wars. State inflows came mainly from the public domain (land, roads, bridges, mines, theatres, temples) but also confiscations and levies. According to Aristotle (Politics, Book V chapter VIII, p. 186), public disclosure was a critical mean to avoid fraud:

To prevent the exchequer from being defrauded, let all public money be delivered out openly in the face of the whole city and let copies of the accounts be deposited in the different wards, tribes and divisions.

⁴ Carmona and Ezzamel (2007, 196).

⁵ Carmona and Ezzamel, (2007, 192).

In the ancient Roman Republic⁶, administration of public finances was under supervision by the Senate, whose acts were publicly disclosed, kept under custody by the Ceres Temple, and held under the responsibility of elected magistrates (the Ediles). According to LaGroue (2014), the roman civilisation employed accounting instruments in a cogent manner, including inventory lists, inflow-outflow statements in both cash and kind, and a single-entry system that monetized the value of goods. These instruments were employed for management, control and making public servants accountable toward the public and the judge:

the one cultural area where their accounting material prominently featured was in the legal setting. Accounting ledgers and data were critical records which were clearly relied upon. Accounting was needed in banking and wills, and its perceived value alone could prove the innocence or guilt of an individual. These uses underscore the functionality of Romans' accounting documents in their society.⁷

According to Zaid (2004), innovations overcoming the Roman epoch emerged in early Islamic accounting practices during the mid-7th through 10th centuries. Once the Quran and Sharia law became the basis for all Muslim states, it became necessary to keep track of the Zakat, a religious levy for all Muslims which is applied to returns on wealth exceeding certain thresholds. Furthermore, Zaid states that "the Quran requires the writing and recording of debts and business transactions in accordance with the"^{8, 9} Surah Al-Baqarah Ayat (Qu'ran, 2:282). In this context, Islamic public

⁶ Humbert (1886).

⁷ LaGroue, (2014, p. VIII).

⁸ Zaid (2004, 154)

⁹ Cooper et al. (2004, 154).

administrations employed budgeting and auditing for control and accountability purposes. Both public sector and business sector accounting systems were developed, surely influencing the European developments which followed.

2.2 Middle Age in Europe

After the disappearance of the Western Roman Empire, the great Carolingian institutions such as the kingdom and the monasteries kept levying feudal dues, which appear to be somehow evolving from the Roman tax system and through the progressive adoption of Roman law across medieval Europe from the end of the eleventh century. According to Beguin and Genet (2017):

like the Roman taxes, these feudal dues based on both men and land were regular and largely foreseeable; they were linked to the exercise of the dominium, which can be understood as public authority exercised collectively by the domini class which seized control at the time of the collapse of the Carolingian Empire, and imposed the dues on their dependants.

Middle age political authorities - such as the commune or the prince - only had access to fiscal resources of feudal origin (for instance, customs, tolls, tonlieux [stallholder taxes], and market taxes; but also granting monopolistic privileges; performing expropriations through the ancient power of purveyance; and selling public functions and nobility titles), levied through an elaborated system of privileges and obligations between the lords and the vassals. In case of urgent need, those authorities may have recourse to arbitrary measures, which were often regarded as abusive and susceptible of provoking grievances and rebellions. The superposition of powers –

by the church, the emperor, and the lords - over the same territory was a common and viable practice under feudalism.

Generally speaking, levy gathering was at that time delegated to local stewards, while specific levies were often devoted to particular activities and requested on a regular or an occasional basis. For instance, from the 12th century, the local sheriffs of each county of England were audited by the great nobles sitting in the Exchequer. ¹⁰ The Exchequer met twice a year, at Easter and Michaelmas (29 September). This court of law could discharge the sheriff (with the Latin words "et quietus est") or rule an amount that was owed to be paid by the sheriff into the lord's treasury. These procedures originated in France and were brought to England with the Norman invasion of 1066. They ensured the accountability of county sheriffs to the lords for their revenue collection and local expenses. They were based upon a charge-discharge system whose objective was to calculate and record the sums owed to the lord by the sheriff of each county. According to Cooper, Funnell and Lee¹¹, the sheriff as

"the steward was charged with the sums for which he was responsible (opening balance, plus receipts), and discharged of his legitimate payments; the end balance showed what he must handover to his lord."

2.3 The modern state in Europe

Throughout the second millennium, economic development revitalized cities, regions and trade, leading to the monetization of the economy. According to Bonney and Ormrod (1999), it was clearly

¹⁰ Cooper et al. (2012).

¹¹ Cooper et al. (2012, 198).

during the fourteenth century that western monarchies began to cross the frontier between the feudal state and the fiscal state, a frontier that the Italian cities had already crossed in the previous century; at the same time, those cities also developed modern accounting and financial techniques for the private sector, including the double book-keeping system lately summarised by Luca Pacioli in his famous treaty. According to Beguin and Genet (2017):

This [Italian] society of bankers and merchants also had the financial techniques: all or nearly all the technologies of taxation and credit originated in Italy, including public debt consolidation and the creation of government [securities], as well as theoretical debate on questions such as whether the interest charged on these [securities] counted as usury. They had all the technologies, but state-building had not occurred, or only on a small scale. The Italians continued to play a leading role in the development of the European states, their tax systems and their finances.

One of the crucial factors in the emergence of the modern tax systems which feature the modern state has been war – including the Crusades¹² – and related borrowing. The funding of wars triggered taxation beyond the customary and regular levies of the Middle Age, enacting the taxing power of the sovereign. Yet, this power encountered limits and depended on the political consensus to be obtained and maintained: when it went out of line, war financing caused financial distress and political outturns.

This connection between state authority, the organisation of state fiscal capacity, and the management of state borrowing emerged progressively and became the backbone of the modern state by the

¹² Russell (1975).

end of the eighteenth century, when tax and debt became structural elements of the finances of all western European countries.

