

The under-realized potential usefulness of the UK Whole of Government Accounts

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IMPACT

After 12 years of publication, the UK Whole of Government Accounts (WGA) is shown to be a qualified success. Compared with statistical accounting, the WGA delivers greater comprehensiveness (improved fiscal transparency) and exhibits less vulnerability to creative accounting (the perimeter is less porous). Combined with fiscal sustainability projections, the WGA highlights the fragility of UK public finances even before the Covid 19 and cost-of-living shocks. Future usefulness will depend on how effectively intermediate users can penetrate the policy domain and whether WGA production can be speeded up. The four modes of government accounting (government financial reporting, statistical accounting, budgeting and fiscal sustainability projections) provide improved information. Though tempting for hard-pressed political decision-makers claiming 'to do good by stealth', manipulations will undermine fiscal transparency and are likely to damage fiscal sustainability. This analysis of UK WGA shows how the modes interact, but will remain separate as they have different rationales, measurements and audiences.

ABSTRACT

The article combines economization's four roles of accounting (territorialization, mediation, adjudication and subjectivization) with the four modes of government accounting (government financial reporting, statistical accounting, budgeting and fiscal sustainability projections) to assess the contribution of the UK's Whole of Government Accounts (WGA) to fiscal transparency and fiscal sustainability. It analyses published WGAs (2009–10 to 2020–21), assessing the incremental information on government assets and liabilities. WGA net liabilities are significantly higher than reported by statistical accounting's public sector net debt.

Introduction

After more than a decade of the UK Whole of Government Accounts (WGA), this is an appropriate time at which to assess achievements against expected outcomes, in particular the incremental usefulness of WGAs to the fiscal transparency and fiscal sustainability agendas. There has to be care about terminology. The UK and Estonia are the only countries to do a full consolidation of general government activity, with New Zealand excluding local authorities which are relatively unimportant in fiscal terms. A consolidation is prepared in Australia for the Commonwealth tier of government. In some countries there is reluctance to consolidate at general government level because of the separate democratic mandates of state and local governments. There is a fear that consolidations at general government level might centralize state power, though a counter-argument would be that consolidation is what is done when national accounts are produced. Whatever the coverage of the consolidation, the common motivation is to construct a more complete picture of public finances.

WGA is an element of government financial reporting which is identified by Heald and Hodges (2018) as one of four modes of government accounting. *Government financial reporting* is now heavily derivative of private sector standards, whether the actual platform is International Financial Reporting Standards (as in the UK), International Public Sector Accounting Standards (increasingly adopted), or European Public Sector Accounting Standards (which are under development by Eurostat on behalf of the European Commission). Notwithstanding institutional specificities, *budgeting* also has parallels in the corporate private sector. However, the other two modes are distinctive: *statistical accounting* based on the System of National Accounts (United Nations, 2008) or its European Union derivative ESA10 (Eurostat, 2013); and model-based *fiscal sustainability projections* for decades ahead beyond the five-year medium-term economic forecast, originated by the Treasury in 2002 but now prepared by the Office for Budget Responsibility (OBR) (OBR, 2022).

These modes have different primary audiences. They are simultaneously synergistic (each adding to the overall picture) yet in competition for attention. The rapid production of national accounts (based on statistical accounting) impacts debt and currency markets, and the 'who gets/loses, what, when' consequences of budgeting dominate the attention of political decision-makers who have truncated time horizons. Government financial reports, including WGA, have a limited audience beyond closely involved actors such as public auditors and parliament.

WGA-level consolidation would not have come onto the UK agenda without the Treasury's (1995) decision to adopt accruals accounting in central government and seek to harmonize financial reporting across the UK public sector. Moreover, consolidation becomes essential when New Public Management (NPM) reforms fragment public service delivery, for example by breaking up departmental bureaucracies into agencies and companies, and by greater involvement of the private sector through recourse to public–private partnerships

KEYWORDS

Economization; fiscal sustainability; fiscal transparency; intergenerational equity; modes of government accounting; roles of accounting; subjectivization; whole of government accounts

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(PPP) and government guarantees. This development of wholeof-government financial reporting draws attention to the relationship between modes of government accounting, particularly between government financial reporting and statistical accounting.

Understanding the macroeconomic context of the study period (2009–10 to 2020–21) is vital. This period covers the middle of the global financial crisis and goes through the period of austerity in the 2010s, includes the first year of the Covid 19 pandemic, but ends before the impact of the cost-of-living crisis resulting from supply shocks generated by the pandemic and the Ukraine war. This WGA period is one of low UK economic growth (real GDP was 21% higher in pre-Covid 2019–20 than in 2009–10) and low inflation (the highest annual GDP deflator, prior to 6.27% in 2020–21, was 2.60% in 2019–20) (Office for National Statistics, 2023).

Research objective

The objective of this article is to assess what has been achieved by the Treasury's (1998) decision to prepare a WGA, supplementing accruals-based financial reporting for central government departments, which came to fruition in 2001–02. To achieve this, there is a systematic examination of the 12 years of published WGAs (2009–10 to 2020–21) (Treasury, undated), with the focus on what incremental information is provided by the WGAs about the state of UK public finances beyond what is available much earlier from statistical accounts based on ESA10.

The development of WGA over this period is analysed using the Miller and Power (2013) economization framework, which is based upon four roles of accounting. This article assesses WGA using the framework as a lens of analysis, rather than seeking to develop the Miller and Power (2013) framework itself.

The WGA aims to achieve greater fiscal transparency by establishing a clearer picture of UK public finances as a whole, so that there can be more effective management of fiscal risks. Otherwise, the individual financial statements of 'over 10,000' (Treasury, 2023, p. 34) entities overwhelm users interested in such a picture. Fiscal transparency is believed to contribute to the public accountability of governments in democratic societies by making government financial information more accessible and understandable (Heald, 2012). In the context of high levels of fiscal transparency, assessments can then be made of the fiscal sustainability of government on the basis of declared future policies on spending and tax. Analyses which show government to be fiscally sustainable do not necessarily mean that the modelled policies would be socially and politically sustainable, as they may cause adverse distributional effects or create hostile reactions from the electorate.