By then, modern monarchies followed the early examples by the cities in Italy and northern Europe to develop both borrowing arrangements with bankers and issuance of public debt securities.¹³ Secondary exchanges for governmental securities developed since those securities became transferable, paving the way to the emergence of private investors and financial market-makers in public debt. Central banking was progressively established to organise public debt management and currency issuance at the junction with private banking. According to Bordo¹⁴:

The story of central banking goes back at least to the seventeenth century, to the founding of the first institution recognized as a central bank, the Swedish Riksbank. Established in 1668 as a joint stock bank, it was chartered to lend the government funds and to act as a clearing house for commerce. A few decades later (1694), the most famous central bank of the era, the Bank of England, was founded also as a joint stock company to purchase government debt. Other central banks were set up later in Europe for similar purposes, though some were established to deal with monetary disarray. For example, the Banque de France was established by Napoleon in 1800 to stabilize the currency after the hyperinflation of paper money during the French Revolution, as well as to aid in government finance. Early central banks issued private notes which served as currency, and they often had a monopoly over such note issue.

While these early central banks helped fund the government's debt, they were also private entities that engaged in banking activities. Because they held the deposits of other banks, they came

¹³ North and Weingast (1989; Beguin and Genet (2017).

¹⁴ Bordo (2007, 1).

to serve as banks for bankers, facilitating transactions between banks or providing other banking services. They became the repository for most banks in the banking system because of their large reserves and extensive networks of correspondent banks. These factors allowed them to become the lender of last resort in the face of a financial crisis. In other words, they became willing to provide emergency cash to their correspondents in times of financial distress.

According to Teichova and Matis (2003), under the influence of the Enlightenment, the English and French courts acted as a centralising force, while the unification of administration promoted a sense of political unity among the royal subjects. Accordingly, the modern state connects with the materialisation of a novel 'public sphere' in Europe against the background of the disintegration of the feudal system, including the repudiation of the Church's and the Empire's claims to universality, and the rise of civil (bourgeois) society. By centralising and unifying administrative processes, introducing compulsory mass education and military service, and forging a common economic area, modern monarchies asserted the idea of state sovereignty over particularistic forces arising out of regionalism and the persistence of traditional social orders.

However, modern monarchies – such as Prussia, France, England, and Spain - were by no means the only agencies in developing the modern state. Political institutions were evolving with the very notion of representative government emerging often out of political unrest, featuring Parliaments with a central role alongside the sovereigns and a judiciary independent of the sovereigns as well. In this context, the French Revolution of 1789 further paved the way to the constitution and dissemination of the modern state and representative government throughout Europe, providing the political and ideal foundations of centralised public administration by

law¹⁵. In particular, the French 'Declaration des Droits de l'Homme et du Citoyen' (Declaration of Human and Civic Rights of 26 August 1789) proclaimed the people's sovereignty over public finances¹⁶:

Article 13

For the maintenance of the public force, and for administrative expenses, a general tax is indispensable; it must be equally distributed among all citizens, in proportion to their ability to pay.

Article 14

All citizens have the right to ascertain, by themselves, or through their representatives, the need for a public tax, to consent to it freely, to watch over its use, and to determine its proportion, basis, collection and duration.

Article 15

Society has the right to ask a public official for an accounting of his administration.

Accordingly, public budgets were to be submitted to the approval by the French Parliament, which had to consent to pay taxes and approve expenditures on behalf of the people. Since the beginning of the nineteenth century, a Supreme Court of Audit was also established to audit public accounts and supervise public financial management on behalf of both the government and the Parliament.

Moreover, the public sector accounting system was further developed by cameral accounting, that is, an accounting system featuring a financial basis of accounting and capable to trace and control financial flows and stocks through time and circumstances. This system has been evolving and implemented since the beginning of the 14th century in German speaking countries (Germany, Austria, Switzerland) and has

¹⁵ Besson (1901, p. 262 ff.).

¹⁶ Normanton (1966).

influenced accounting in Nordic countries, the Netherlands, Belgium, Hungary and Italy. 17 Cameral accounting was also employed in Russia from the early $18^{\rm th}$ century until the $20^{\rm th}$ century. 18

The cameral accounting structure is symmetric for revenues and expenditures (Table 2.1). It provides a consistent design to organise and implement a cash basis of accounting, featuring its importance for public sector accounting.

	Revenues (financial inflows), or Expenditures (financial outflows) Over a time period between t-1 and t				
	Balances of residual dues brought- forward (B/F)	Current dues (CD)	Actuals (A)	Balances of residual dues carried-forward (C/F)	
Transactions/ operations by	= Initial Balance	= Increases	= Decreases	= Ending Balance	
type and class	$B/F = C/F_{t-1}$	over period <i>t</i>	over period <i>t</i>	$C/F_t = B/F + CD_t - A_t$	
Totals					

B/F: balances unsettled (unpaid and/or not-received) in the previous period and brought-forward from the previous accounting period

CD: payment (or receipt) instructions made in the current period

A: payments/expenditures (or receipts/revenues) liquidated in the current period

C/F: balances unsettled in the current period and carried-forward to the next accounting period

Table 2.1: The cameral account structure 19

Monsen²⁰ claims that

cameral bookkeeping method for centuries has been used in the public sector, as opposed to the commercial bookkeeping method.

 $^{^{17}}$ Monsen (2002); Filios (1983); Forrester (1990); Coronella (2007); Canziani and Camodeca (2010).

¹⁸ Nazarov and Sidorova (2016); Platonova (2017).

¹⁹ Adapted from Monsen (2002), Table 1, p. 50.

²⁰ Monsen (2002), 45.

Cameral book-keeping is based upon single entries which are recorded either on the revenues (financial inflows) or the expenditures (financial outflows) side of the cameral accounts. It can be consistently connected with the budget through current dues and actuals, which are both recorded on a cash basis of accounting. To be sure, current dues and actuals constitute the financial flows which feature the dynamic of cameral accounts. They comprise both cash (actuals) and cash equivalents (dues), assuring a comprehensive representation of treasury management. Moreover, transactions and operations can be disentangled and classified between operational, financing and investment flows, expanding financial management and control through comprehensive cash flow statements.

In sum, the modern state is featured by its territorial sovereignty which justifies its taxing power and monetary management by the law, on which depends its public borrowing that gathers resources for public administration deployment. The next section shall investigate these specificities from a theoretical perspective.

3. Specificities of public sector accounting: examples and insights from theory

Public sector accounting design relates to the specificities of modern public administration, featured by management of taxation and public finances, as well as accountability toward governments, parliaments and the citizenship.

The modern government consummates resources acquired through taxation and borrowing, so as to redistribute them at the macroeconomic level. In turn, citizens contribute with resources to be redistributed by paying taxation and subscribing governmental debt issuance and refinancing (including for monetary base management). Moreover, the government takes non-debt commitments on behalf of its constituencies.

This specific financial-economic working by the government differs from that by the business entity, requiring a specific accounting representation. Specificities include: absence of commercial revenues; public debt and monetary base management; public debt management for redistribution purpose; and assurance of social protection (social benefits) through non-debt commitments.

From this perspective, recent reforms driven by new public management (NPM) and new public governance (NPG) – aiming to align public sector and business sector accounting systems - constitute yet another unfolded evolution whose implications shall be assessed over time and in context (see Section 3.4 below).

The rest of this section is organised as follows. Section 3.1 denotes the specific financial economy of governments. Section 3.2 highlights the accounting representation which is consistent with these specificities. In particular, Section 3.3 discusses the relationship between the cash basis and the accrual basis of public sector accounting. Section 3.4 addresses the NPM and NPG ideology which argues for aligning public sector and business sector accounting systems.

3.1 The specific financial economy of the government

Business entities seek to recover accrued costs or invested values through commercial revenue generation. This revenue is supposed to be spent, reinvested or distributed to stakeholders, including shareholding investors. Consequently, the business sector accounting system aims to represent this business economic process of profit-seeking and commercial revenue generation.

Contrary to the business entity, the public sector entity is not supposed to generate positive financial values (or profits) from its ongoing activities. Tax-payers expect the direct satisfaction of public needs (individual or collective) through non-lucrative activities based on social redistribution of resources. This satisfaction is the ultimate result or performance, and it is fundamentally disconnected from generation of "surplus". Therefore, the overarching purpose of public sector accounting system shifts from generation of net values (or net profits) to financing and covering of costs absorbed.²¹

In this context, financial sustainability of central government depends on (Figure 2.1): (i) the taxing power; (ii) public debt management and its issuance and refinancing mechanisms; and (iii) collective commitments such as pay-as-you-go pension obligations.

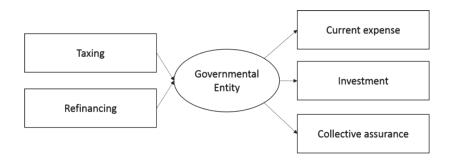


Figure 2.1: Specificities of financial economy of government: sources and uses of resources²²

Public sector specificities include²³: absence of commercial revenues (Section 3.1.1); public debt and monetary base management (Section 3.1.2); public debt management for redistribution purpose (Section 3.1.3); and assurance of social protection (social benefits) (Section 3.1.4).

²¹ Biondi (2012).

²² Reprinted from Biondi and Boisseau-Sierra, (2017a), Figure 1.

²³ Biondi (2012) and (2016); Biondi and Boisseau-Sierra (2017a).

3.1.1 Absence of commercial revenues

Concerning the business entity, recovering inflows are commercial revenues related to the prices of goods and services exchanged in business transactions. On the contrary, typical operating inflows to the governmental entity such as taxation are generated by non-commercial transactions which do not involve prices and an equivalent exchange of products and services against those prices (Table 2.2, left column).

Commercial Revenues to the business entity	Operating inflows (contributions) to the governmental entity		
(a) Involve the transfer of a good or service in exchange for a transfer of cash;	(a) These operating inflows are a transfer that is not measured at the equivalent price of a commercial transaction;		
(b) Imply a profit motive, i.e., the seeking of a satisfactory (reasonable) business income (the basis for recovering);	(b) The non-business activity does not have – by definition – profit (lucrative) motive;		
(c) Incorporate in pricing a judgment about the utility of the purchased item (based on the voluntary nature of the exchange under competitive conditions);	(c) This transfer does not imply any evaluation, even crude, of the utility of the generating activity;		
(d) Are determined by prices which reflect the client's willingness to pay; no business firm refuses to be paid more for the same service, does it?	(d) This transfer is not based on the willingness to pay of the beneficiaries, but on their capacity to pay;		
(e) Complete the financial relationship between the client and the business entity. Nothing further is charged to the client, who in turn does not have any control or influence over the utilization of the revenues realized by the transaction.	(e) This transfer does not conclude the financial relationship between the beneficiaries and the entity, since they are still subject to the future implications of the relationship (for instance, the tax levy by the state).		

Table 2.2: Comparative analysis of notions of commercial revenues to the business entity, and operating inflows to the governmental entity²⁴

²⁴ Adapted from Biondi, (2016), Table 1, p. 209.

Commercial revenues are the backbone of the financial economy of the business firm. Consequently, the business accounting system requires them to recover outflows (either values, cash or economic outflows, see section 3.3 below). However, in the normal functioning of the public sector entity, no such things as commercial revenues exist. Not only taxes and transfers, but also the direct operating inflows (contributions) generated by public sector entities providing services for a consideration do not usually involve prices fixed in commercial transactions (Table 2.2, right column). According to the US Governmental Accounting Standards Board²⁵:

Businesses receive revenues from a voluntary exchange between a willing buyer and seller, governments obtain resources primarily from the involuntary payment of taxes. Taxes paid by an individual taxpayer often bear little direct relationship to the services received by that taxpayer.

3.1.2 Public debt and monetary base management

Central government is deemed to be financially sustainable when it can pursue its ongoing public benefit missions while fulfilling its financial obligations when they are due in time and amount.²⁶

This financial capacity depends not only on tax revenues but also on public debt management.²⁷ In this context, governmental debt capacity consists in placing sovereign debt – for sake of debt issuance and refinancing – with: (i) governmental entities; (ii) resident and

²⁵ GASB (2006), 'Why Are Separate Accounting and Financial Reporting Standards Essential for Governments?', p. 1.