The article does not delve into why WGAs are still published very late, though these delays unquestionably detract from their policy usefulness (Comptroller and Auditor General, 2023). Never has the WGA been published in less than 12 months after the reporting date. Some of this delay is due to under-resourcing by the Treasury and technical problems, particularly for WGA 2019–20, with the Treasury's Online System for Central Accounting and Reporting (OSCAR II), the public spending database to which entities within the WGA submit their accounts data (Little, 2020). Auditors of public sector entities assure the WGA submission after they have audited the individual body's accounts. In contrast, the audit of a listed corporate is led by the group auditor and the subsidiary accounts are audited in parallel.

Methodology

This is a document-based study, primarily focused on successive WGAs prepared by the Treasury, audited by the National Audit Office (NAO), and reviewed on behalf of the UK parliament at annual meetings of the Public Accounts Committee (PAC) which is the primary user. The focus of the data work is sharpened by combining the theoretical framings of economization (Miller & Power, 2013; Heald & Hodges, 2015) and the four modes of government accounting (Heald & Hodges, 2018).

Theoretical framework

The Miller and Power (2013) economization framework conceptualizes the roles of accounting as territorialization, mediation, adjudication and subjectivization. The framework applies to all forms of accounting but in some UK-based studies has been focused within the public sector. For example Heald and Hodges (2018) use the framework to analyse accounting for government guarantees by the UK government and Ferry et al. (2022) use it to assess the challenges arising from auditing and accountability reforms of local government in England.

In the public sector context, territorialization determines 'what is government' and configures government organizations as economic entities with the obligation to report on their activities in financial terms. Territorialization differs according to the modes of government accounting: for example budgeting usually covers a narrower domain statistical accounting (focused than on general government) and the WGA component of government financial reporting (focused on the public sector as whole). Governments define what budgets cover, whereas both government financial reporting and statistical accounting are largely regulated by independent organizations.

Mediation covers the various ways in which economic actors communicate with each other and in which accounting is a key tool. Mediation occurs when individuals or groups combine to make decisions or policy from the alternatives made available through recognition of the calculable sub-spaces defined by territorialization. Under the influence of NPM ideas, including accruals accounting in government, there has been increasing reliance on marketized forms of mediation instead of hierarchy and non-market co-ordination. Mediation refers to the way in which accounting links actors and organizations together, including the consolidation in WGA of disparate bodies. Accounting numbers are treated as comparable, even when the activities to which the numbers are attached are not comparable. Mediation is therefore facilitated by accruals accounting because it provides an apparently consistent and objective basis for policy and regulation.

Adjudication relates to the judgements which external actors make about the financial and service performance of public organizations. Adjudication, in the sense of enforcing financial compliance, is evidenced by different actors pronouncing on government financial reporting (NAO in the context of UK WGAs) and statistical accounting (Eurostat when the UK was a member state of the EU until 31 January 2020). Adjudicators are not necessarily the bodies which devise and/or approve standards (for example the International Accounting Standards Board and Financial Reporting Advisory Board to HM Treasury for UK government accounting). The second element of adjudication relates to the evaluation of and pronouncement on performance. Most organizations will be adjudicated by a variety of organizations and individuals, such as equity shareholders in the private sector, capital market actors, taxpayers and their representatives, pressure groups and the media. The extent of this type of adjudication activity of WGAs appears to be limited (Chow et al., 2019). The high level of abstraction caused by the wide scope of the WGA boundary and the long delay between the financial period end and publication are factors that limit the type and number of users. Adjudication activities are likely to be more extensive within particular sectors of government where there is a shorter distance between activities, users and financial reporting (Ferry et al., 2022).

Subjectivization includes the pressure that is brought to bear on public organizations (supposedly to improve performance) and how those organizations respond to that pressure. Subjectivization refers not only to downwards pressure on public organizations, but also to the freedom that individual organizations have in choosing how they might respond to it, albeit limited by financial norms and standards. For example organizations may adopt approaches on a continuum from enthusiastic compliance, through grudging acceptance to resistance which might include false reporting upwards or activities that meet the letter, but not the spirit, of the requirements. 'Better accounting' (Treasury, 1995) might facilitate more intrusive top-down control of supposedly independent public bodies and of sub-national governments with their own democratic mandate. The later extension of departmental boundaries through the 'Clear line of sight' project (Treasury, 2009) may have affected the relationship of executive non-departmental public bodies (NDPBs) with parent departments (Heald & Steel, 2018), though accounting is only one factor in the intensified control by central government of the UK public sector. Examples of resistance are revealed by the adjudication function of the NAO, such as in relation to: earlier off-balance sheet treatment of PPP liabilities; the earlier locating of government-controlled rail infrastructure providers (Railtrack and Network Rail) outside general government; and the continuing resistance of local authorities to adopting the UK government's preferred valuation methodology for infrastructure assets.

Relevant literature

Andrew Likierman, the Head of the UK Government Accountancy Service from 1993 to 2004, was the architect of the adoption of accruals accounting in UK central government. As a public sector accounting academic, he had previously written extensively on public sector accounting reform and had acted as specialist adviser to the Treasury Committee of the House of Commons. He had identified the issue of accessibility and missing users and had elaborated the case for what would now be known as 'fiscal transparency' (Likierman & Creasey, 1985). In Likierman's own publications while a Treasury official (Likierman, 1995, 2003) and in the Treasury's exposition of 'resource accounting and budgeting' (RAB) (Treasury, 1995), two motivations are provided for adopting accruals accounting and accruals budgeting:

- To fulfil obligations of public accountability by providing more consistent information and greater comparability with the private sector, hence improving mediation.
- To improve the financial management of central government by revealing the value of a wider range of assets and liabilities, thereby achieving a more complete territorialization.

In the mid-1990s, the Treasury resisted calls for a WGA, preferring to concentrate on RAB implementation in core central government (i.e. excluding executive NDPBs), a task which was not completed until financial year 2001–02. Nevertheless, the Treasury Scoping Study on WGA (Treasury, 1998) announced a commitment to publish a WGA. The WGA project suffered delays, with the first WGA being published in November 2011 for financial year 2009–10, academic authors such as Chow et al. (2007) and Heald and Georgiou (2011) having acted as critical friends through this lengthy process.

Statistical accounting attaches great importance to consolidation into sectors, with general government being one of the key aggregates. However, the general government boundary is porous and activities can be located accidentally or placed deliberately just outside the boundary (Sinn, 2015) while effectively remaining under government control. Consolidation within government financial reporting seeks to address such vulnerability through the application of accounting standards not controlled by governments.

Bergmann (2014) identified accounting consolidation and government guarantees as key issues for fiscal sustainability, as otherwise user understanding of government accounts would be incomplete. Bergmann et al. (2016) surveyed consolidation practices in OECD countries while Chow et al. (2019) covered similar ground. Santis et al. (2018) focused on the academic literature on WGA rather than on countries' practices.

In the UK, the PAC has emerged as the primary user of the WGA, this destination suggesting that the WGA is conceived of as an accountability and adjudicating tool. If it were mainly seen as a decision-making tool, it might go to another parliamentary committee, such as the Treasury Committee -though this sees itself primarily as a macroeconomic committee. The PAC holds annual sessions with high-level Treasury officials which are videoed and archived. The WGA is a complex document and members of the PAC, though advised by the NAO, may lack the technical knowledge and analytical ability to mount a constructive challenge to the Treasury. Strangely, the hearing on the 2019-20 WGA (Treasury, 2022) was held on 8 June 2022 even though the 221-page WGA had only been published two days before. This timescale might reflect that, as a result of the long delay between the financial year end of 31 March 2020 and its publication date, the WGA was seen to be less important, having reduced influence as a mediating instrument.

It has been emphasized that public accountability in relation to government accounts rests on there being 'intermediate users' who could impartially interpret accounts for a wider audience (Rutherford, 1992; Heald, 2003). In relation to statistical accounting, the Institute for Fiscal Studies and the National Institute of Economic and Social Research prominently fulfil such a role. This has no counterpart in relation to government financial reporting, notwithstanding efforts by the Institute of Chartered Accountants in England and Wales (Campbell & Wheatcroft, 2017). One possible reason for this difference is that those who might otherwise be WGA users do not find them useful as an analytical tool to study current policy problems, dismissing them as 'out-of-date' and therefore reducing the adjudicating power of WGA.

Usage of public sector financial reports is often internal to the system: following completion of the audit, accounts for government departments are laid before the UK parliament (where they may be considered by the relevant select committee, the main adjudication forum) and local authority accounts are submitted to councillors.

Evidence from WGA balance sheets from 2009–10 to 2020–21

This article focuses primarily on the balance sheet, which is where the greatest incremental contribution of WGAs to fiscal transparency and fiscal sustainability would be expected. So that the data tables are comprehensible, they are based upon the final restated figures (where available) from the next two years' WGA. Most of the restatements are comparatively modest.

Table 1 shows the balance sheet for the full period 2009– 10 to 2020–21, over which terminology has been consistent. The public sector's investment in what were private sector banks before the global financial crisis stopped being separately identified on the face of the balance sheet from 2013–14. These banks were never consolidated, leading to the audit qualifications coded as (c) in Table 4 later in the article. Audit qualifications are a valuable source of information about contentious practices which provide evidence of subjectivization and of resistance to being subjectivized.

The key aggregates are total assets, total liabilities and net liabilities. The final row of Table 1 retains the Treasury terminology of 'Total liabilities to be funded by future revenues', which is a duplicate label for 'WGA net liabilities'. Unlike for a private sector entity, this presently unfunded net liability does not mean that the UK government is insolvent, given its sovereign right to tax in future. When considering such numbers, it should be remembered that the government's taxing capacity is not recognized as an asset, and that the implicit commitments to keep providing state pensions, welfare benefits and public services, as well as obligations arising from future crises, are not recognized as liabilities (Ferry & Midgley, 2023). Projecting forward such rights and obligations is a key function of fiscal sustainability projections which extend territorialization into the future.

Over the study period from 2009–10 to 2020–21, total assets increased in nominal terms by 77%, total liabilities by 123%, and WGA net liabilities by 171%. Changes in the structure of assets and liabilities over the period can be

expressed as percentages. Property, plant and equipment increased marginally from 57.0% of total assets in 2009–10 to 57.6% in 2020–21, while non-current assets remained at 76.5% and current assets remained at 23.5%. Over the 12-year time span of WGA, there is a high degree of compositional stability.

Current liabilities increased from 23.8% to 25.6% of total liabilities, with some compositional change. Other financial liabilities noticeably rose in 2020–21, the first financial year significantly affected by Covid 19. Provisions in non-current liabilities rose from 3.5% to 6.1%. The dominant non-current liability remained the net public sector pension liability (45.8% to 41.7%), constituting 56.0% of non-current liabilities in 2020–21. The combined percentage of current and non-current government borrowings of 27.5% of total liabilities in 2020–21 had fallen from 31.6% in 2009–10, but may increase from 2021-22 due to the financial impacts of the Covid 19 pandemic and the cost-of-living crisis. Overall, there is considerable stability in the composition of WGA liabilities during the study period.

Evidence from reconciliation of WGA to national accounts

There are several reasons why statistical accounting dominates macro-fiscal decision-making. National accounts estimates can be produced far faster than a well-run WGA and are subject to later revisions as better estimates become available and there is extensive back-working of earlier years to achieve data comparability. In contrast, financial reports are definitive once published, though there can be restatements for the prior year. Although the WGA cannot inform short-term fiscal decisions because of delays in publication, it can provide a medium- to long-term view on liabilities and contingent liabilities.

International comparability is important for policy institutions (for example the International Monetary Fund, the Organisation for Economic Co-operation and Development, and the European Commission) and the debt markets which fund government debt. Statistical accounts across the world are prepared on internationally mandated standards, something that is far away for government financial reporting—even at entity level. There is a forwardlooking indirect benefit in the provision of a more secure basis for the OBR's model-based fiscal sustainability projections. The comprehensiveness of WGA, with its extensive territorialization as a distinguishing attribute, constrains the scope for hiding liabilities outside the reported numbers through creative accounting (Irwin, 2016).