²⁶ Biondi (2018).

²⁷ Biondi (2016).

foreign debt-holding investors; (iii) monetary financial institutions (banks); and (iv) central banking. The latter two placements relate to the monetary base management (so-called monetization). Financial markets may facilitate some of these transactions on sovereign debt.

Therefore, fiscal policies, welfare policies and public debt management are linked, while governmental debt capacity constitutes an integral part of its financial sustainability.

3.1.3 Public debt management for redistribution purpose

Governmental borrowing is systematically employed to both "wake-up" sleeping cash hoardings, and to manage the monetary base. On the one hand, governmental borrowing generates additional spending by mobilizing cash holdings held by households and other final investors. On the other hand, placement of governmental debt in portfolios managed by financial institutions relates to monetary base creation and administration. Last but not least, when central banks issue currency and grant loans to financial institutions, government debt may be (and generally is) bought or collateralized. This joint process makes governmental debt an essentially monetary phenomenon.²⁸

This process is made possible by continued refinancing of governmental debt at every capital installments. When one cohort of debt securities becomes due, a new debt issuance is performed to replace the expiring one. In this way, the governmental entity can sustain a virtually permanent negative balance (deficit spending), as long as lenders go on subscribing its refinancing issuances over time and circumstances. Public deficit spending is then functionally connected with public debt refinancing.²⁹

²⁸ Biondi (2018).

²⁹ Biondi (2016 and (2018).

From the viewpoint of individual holders, governmental debt is to be remunerated by interest charges and repaid by capital installments at its nominal value. However, at the aggregate level, governmental borrowing enables transferring these borrowed funds in view to redistribute them across citizens. As Macaulay³⁰ explained,

here it is sufficient to say that the prophets of evil were under a [...] delusion. They erroneously imagined that there was an exact analogy between the case of an individual who is in debt to another individual and the case of a society which is in debt to a part of itself; and this analogy led them into endless mistakes about the effect of the system of funding.

These 'prophets' – in Macaulay's words - neglect the dynamic and collective dimensions of public debt management, misunderstanding the economic effects of its financial process of borrowing. On the one hand, governmental debt relates to the use of borrowing to fulfil public benefit missions with an overall redistributive purpose (welfare policies). On the other hand, it relates to the monetary base management (monetary policies).

Governmental borrowing does not, of course, create legal-tender money and still less does it create real goods and services. It is employed to fund transfers and non-market provision of goods and services. It does, therefore, something – it is perhaps easier to see this in the case of expansion of monetary base to finance public expenditure – which, in its economic effects, may lead to the creation of real goods and services that could not have been created without this practice. Social welfare improvement is therefore not synonymous of absolute or relative reduction of governmental debt (Biondi 2016).

³⁰ Macaulay (1848, p. 400).

3.1.4 Assurance of social protection (social benefits)

A further specificity relates to the connection of public debt management to general interest missions performed by governments to assure collective obligations and guarantees over time and circumstances. On the one hand, the refinancing mechanism (see Section 3.1.3 above) enables issuing fresh debt to roll over debt obligations that become due, instead of repaying them from tax revenues. On the other hand, collective assurances may eventually become future payments in due course, but governmental entities are not yet liable for them today.

Pension commitments provide an illustrative example of these collective assurances. For instance, 'pay-as-you-go' pension schemes refer to a system of paying pensions when due; consequently, these schemes are generally unfunded and do not involve refinancing needs on their financial position until pension payments become due. Moreover, a decrease on interest rates facilitates their financial sustainability, contrary to funded defined contribution pension schemes.³¹

The same analysis applies to collective guarantees and contingencies that may presently exist as potential (but not yet actual) governmental obligations. Pension and other collective commitments are assured by governments as general interest missions, in view to achieve intergenerational solidarity and redistribution purposes (welfare policies).

3.2 Features of public sector accounting representation

According to the GASB's White Paper:32

Governments are fundamentally different from for-profit business enterprises in several important ways. They have different

³¹ Biondi and Boisseau-Sierra (2017b) and (2018).

³² GASB (2006), 'executive summary', p. 1.

purposes, processes of generating revenues, stakeholders, budgetary obligations, and propensity for longevity.

Consequently, "the purpose of government is to enhance or maintain the well-being of citizens by providing public services in accordance with public policy goals" 33. So-called revenues are operating inflows which are not generated by commercial transactions, contrary to the business entity (see Table 2.2 and Section 3.1.1 above), while public spending has to be made accountable to citizens and their representatives by law. Therefore, "governmental budgets can be the primary method by which citizens and their elected representatives hold the government's management financially accountable" 34.

In this context, the government consummates resources acquired through taxation and borrowing, so as to redistribute them at the macroeconomic level. In turn, citizens contribute with resources to be redistributed by paying taxation and subscribing governmental debt issuance and refinancing (including for monetary base management). Moreover, the government takes non-debt commitments on behalf of its constituencies.

This specific financial economy of governments makes them different from business entities and requires a specific accounting representation. According to Chan³⁵:

Government accounting and financial reporting aims to protect and manage public money and discharge accountability. These purposes, and the nature of public goods and tax financing, give rise to differences with commercial accounting.

³³ GASB (2006), 'Major Environmental Differences between Government and Businesses', p. 6.

³⁴ GASB (2006), Major Environmental Differences between Government and Businesses, p. 9.

³⁵ (2003), abstract.

To be sure, this specific economic process has never prevented modern states to be funded and refinanced for centuries by final investors active on Securities Exchanges (see Section 2.3). Investment practice has been accepting for long that structural debt is issued and refinanced over time to cover governmental expenditure, including for but not limited to investment purpose.

From this perspective, the accounting system is expected to represent the governmental entity as a going concern. Public sector accounting system shall be carefully designed to cope with public sector specificities (see Section 3.1 above), including but not limited to absence of commercial revenues, public debt and monetary base management, public debt management for redistribution purpose, and assurance of social protection (social benefits). Both the cash basis and the accrual basis of accounting should be adapted to properly represent these specificities.