An enduring feature of the UK WGA has been the reconciliation of WGA net liabilities (government financial reporting) with public sector net debt (PSND) (statistical accounting). Until WGA 2014–15, this reconciliation went from WGA net liabilities to PSND, the direction being reversed from WGA 2015–16. Given the fact that new opportunities have now been created, there has so far been a surprising lack of research into the relationship between government financial reporting on accounting standards and fiscal data on statistical standards (Jones & Lüder, 1996).

WGA net liabilities are always higher than PSND because the wider coverage brings in more liabilities than assets. The 2020–21 WGA shows the effects of Covid 19, which had a limited impact on 2019–20 but did delay the preparation

Table 1. WGA Balance Sheet, 2009-10 to 2020-21, £bn.

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Non-current assets												
Property, plant and equipment	712.8	714.0	744.5	746.8	812.3	1,075.8	1,120.2	1,167.6	1,208.4	1,268.0	1,313.3	1,270.3
Investment property	12.0	12.4	12.6	12.4	13.9	14.9	15.8	18.2	20.0	22.9	24.1	16.5
Intangible assets	36.3	34.8	35.2	34.5	31.9	32.4	33.0	34.5	36.0	37.4	40.2	41.0
Trade and other receivables	14.4	15.1	15.9	16.6	17.7	12.7	14.4	15.2	19.1	17.9	22.3	20.6
Equity investment in PS banks	61.1	59.5	40.8	40.0	43.0							
Other financial assets	119.2	120.4	125.0	158.6	164.6	216.6	208.8	260.8	323.3	320.6	299.2	340.8
Total: Non-current assets	955.8	956.2	974.0	1,008.9	1,083.4	1,352.4	1,392.2	1,496.3	1,606.8	1,666.8	1,699.1	1,689.2
Current assets												
Inventories	12.0	12.0	11.4	12.1	11.8	11.3	9.6	9.2	9.9	9.7	10.6	15.3
Trade and other receivables	125.0	130.0	126.0	122.3	131.9	133.2	140.3	158.0	160.8	172.4	159.7	182.3
Other financial assets	128.0	102.7	125.5	117.6	151.5	148.9	164.2	198.1	184.3	194.3	217.0	264.9
Cash and cash equivalents	19.7	22.5	21.2	24.5	26.9	26.8	25.8	28.3	34.3	44.2	37.6	39.6
Gold holdings	7.3	9.0	10.4	10.5	7.7	8.0	8.6	9.9	9.4	9.9	12.8	12.3
Assets held for sale	1.7	1.9	2.1	1.6	1.7	2.7	1.7	3.2	8.3	1.5	1.7	3.1
Total: Current assets	293.7	278.1	296.6	288.6	331.5	330.9	350.2	406.7	407.0	432.0	439.4	517.5
Total assets	1,249.5	1,234.3	1,270.6	1,297.5	1,414.9	1,683.3	1,742.4	1,903.0	2,013.8	2,098.8	2,138.5	2,206.7
Current liabilities												
Trade and other payables	-103.1	-98.6	-103.7	-98.3	-107.0	-108.8	-114.7	-122.5	-126.8	-133.3	-143.2	-169.3
Government borrowings	-200.9	-217.0	-224.2	-214.3	-212.4	-235.2	-274.2	-275.5	-275.6	-307.2	-344.7	-274.0
Other financial liabilities	-270.1	-259.4	-341.1	-408.4	-432.8	-444.2	-452.5	-584.9	-654.0	-652.1	-656.8	-943.3
Provisions	-15.7	-11.6	-13.6	-13.4	-17.1	-14.9	-14.7	-15.6	-16.4	-17.7	-30.4	-28.4
Total: Current liabilities	-589.8	-586.6	-682.6	-734.4	-769.3	-803.1	-856.1	-998.5	-1,072.8	-1,110.3	-1,175.1	-1,415.0
Non-current liabilities												
Trade and other payables	-74.0	-49.8	-55.2	-55.2	-66.0	-64.1	-65.5	-63.1	-64.4	-58.6	-57.9	-52.0
Government borrowings	-580.9	-691.2	-741.3	-781.9	-883.7	-939.3	-986.4	-1,013.5	-1,071.8	-1,100.0	-1,100.7	-1,246.3
Other financial liabilities	-11.5	-36.0	-33.2	-64.4	-95.9	-98.3	-104.9	-107.3	-98.8	-98.1	-105.1	-175.5
Provisions	-86.5	-95.4	-99.4	-117.6	-137.5	-160.4	-290.8	-306.6	-406.1	-293.7	-344.4	-338.0
Net public sector pension liability	-1,134.7	-961.0	-1,005.8	-1,171.9	-1,303.1	-1,493.3	-1,424.7	-1,834.7	-1,865.3	-1,893.9	-2,189.5	-2,306.2
Total: Non-current liabilities	-1,887.6	-1,833.4	-1,934.9	-2,191.0	-2,486.2	-2,755.4	-2,872.3	-3,325.2	-3,506.4	-3,444.3	-3,797.6	-4,118.0
Total liabilities	-2,477.4	-2,420.0	-2,617.5	-2,925.4	-3,255.5	-3,558.5	-3,728.4	-4,323.7	-4,579.2	-4,554.6	-4,972.7	-5,533.0
WGA Net liabilities	-1,227.9	-1,185.7	-1,346.9	-1,627.9	-1,840.6	-1,875.2	-1,986.0	-2,420.7	-2,565.4	-2,455.8	-2,834.2	-3,326.3
Financed by taxpayers' equity												
General reserve	-1,426.9	-1,422.7	-1,588.9	-1,876.6	-2,099.7	-2,379.7	-2,504.4	-2,948.1	-3,134.0	-3,048.8	-3,436.1	-3,932.3
Revaluation reserve	214.9	231.4	238.8	245.0	255.9	501.0	514.5	482.4	564.5	588.8	597.3	607.8
Other reserves	-15.9	5.6	3.2	3.7	3.2	3.5	3.9	45.0	4.1	4.2	4.6	4.2
Total liabilities to be funded by future revenues	-1,227.9	-1,185.7	-1,346.9	-1,627.9	-1,840.6	-1,875.2	-1,986.0	-2,420.7	-2,565.4	-2,455.8	-2,834.2	-3,326.3

of accounts. It is already clear that PSND and WGA net liabilities will be increased by the cost-of-living crisis, accelerated inflation and increased interest rates on UK public debt. These events seem likely to result in an upward lift in both PSND and WGA net liabilities caused by the UK government taking on more debt.

Table 2 adopts the current presentation of the published reconciliation between PSND and WGA net liabilities, reorganizing the earlier data. There are two items in the earlier presentation which mixed assets and liabilities and are therefore shown separately. Each year's WGA provides a reconciliation for three years: the reporting year and the two previous ones. In some WGAs, the earlier data are restated but the differences are generally small. In this article, a methodological decision has been taken to always use the latest stated numbers rather than the original ones, a decision influenced by the continuous updating practices of statistical accounting.

The grouping of adjustments in Table 2 is helpful because they:

- Add liabilities not recognized in national accounts.
- Adjust assets measured differently in national accounts.
- Add assets and liabilities excluded from measure of PSND.
- Deduct liabilities not yet recognized in WGA.
- Include other adjustments such as eliminations.
- Add an extra category for where there are inadequate data to match the current classification.

Two points emerge from Table 2. First, WGA net liabilities are always substantially higher than PSND: 48% higher in 2009–10 and 81% higher in 2020–21, a much higher excess than 2019–20's 57%. Total liabilities to be funded by future revenues as percentages of GDP increased from 78% (2009–10) to 155% (2020–21, which was heavily affected by Covid 19) (Office for National Statistics, 2022). Second, the reconciliation is complex, consisting of positive and negative adjustments, which reflect two factors: different measurement principles underlying IFRS-based government financial reporting and ESA10-based statistical accounting; and refinements made to the WGA in the early years after the 2009–10 implementation.

A few big adjustments dominate the reconciliation. For convenience this is illustrated in Table 2 with reference to the final column for 2020–21. Whereas PSND was £1,835 billion (86% of GDP), WGA net liabilities were £3,326 billion (155% of GDP). The biggest positive adjustment (i.e. enlarging the gap between WGA net liabilities and PSND) always comes from the net public sector pensions liability which was £2,306 billion in 2020–21, being recognized in the WGA but not in PSND, illustrating the point that PSND is not comprehensive. These relate to public employee pension schemes. The biggest negative adjustment (i.e. reducing the gap between WGA net liabilities and PSND) usually comes from tangible and intangible fixed assets being recognized in the WGA (£1,328 billion in 2020–21) but not in PSND.

Table 2. WGA Net Liabilities compared with Public Sector Net Debt, 2009-10 to 2020-21, £bn.

	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-	2020-
	10	11	12	13	14	15	16	17	18	19	20	21
Public Sector Net Debt, £bn	828	1,005	1,106	1,299	1,458	1,554	1,603	1,727	1,779	1,774	1,806	1,835
Add liabilities not recognized in												
national accounts												
Net public sector pensions liability	1,135	961	1,006	1,172	1,303	1,493	1,425	1,835	1,865	1,894	2,190	2,306
Provisions	102	108	113	131	155	175	306	322	422	311	375	366
Private Finance Initiative contracts	25	27	31	32	33	33	33	33	33	32	31	27
Adjust assets measured differently in												
national accounts												
Asset Purchase Facility Fund				-44	-46	-49	-50	-127	-200	-194	-181	-1,557
Unamortized premia on gilts	13	15	23	31	29	35	38	51	54	56	62	62
UK Asset Resolution net impact on net	-59	-94	-83	-83	-74	-50	-30	-24	-10	-2	-1	5
debt												
Add assets and liabilities excluded												
from measure of PSND												
Property, plant and equipment		-710	-745	-747	-812	-1,076	-1,120	-1,168	-1,208	-1,268	-1,313	-1,270
Investment property		-13	-13	-12	-14	-15	-16	-18	-20	-23	-24	-17
Intangible assets		-34	-35	-35	-32	-32	-33	-35	-36	-37	-40	-41
Tangible and intangible fixed assets	-769											
Trade and other receivables		-40	-35	-35	-37	-35	-37	-49	-42	-41	-45	-43
Prepayments and accrued income		-77	-81	-77	-80	-78	-87	-91	-103	-108	-88	-79
Inventories		-12	-11	-12	-12	-11	-10	-9	-10	-10	-11	-15
Investments	-11	-17	-17	-27	-23	-73	-50	-51	-52	-53	-33	-41
Trade and other payables		51	50	48	47	49	51	51	53	51	56	44
Accruals and deferred income		37	41	39	44	54	55	59	62	61	66	81
Deduct liabilities not yet recognised												
in WGA												
Network Rail				-34								
Housing associations					-56	-60	-67	-70	0	0	0	0
Other adjustments												
Other adjustments including	-27	-16		-15	-43	-39	-25	-15	-22	13	-16	1,663
eliminations												
Inadequate data to match												
classification structure												
Payables and receivables	-9											
Net taxation and duties due		-5	-3	-3								
WGA Net Liabilities, £bn	1,228	1,186	1,347	1,628	1,840	1,875	1,986	2,421	2,565	2,456	2,834	3,326
Memorandum items												
Public Sector Net Debt as % of GDP	53%	62%	66%	75%	80%	82%	82%	85%	84%	81%	80%	86%
WGA Net Liabilities as % of GDP	78%	73%	80%	94%	101%	99%	102%	119%	121%	112%	125%	155%

Two items in Table 2 have acquired unusual prominence in the 2020-21 WGA. The asset purchase facility fund connected to quantitative easing went from negative £181 billion in 2019-20 to negative £1,557 billion in 2020-21. This item is a consequence of the monetary and fiscal responses to Covid 19 and to different measurement bases. Whereas the WGA shows gilt purchases at fair value, the national accounts record gilt purchases at nominal value. The 2020-21 figure of positive £1,663 billion for 'Other adjustments including eliminations' is far larger than in any previous year. It includes the eliminations journals that the Treasury posts as part of the WGA production process. It is possible that this may have included elements of the negative £1,557 billion if there were intra-government transactions contributing to the overall figure, these being eliminated as per standard practice for WGA. For WGA 2020-21, more entities did not submit before the extended cut-off date. There were 155 non-submissions for 2020-21, much higher than before, thereby damaging WGA guality and the comparability of multi-year data.