3.3 Cash basis and accrual basis of accounting

The dialogue between public sector and business accounting systems is not new. From an historical perspective, public administrations have been generally reluctant to adopt merchant book-keeping for functional, ideal and political reasons.³⁶

From a theoretical perspective, a convergence with the business sector would be "straightforward" only if a unique business accounting model existed. However, as a matter of fact, at least three main accounting models have been proposed for the business enterprise:³⁷

³⁶ Lemarchand (2010); Monsen (2002).

³⁷ This approach disentangling static (current value) and dynamic (historical cost) accounting draws upon the original work by E. Schmalenbach, E. Walb and other accounting thinkers especially from Germany, Italy and US throughout the first half of the XX century; see Biondi and Zambon (2012) for an historical overview of national traditions.

- A static model (patrimonial, wealth-basis), focusing on the net worth of the enterprise and its valuation at a specific moment in time;
- A financial model (cash flow-basis), focusing on the financial inflows and outflows of the enterprise; it represents the resources available, at a particular time, to meet the needs or purposes of the enterprise;
- A dynamic model (economic flow-basis), focusing on the economic inflows and outflows of the enterprise; it represents the resources absorbed by the activities of the enterprise during a particular period.

These views imply very different configurations for the business accounting system (Table 2.3).

	Static model	Financial model	Dynamic model
Orientation	Wealth	Cash Flows	Income
Focus	Net worth	Resources available	Resources mobilized (and utilized)
Basis of reference	Properties and claims	Cash outflows and inflows	Matching of costs and revenues
Timing	Moment in time; changes between moments	Time period	Time period
Recovery of	Values conferred	Cash outflows	Costs absorbed

Table 2.3: Variety of business accounting models (adapted from Biondi 2012, Table 1, p. 605)

In particular, these models imply a very different notion of **recovery**:

- The **static model** (patrimonial) asks: did the entity recover the *values* invested in the enterprise by its owners?
- The **financial model** (cash flow) asks: did the entity recover the *financial outflows* incurred by the enterprise during a period of time?
- The **dynamic model** (economic) asks: did the entity recover the *costs* absorbed by the enterprise during a period of time?

The static model is consistent with a current value basis of accounting, a balance sheet approach and a stock method of accounting. The latter constitute the background of international accounting standards (both IAS/IFRS and IPSAS). The financial model is consistent with a cash basis of accounting and a cameral accounting approach (see section 2.3 above) which featured the public sector accounting system through history in several European countries. The dynamic model is consistent with a cost basis of accounting, an income statement approach and a flow method of accounting. The latter used to be the backbone of business sector generally accepted accounting principles in the 20th century.³⁸ In fact, this dynamic model may be made compatible with the financial model.³⁹

Because of a variety of accounting models for business, the so-called 'accrual basis' of accounting cannot be applied straightforwardly to the public administration. No such a thing as one accrual basis of accounting exists. Public sector specificities require a careful adaptation of the accrual basis of accounting. A public

³⁸ Biondi (2011); Biondi and Zambon (2012).

³⁹ Biondi and Oulasvirta (2022).

sector accounting model has to be developed to cope with public sector specificities. In this context, instead of replacing cash basis of accounting, an accrual basis of accounting may be adapted to become complementary to, and compatible with budgeting by combining a flow method of accounting with an historical cost accounting approach. 40

In particular, financial sustainability for central government is framed and shaped by the specific use of governmental debt for non-market, redistributive purpose. Accordingly, under an accrual basis of financial accounting, accrued deficit or surplus (resulting from a balance between expenses and contributions attached to the same period, and its accumulation over time) acquires a distinctive meaning that is different from accrued business income: be it positive or negative, this matching balance shows ongoing capacity of contributions (mainly taxation, in case of governments) to cover incurred expenses.

This interpretation points to a featuring difference with the business enterprise. In the business context, enterprises seek for profits. Consequently, accrued business income provides a key indicator of financial performance, since the latter depends on the capacity of the business to transform incurred expenses in commercial revenues through time. In the public sector context, financial performance depends on the capacity of the entity to cover incurred expenses through time, while the overall performance relates to the satisfaction of general interest needs through non-lucrative activities which are paid by those expenses.

Generally speaking, concerning the public sector, accrual-based (accumulated) balance is materially negative and has

⁴⁰ Biondi (2012); Biondi and Oulasvirta (2022). See also Chapters 3 and 4.

⁴¹ Biondi (2016).

⁴² Biondi (2012).

increased over time for central governments all around the world. This fact has surely been the case throughout the twentieth century, showing that modern states employ debt issuance (and refinancing) to cover for operational expenses (see also Figures 2.2 and 2.3). Accordingly, governmental borrowing performs a specific economic function as a macroeconomic redistributive policy: in a nutshell, governments employ debt to redistribute incomes and fortunes across stakeholders over space and time.⁴³

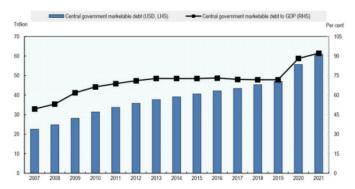
3.4 New Public Management (NPM) and New Public Governance (NPG)

Recent reforms driven by NPM and NPG ideology aim to align public sector and business sector accounting systems.⁴⁴ These reforms constitute yet another unfolded evolution whose implications have to be assessed over time and in context. Generally speaking, they claim for privatisations and outsourcing of public service including through private-public partnerships (whenever possible), deregulation, downsizing of public administration including tenured public servants, private auditing on public sector entities, and an overall favour for the business sector and the private financial sector. These reforms were accompanied by a preferred reference to international standards in many fields including accounting regulation - the case of the International Public Sector Accounting Standards (IPSAS) being emblematic here -, along with fostering emission of sovereign debt on international financial markets, denominated in either local or foreign currencies.

⁴³ Biondi (2016).

⁴⁴ Hood (1991); Osborne (201); Biondi (2012) providing further references.

Figure 1.9. Outstanding central government marketable debt in OECD countries, 2007-2021, nominal and as a percentage of GDP



Source: 2020 Survey on Central Government Marketable Debt and Borrowing; OECD Economic Outlook (December 2020); IMF World Economic Outlook Database (October 2020); Refinitiv, national authorities' websites and OECD calculations.