The different purposes of these aggregates explain the exclusion of non-financial assets from PSND. These are not generally available to meet cash needs because of asset illiquidity and the risks of a fire sale. However, such assets are clearly relevant to the fiscal sustainability of service provision, about which the WGA is informative.

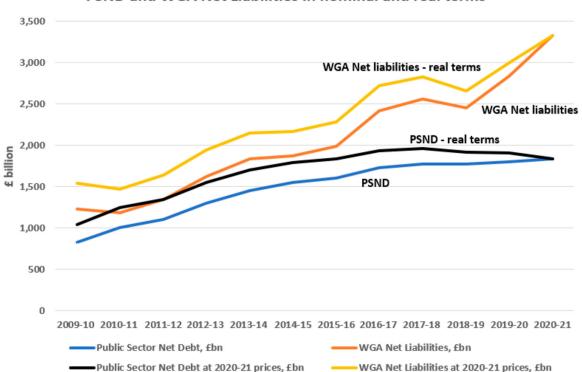
With some specialized exceptions, the national accounts do not include provisions, which always had the third largest absolute size in Table 2 until the exceptional circumstances of WGA 2020–21. One of the central benefits of the comprehensiveness of WGA is that it limits the opportunities for liabilities to be pushed outside the measurement boundary. Although the trajectories differ, the indexes (2009-10 = 100) for PSND (218) and WGA net liabilities (231) were not much different in 2019–20, though they diverged in 2020–21 (222 against 271). As a percentage of GDP in 2020–21, WGA net liabilities (155%) are significantly higher than PSND (86%).

Figure 1 plots PSND in nominal (blue) and in real terms (black), and also WGA net liabilities in nominal (orange) and real terms (yellow). This shows that WGA net liabilities are higher than PSND and that the gap between them has increased markedly from 2015-16. Figure 2 plots the ratios of PSND (blue) and WGA net liabilities (orange) as percentages of GDP.

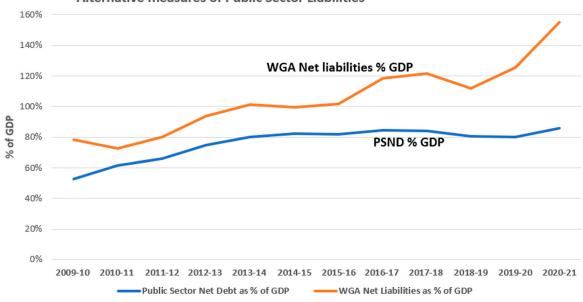
Evidence from reconciliation of income statements

The WGA income statement is informative in showing that the UK budgetary outcome for a financial year is always worse than shown by the public sector current budget deficit (PSCBD). The reason is that some items are excluded from the national accounts (for example provisions) and in the WGA a number of items are treated differently and usually more extensively in terms of coverage than in the national accounts. Table 3 shows the historical record from WGA 2009–10 to WGA 2020–21, tabulating the latest published data for each financial year.

Over that period, there have been some changes in the level of detail in the published reconciliation, resulting in additional lines in Table 3. In the 2015–16 WGA, the Treasury introduced the aggregate of 'WGA net expenditure on public services' as a total that would be less volatile than WGA net expenditure by excluding financing items.



PSND and WGA Net Liabilities in nominal and real terms



Alternative measures of Public Sector Liabilities

Source: https://www.gov.uk/government/collections/whole-of-government-accounts

Figure 2. Alternative measures of public sector liabilities.

Because each WGA provides reconciliations for three years (i.e. the reporting year and the two preceding years), Table 3 takes this modification back to financial year 2013–14. These financing items are presented as 'Financing costs of long-term liabilities, including discounting' and 'Revaluation of financial assets and liabilities'. Introducing the new subtotal is a presentational change that does not affect WGA net expenditure as a consistent series.

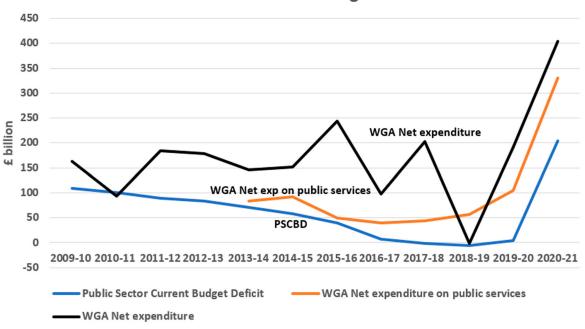
The graphic representation in Figure 3 covers the study period, though the orange line (WGA net expenditure on public services) can only be taken back to 2013–14. This

aggregate is much more stable than the black line for WGA net expenditure. The PSCBD line (blue) shows a steady reduction over the austerity years of the 2010s until 2019–20 when there is a pre-Covid 19 turning point upwards. WGA net expenditure on public services (orange) presents a more negative picture than PSCBD (blue) of the extent to which the current budget is balanced in a particular year. This is alarming as the 2010s were a decade in which UK public services struggled under the influence of austerity.