Chart1: Balance sheets of the Eurosystem, the FED and the Boj (in amounts and as a % of GDP)

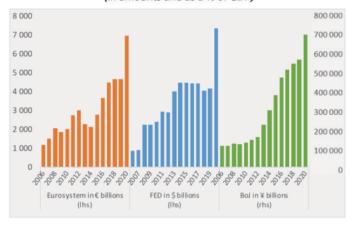
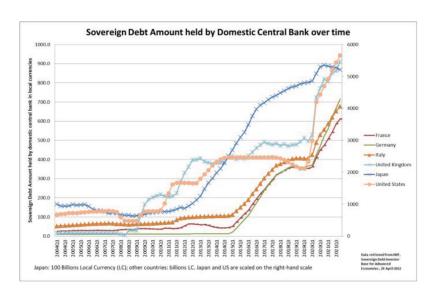


Figure 2.2: Central Government Debt Outstanding and Total Assets of Central Banks since 2007

Sources: OECD (2021), Figure 1.9 (left panel); Banque de France (2021), Chart1 (right panel), reprinted with permission⁴⁵

⁴⁵ Balance sheets of the European Central Bank and related network (Eurosystem), the US Federal Reserve (FED) and the Bank of Japan - BoJ (in amounts). Data retrieved from: ECB, FED, BoJ. Amount in billions of euros (G€), dollars (G\$), and yen (G¥).



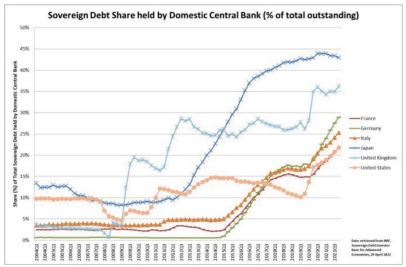


Figure 2.3: Sovereign Debt Amount and Share held by Domestic Central Banks over time

Source: Data retrieved from International Monetary Fund - IMF, Sovereign Debt Investor Base for Advanced Economies, 29 April 2022, designed by Arslanalp & Tsuda (2014) 46

⁴⁶ Database weblink: https://www.imf.org/~/media/Websites/IMF/imported-datasets/external/pubs/ft/wp/2012/Data/_wp12284.ashx

So far, these reforms did not challenge the specificities of governments as denoted above. Quite the contrary, these specificities have been magnified by the response to the financial crisis of 2007-8, the pandemic management of 2020-22, the war in Ukraine since 2022 and the related energy crisis in Europe and abroad. Central banking, public debt issuances and governmental guarantees stand at the core of the public policy response to all these crises (Figures 2.2 and 2.3). Moreover, central banking has been further involved in supporting climate change policy, including in the European Union (ECB 2022). To be sure, new public management and new public governance reforms have been affecting the ways public money is managed, gathered and allocated, reshaping the redistributive effects of public policies across stakeholders.

4. Concluding remarks

Public sector (governmental) accounting has been co-evolving with public finances and the financial organisation of the state through history and contexts. This chapter has briefly summarised its historical evolution through examples from ancient civilisations, the feudal state and the modern state, which is featured by the connection between state authority, the organisation of state fiscal capacity, and the management of state borrowing. This financial organisation emerged progressively and became the backbone of the modern state by the end of the eighteenth century, when tax and debt became structural elements of public finances of all Western European countries.

Under this financial organisation, some specificities feature the financial economy of public administration: absence of commercial revenues; public debt and monetary base management; public debt management for redistribution purpose; and assurance of social protection (social benefits) through non-debt commitments.

Public sector accounting has to properly represent these specificities while assuring the purposes of accountability and control which appear to be constitutive of institutional framework of governments. Its core through modern history have been the fight against misappropriation, fraud and embezzlement; prevention of financial distress; and budgeting including prospective budgeting.

By referring and adopting accounting models and practices from the business sector in the wake of the NPM and NPG ideas, public sector accounting may mislead public sector management away from its general interest missions, transforming public sector activities in for-profit ventures which would neglect their role in achieving intergenerational solidarity and redistribution purposes (social welfare).

Bibliographic references

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References

ARISTOTLE (1888) – Politics. English translation: A Treatise on Government, translated from the Greek by William Ellis, London: Routledge.

ARSLANALP, Serkan and TSUDA, Takahiro (2014) – Tracking Global Demand for Advanced Economy Sovereign Debt, IMF Economic Review, Volume 62, Number 3, Washington DC.

BANQUE DE FRANCE (2021) – Understanding the expansion of central banks' balance sheets, authored by Emmanuel Cerclé, Hervé Le Bihan and Michaël Monot, Eco