There is no argument for WGA net expenditure being zero in every year: there will be fluctuations over the economic

Table 3 Public Sector	r Current Budaet Defici	t compared to V	WGA Net Exner	nditure 2009-10	to 2020-21 fbn
	i current buuget benci	t compared to		iuiture, 2007 10	

	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-	2020-
	10	11	12	13	14	15	16	17	18	19	20	21
Public Sector Current Budget Deficit Add expenditure on liabilities excluded	109	101	89	84	71	58	39	7	-1	-6	4	204
from National Accounts												
Increase in provisions	-27	6	6	16	9	18	0	7	5	21	74	32
Adjust expenditure calculated												
differently from National Accounts												
Public sector pensions	51	-79	52	48								
Depreciation and amortization		7	4	-5	-10	-10	-8	-10	-10	-15	-19	-16
Impairments and revaluations of assets		53	35	21	21	15	9	15	25	13	16	27
Depreciation and impairment of assets	30											
Net (gains)/Losses on sale of assets		4	0	3	-4	-2	-6	2	4	4	2	1
Capital grants	16	18	15	12	11	8	7	9	9	10	9	42
Research and development					3	3	3	2	2	2	2	2
UK Asset Resolution net impact on current deficit	1	1	1	1								
Military expenditure capitalized in WGA	-5	-5	-6									
Other adjustments												
Other Adjustments including eliminations	-12	-12	-11	-1	-17	2	5	8	11	27	17	39
WGA Net expenditure on public					84	92	49	40	44	56	105	331
services												
Financing costs of long-term liabilities,					57	65	187	68	154	-57	67	56
including discounting					_	_			_	_		
Revaluation of financial assets and					5	-5	8	-10	5	-1	20	17
liabilities										-		
WGA Net expenditure	163	94	185	179	146	152	244	98	203	-2	192	404
Memorandum items	10 10/	F 00/	11.00/	10 20/	0.00/	0.00/	10 50/	4.00/	0.60/	0.10/	0.50/	10.00/
WGA Net expenditure as percentage of GDP	10.4%	5.8%	11.0%	10.3%	8.0%	8.0%	12.5%	4.8%	9.6%	-0.1%	8.5%	18.9%
PSCBD as percentage of GDP	7.0%	6.2%	5.3%	4.8%	3.9%	3.1%	2.0%	0.3%	0.0%	-0.3%	0.2%	9.5%



Alternative Measures of the Budget Deficit

Source: https://www.gov.uk/government/collections/whole-of-government-accounts

Figure 3. Alternative measures of the budget deficit.

cycle and when there are one-off shocks. Although the study period includes the recovery from the global financial crisis and the anticipatory effects of Brexit on 31 January 2020, it only includes the first year of Covid 19 (2020–21), while the cost-of-living crisis exacerbated by the Russian invasion of Ukraine will impact future WGAs. When the WGA is published 27 months after the year end, the issue of postbalance events acquires more significance than if reporting were done promptly.

Evidence from audit reports and qualifications

The first published WGA (2009–10) was substantially delayed in comparison with the Treasury's original schedule. It was then expected that there would be audit qualifications in the early years which would in time be purged. In 2020–21, the overall qualified audit opinion (a) in Table 4 remains.

The upper part of Table 4 codes the audit qualifications during the study period, with summary explanations provided in the lower part. Strikingly, of the seven causes of qualifications in 2009–10, only three had been removed by 2020–21: (d) intra-group transactions; (f) 3G and 4G licences; and (g) accounting for leases. The 2009–10 emphasis of matter paragraph on nuclear decommissioning costs (n) also remains in 2020–21.

Two of the remaining original qualifications relate to boundary issues: (b) the Comptroller and Auditor General (C&AG) wishes the test to be compliance with accounting standards whereas the Treasury insists on following national accounts, albeit with some deviations; and (c) a lack of consistent application. The Treasury refused to consolidate public sector banks, on the grounds that: first, the work involved would fail a cost-benefit test when the government had no intention of continuing ownership; second, this would invite excessive intervention by governments in these banks' commercial affairs; and third, the WGA would be less useful as the banking numbers would dominate core government activity in the years before disposal.

The other remaining qualifications relate to: (e) valuation of infrastructure because of the use of inconsistent accounting policies; and (h) accounting for inventories which resulted in a qualification for the first five years of WGA and reappeared in 2020-21 relating to a different government department (Department of Health & Social Care replacing the Ministry of Defence). Qualifications that have appeared since 2009-10, and which remain in the 2020-21 WGA, relate to: (k) academy schools, which first appeared in 2010–11, referring to the use of a reporting cycle based on the academic year; (m) the valuation of operational assets by the Department of the Environment, Food & Rural Affairs, a new qualification in 2020-21; (I) the absence of audit evidence to support the valuation of local authority assets; and (p) the omission of 155 bodies from the WGA in 2020-21. The last two causes of qualification are related to the local audit crisis in England (Bradley et al., 2023).

An audit qualification on technical grounds may be inconsequential to the Treasury given the late publication of WGA financial statements, their much lower public profile than statistical or departmental accounts, and the timing disadvantage of the PAC review of them which limits adjudication. In contrast, qualifications relating to the inclusion of significant unaudited data or the omission of public bodies altogether may have longer-term implications for the mediating and adjudicatory roles of the WGA.

Discussion

The analyses of the 12 WGAs that have so far been published focused attention on the balance sheet rather than the income statement and considered the relationship between

Table 4. NAO audit certificates on UK WGA, 2009-10 to 2020-21.

Financial year	09-10	10-11	21-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Qualified audit opinion ('Except for ' basis)	а	а	а	а	а	а	а	а	а	а	а	а
Causes of qualification												
Boundary issue 1	b	b	b	b	b	b	b	b	b	b	b	b
Boundary issue 2	с	с	с	с	с	с	с	с	с	с	с	с
Intra-group transactions	d	d	d	d	d	d	d	d	d	d		
Valuation of infrastructure	e	e	e	e	e	e	e	e	е	e	e	e
3G and 4G licences	f	f	f	f	f							
Accounting for leases	g	g	g	g	g	g	g	g	g	g	g	
Accounting for inventories	h1	h1	h1	h1	h1	5	5	5	5	5	5	h2
Pension liabilities		i	i									
Local authority schools		i	i	i	i							
Academy schools		k	k	k	k	k	k	k	k	k	k	k
Local authority assets											I	1
Operational assets valuation												m
Emphasis of matter												
Nuclear decommissioning	n	n	n	n	n	n	n	n	n	n	n	n
Hinkley Point C contract								0	0	0		

Notes:

(a) Except for [the causes of the qualification] the financial statements give a true and fair view of the state of the whole of government's affairs of the financial year and of its net expenditure for the year; and the financial statements have been properly prepared in accordance with the Government Resources and Accounts Act 2000.

(b) HM Treasury defines the accounting boundary based upon bodies classified by the ONS as being in the public sector. The C&AG takes a view that it would be more accurate to assess the accounting boundary with reference to accounting standards.