- Notepad Post n°209, Paris. URL: https://blocnotesdeleco.banque-france.fr/en/blog-entry/understanding-expansion-central-banks-balance-sheets
- BAXTER, Stephen B. (1957) The Development of the Treasury, 1660-1702, London, Cambridge, Mass.: Harvard University Press.
- BÉGUIN, Katia and Jean-Philippe GENET (2017) Taxation and the Rise of the State: Introductory Remarks. Béguin, Katia, and Anne L. Murphy (eds.) State Cash Resources and State Building in Europe 13th-18th century. Paris: Institut de la gestion publique et du développement économique, 2017. URL: http://books.openedition.org/igpde/3809>.
- BESSON, Emmanuel (1901) Le contrôle des budgets en France et à l'étranger : étude historique et critique sur le contrôle financier des principaux États depuis les temps les plus reculés jusqu'à nos jours (2e édition). Paris : A. Chevalier-Marescq. URL : https://gallica.bnf.fr/ark:/12148/bpt6k5549250p
- BEZES, Phillippe, DESCAMPS, Florence, KOTT, Sébastien and TALLINEAU, Lucile (2013) eds. L'invention de la gestion des finances publiques. Du contrôle de la dépense à la gestion des services publics (1914-1967). Paris: Institut de la gestion publique et du développement économique. doi:10.4000/books.igpde.2886
- BINNEY, John Edward Douglas (1958) British Public Finance and Administration 1774-1792, Oxford, Clarendon Press.
- BIONDI, Yuri (2011). The Pure Logic of Accounting: A Critique of the Fair Value Revolution. Accounting, Economics, and Law, 1(1). https://doi.org/10.2202/2152-2820.1018
- BIONDI, Yuri (2012) Should Business and Non-Business Accounting be Different? A Comparative Perspective Applied to the French Central Government Accounting Standards, Vol. 35: International Journal of Public Administration, pp. 603-619. DOI: https://doi.org/10.1080/01900692.2012.661186
- BIONDI, Yuri (2016) Accounting representations of public debt and deficits in European central government accounts: An exploration of anomalies and contradictions. Accounting Forum, DOI: http://dx.doi.org/10.1016/j.accfor.2016.05.003
- BIONDI, Yuri (2016) Debt Capacity and Financial Sustainability in Central Government. Entry in: Global Encyclopedia of Public Administration, Public Policy, and Governance. Edited by Ali Farazmand, November. DOI: http://link.springer.com/referenceworkentry/10.1007/978-3-319-31816-5_2269-1
- BIONDI, Yuri (2018) The Financial Sustainability Conundrum in Central Government. Accounting, Economics, and Law: A Convivium. DOI: http://dx.doi.org/10.1515/ael-2018-0003
- BIONDI, Yuri and BOISSEAU-SIERRA, Marion (2017a) Financial Sustainability and Public Debt Management in Central Government. Chapter in: M. P. R. Bolívar ed. Financial Sustainability in Public Administrations, Basingstoke (UK): Palgrave Macmillan Pub. URL: http://dx.doi.org/10.1007/978-3-319-57962-7_7
- BIONDI, Yuri and BOISSEAU-SIERRA, Marion (2017b) Pension Obligations in the European Union: A Case Study for Accounting Policy. Accounting, Economics, and Law: A Convivium, 7(3), 20170027. https://doi.org/10.1515/ael-2017-0027
- BIONDI, Yuri and BOISSEAU-SIERRA, Marion (2018) Pension Management between Financial Market Development and Intergenerational Solidarity: A Socio-Economic

- Analysis and a Comprehensive Model. Socio-Economic Review, Volume 16, Issue 4, October, Pages 791–822, https://doi.org/10.1093/ser/mwx015
- BIONDI, Yuri and OULASVIRTA, Lasse (2022) Accounting for public sector assets: Comparing historical cost and current value models, chapter in: Josette Caruana, Marco Bisogno, Mariafrancesca Sicilia eds. Measurement of Assets and Liabilities in Public Sector Financial Reporting: theoretical basis and empirical evidence, Emerald Publishing, forthcoming.
- BIONDI, Yuri and ZAMBON, Stefano (2012) eds. Accounting and Business Economics: Insights from National Traditions, New York: Routledge. DOI: https://doi.org/10.4324/9780203094723
- BONNEY, Richard and ORMROD, William Mark (1999) Introduction, chapter in: W. M. Ormrod and R. Bonney (eds.), Crises, revolutions and self-sustained growth. Essays in European fiscal history, 1130–1830, Stamford: Shaun Tyas, pp. 1-21.
- BORDO, Michel D. (2007) A Brief History of Central Banks, Federal Reserve Bank of Cleveland, December, Cleveland/OH.
- BUCHHOLZ, Werner (1992) Öffentliche Finanzen und Finanzverwaltung im entwickelten frühmodernen Staat : Landesherr und Landstände in Schwedisch-Pommern, 1720-1806, Cologne, Böhlau.
- CANZIANI, Arnaldo and CAMODECA, Renato (2010) Il Bilancio dello Stato nel Pensiero degli Aziendalisti Italiani, Universita degli Studi di Brescia, Dipartimento di Economia Aziendale, paper n. 100, Febbraio.
- CARMONA, Salvador and EZZAMEL, Mahmoud (2007) "Accounting and accountability in ancient civilizations: Mesopotamia and ancient Egypt", Accounting, Auditing & Accountability Journal, Vol. 20 No. 2, pp. 177-209
- CHAN, James L. (2003) Government Accounting: An Assessment of Theory, Purposes and Standards, Public Money & Management, 23:1, 13-20, DOI: 10.1111/1467-9302.00336
- CHATFIELD, Michael and VANGERMEERSCH, Richard (1996) eds. The History of Accounting: An International Encylopedia, Oxon: Routledge.
- FUNNELL, Warwick; COOPER, Kathie; LEE, Janet (2012) Public sector accounting and accountability in Australia. (2 ed.). Sydney, Australia: UNSW Press.
- CORONELLA, Stefano (2007) Lo sviluppo della contabilità di Stato nel XIX secolo: il contributo dei 'precursori' dell'Economia aziendale, Rivista Italiana di Ragioneria e di Economia Aziendale, 107, 7-8.
- DECLARATION OF HUMAN AND CIVIC RIGHTS of 26 August 1789, official translation provided by the Conseil Constitutionnel). URL: https://www.conseil-constitutionnel. fr/sites/default/files/as/root/bank_mm/anglais/cst2.pdf
- DUBET, Anne and LEGAY, Marie-Laure Avant-Propos, in : LEGAY Marie-Laure (dir.),
 Dictionnaire historique de la comptabilité publique (1500-1850), Rennes : PUR, 2010.
- ECB European Central Bank (2022) Climate Change and the ECB, institutional webpage, Frankfurt an Main. URL: https://www.ecb.europa.eu/ecb/climate/html/index.en.html
- FILIOS, Vassilios (1983) The Cameralistic Method of Accounting A Historical Note, Autumn, 10(3): Journal of Business Finance & Accounting, pp. 443-450.

- FORRESTER, David A. R. (1990) Rational Administration, Finance and Control Accounting: The Experience of Cameralism, 1(4): Critical Perspectives on Accounting, pp. 285-317.
- GASB Governmental Accounting Standards Board (2006) Why Governmental Accounting and Financial Reporting Is and Should Be Different, White Paper, Norwalk, CT: GASB.
- HOOD, Christopher (1991) A Public Management for all Seasons?", Public Administration. 69 (1): 3–19. DOI:10.1111/j.1467-9299.1991.tb00779.x
- HUMBERT, Gustave (1886) Essai sur les finances et la comptabilité publique chez les Romains, 2 Volumes, Paris : Ernest Thorin Editeur.
- LAGROUE, Lance Elliot (2014) Accounting and Auditing in Roman Society, PhD Dissertation, University of North Carolina At Chapel Hill.
- LEGAY, Marie-Laure (2010) ed. Dictionnaire historique de la comptabilité publique (1500-1850), Rennes: PUR.
- LEMARCHAND, Yannick (2010) «Parties doubles », entry in : Legay M.-L. (dir.), Dictionnaire historique de la comptabilité publique (1500-1850), Rennes: PUR, 2010.
- MACAULAY, Thomas Babington (1848) The History of England from the Accession of James II, Vol. IV, Philadelphia: Porter & Coates [1848/1887].
- MARGAIRAZ, Michel (1991) L'État, les finances et l'économie. Histoire d'une conversion 1932-1952. Vincennes: Institut de la gestion publique et du développement économique, 1991. URL: http://books.openedition.org/igpde/2276
- MONSEN, Norvald (2002) The Case for Cameral Accounting. Financial Accountability & Management, 18: 39-72.
- NAZAROV, Dmitry and SIDOROVA, Marina (2016) Russian Public Sector Accounting: The Case of Experimental Estate Konskaya Volya (1893-1905). 10.2991/icaat-16.2016.36
- NORMANTON, E. Leslie (1966) The Accountability and Audit of Governments: a comparative study, Manchester: Manchester University Press and New York: Frederick A. Praeger.
- NORTH, Douglass C. and WEINGAST, Barry R. (1989) Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England. The Journal of Economic History, 49 (4), 803-832.
- OECD (2021) OECD Sovereign Borrowing Outlook 2021, OECD Publishing, Paris. DOI: https://doi.org/10.1787/48828791-en
- OSBORNE, Stephen P. (2010) ed. The New Public Governance? Emerging perspectives on the theory and practice of public governance. London and New York: Routledge.
- PLATONOVA, Natalia V. (2017) Accounting and the Reforms of Government in Eighteenth-Century Russia, Jahrbücher für Geschichte Osteuropas , 2017,65(2), pp. 200-238. URL: https://www.jstor.org/stable/26381419
- QU'RAN, Surah Baqarah Ayat, URL: https://myislam.org/surah-baqarah/ayat-282/
- RUSSELL, Frederick H. (1975) The just war in the Middle Ages, Cambridge University Press.
- SCHNEIDER, Franz (1952) Geschichte der formellen Staatswirtschaft von Brandenburg-Preussen, Berlin, Duncker & Humblot.

- TEICHOVA, Alice and MATIS, Herbert (2003) eds. Nation, State and the Economy in History. Cambridge: Cambridge University Press. DOI: 10.1017/CBO9780511497575
- WAQUET, Jean-Claude (1990) Le Grand-duché de Toscane sous les derniers Médicis, Ecole française de Rome.
- WYNNE, Andy (2018a) History of public sector accounting and alternatives, chapter 2 in Peter C. LORSON, Susana JORGE, Ellen HAUSTEIN (eds.), European Public Sector Accounting, Coimbra: Coimbra University Press. DOI: 10.14195/978-989-26-1861-6_2
- WYNNE, Andy (2018b) Difference between private and public sector accounting, chapter 3 in Peter C. LORSON, Susana JORGE, Ellen HAUSTEIN (eds.), European Public Sector Accounting, Coimbra: Coimbra University Press. DOI: 10.14195/978-989-26-1861-6_3
- ZAID, Omar Abdullah (2004) Accounting Systems and Recording Procedures in the Early Islamic State. The Accounting Historians Journal, vol. 31, no. 2, 2004, pp. 149–70. JSTOR: http://www.jstor.org/stable/40698304
- ZANNINI, Andrea (1994) Il Sistema di revisione contabile della Serenissima. Istituzioni, personale, procedure (secc. XVI-XVIII), Venise, Albrizzi editore.

Additional readings

- BIONDI, Yuri (2012) Should Business and Non-Business Accounting be Different? A Comparative Perspective Applied to the French Central Government Accounting Standards, Vol. 35: International Journal of Public Administration, pp. 603-619. DOI: https://doi.org/10.1080/01900692.2012.661186
- BIONDI, Yuri (2016) Accounting representations of public debt and deficits in European central government accounts: An exploration of anomalies and contradictions. Accounting Forum, DOI: http://dx.doi.org/10.1016/j.accfor.2016.05.003
- BIONDI, Yuri (2018) The Financial Sustainability Conundrum in Central Government. Accounting, Economics, and Law: A Convivium. DOI: http://dx.doi.org/10.1515/ael-2018-0003
- BIONDI, Yuri and BOISSEAU-SIERRA, Marion (2017) Financial Sustainability and Public Debt Management in Central Government. Chapter in: M. P. R. Bolívar ed. Financial Sustainability in Public Administrations, Basingstoke (UK): Palgrave Macmillan Pub. URL: http://dx.doi.org/10.1007/978-3-319-57962-7_7
- WYNNE, Andy (2018a) History of public sector accounting and alternatives, chapter 2 in Peter C. LORSON, Susana JORGE, Ellen HAUSTEIN (eds.), European Public Sector Accounting, Coimbra: Coimbra University Press. DOI: 10.14195/978-989-26-1861-6_2
- WYNNE, Andy (2018b) Difference between private and public sector accounting, chapter 3 in Peter C. LORSON, Susana JORGE, Ellen HAUSTEIN (eds.), European Public Sector Accounting, Coimbra: Coimbra University Press. DOI: 10.14195/978-989-26-1861-6_3

Discussion topics

- Implications of public sector accounting history for current public sector accounting
- Applicability of private sector accounting standards to the public sector
- The role of public debt management and its implications for public sector accounting

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