(c) The C&AG considers that the basis of consolidation has not been applied consistently as some bodies are not consolidated, even though they are classified by the ONS as being within the public sector. Examples include the publicly-owned banks and, for some years, Network Rail and further education institutions.
(d) The C&AG has, in most years, been unable to confirm the completeness of the elimination of intra-group transactions and balances.

(e) The C&AG reports on the inconsistent application of accounting policies relating to the valuation of infrastructure assets. In all years this applies to local government bodies and, in some years, to Network Rail and the Environment Agency.

(f) In some years the WGA includes income arising from the sale of new 3G/4G telecommunication licences. The C&AG believes that the income from these licences should be spread over the licence period.

(g) The Ministry of Defence has not undertaken sufficient work to account for leasing transactions under IAS 17.

(h) In some years, inadequate accounting records were maintained and/or inadequate audit evidence provided in relation to inventories of (1) the Ministry of Defence and (2) the Department of Health & Social Care.

(i) The Cabinet Office was unable to provide sufficient evidence to validate some pension benefits.

(j) Local authority-maintained school assets were omitted from the WGA.

(k) Academy Schools prepare their financial statements from 1 September to 31 August, corresponding to the academic year. Their accounts are consolidated in the subsequent WGA period ending 31 March. This does not comply with IFRS 10, leading to a continuing qualification.

(I) Local authority audits on property, plant and equipment and investment properties were not concluded or those bodies used non-audited accounts so that the C&AG was unable to obtain sufficient audit evidence.

(m) The Department for Environment, Food and Rural Affairs used an incorrect valuation method for operational assets.

(n) Refers to the considerable uncertainty over future estimated costs due to the very long timescale and the complexity of nuclear plants and materials.

(o) Refers to the considerable uncertainty in the valuation of the Hinkley Point C (nuclear power station under construction) Contract for Difference, which is not recognized but is treated as a contingent liability.

Source: https://www.gov.uk/government/collections/whole-of-government-accounts

WGA aggregates and national accounts aggregates. The research question is:

What has been achieved by the 1998 decision to prepare a WGA?

Economization as a framework for analysing the WGA

This can usefully be addressed by relating the roles of accounting (Miller & Power, 2013) to the modes of government accounting (Heald & Hodges, 2018). The central issue is how the four modes of government accounting can contribute to the process requirement of fiscal transparency (through which users can evaluate government financial positions) and the substantive requirement of fiscal sustainability (so that government activities can credibly continue into the future without hitting deficit or debt constraints).

Using a four-by-four matrix, Table 5 combines economization's roles of accounting (rows) with modes of government accounting (columns) to draw out the contribution of WGAs. Each of the four modes of government accounting has a legitimate and separate purpose and their interactions are important, though complex. Taken as a package, the four modes enhance fiscal transparency by making possible a clearer picture of government finances, including early identification of fiscally unsustainable policy mixes of spending and tax. The WGA's wider territorialization draws attention to assets and liabilities which do not appear in PSND, for example tangible assets and public employee pensions. There are tensions between government financial reporting, of which the WGA is the pinnacle, and statistical accounting which is much faster and internationally comparable. Reconciliations between the two (see Tables 2 and 3) are informative as they draw attention to different treatments of the same transactions, some of which are structural (stemming from different purposes) and some problematic (subjectivization having led to policies designed to circumvent statistical standards but which are captured by accounting standards).

The mediating role of the WGA has been constrained by delays and by the dominant position of statistical accounting on which UK spending plans are formulated. Cash-based fiscal sustainability projections draw attention to age-related state pensions which are outside the recognition criteria of both government financial reporting and statistical accounting, but struggle to find an audience to engage in mediation. Adjudication takes place in relation to all four modes of government accounting, with the actors and procedures documented in Table 5.

Table 5. The interaction of roles and modes of accounting.

	Government financial reporting	Statistical accounting	Budgeting	Fiscal sustainability projections
Territorialization	Accruals accounting emphasizes the reporting entity. With minor exceptions, WGA defines all government activity involving spending and tax as being within the entity, using the control concept of IFRS. WGA adds an aggregated layer to pre-existing territorialization.	Statistical accounting territorializes general government, creating vulnerability to arbitrage which puts assets and liabilities outside its scope. WGA has stimulated the ONS to pay more attention to the public sector balance sheet, with the potential to extend the territorialization of statistical accounting reports.	Budgeting is the mode of accounting for which governments have most scope to decide its territorialization. It is heavily influenced by constitutional provisions and inherited practice. A long tradition in UK budgetary policy has been to use national accounts aggregates.	Fiscal sustainability is judged over the long term; 45-year projections are constructed on the basis of current policies and mounted on the platform of five-year economic forecasts. Territorialization is extensive as it includes projections of future income and expenditures and focuses attention on intergenerational equity. WGA has provided better data for these projections but governments and opposition parties ignore the messages about fiscal unsustainability.
Mediation	The mediating role of the WGA is limited by the failure to establish a wide user audience beyond its primary user which is the UK parliament's PAC. The reasons include long delays in publication and technical complexity. Nevertheless, the WGA helps to provide a more secure data foundation for budgeting and fiscal sustainability projections.	Statistical accounting derives its salient mediating role from the combination of international comparability and the speed with which provisional data can be published. Currency and debt markets can react aggressively to the latest data. The mediating role of statistical accounting has been influenced by WGA, for example in relation to preparing improved data on public sector net worth.	The mediating role of the budget is more significant than WGA. UK government budgets are prepared in the context of monitoring by the OBR and the monetary policies of the Bank of England. The budget process is where decisions are taken about the size of the public sector, and the priority to be given to different spending areas. Politicians and the media care most about the current year or a small number of years ahead.	Model-based long-term fiscal projections are sensitive to what are assumed to be current policies, even though future fiscal constraints will compel policy change. The mediating role of these projections appears to be limited as they rarely enter public debate and remain the domain of a few specialists. However, they identify the impact of future demographic changes, including projected expenditure on state pensions, which are outside the scope of the other three modes of government accounting.
Adjudication	The UK follows IFRS as interpreted and modified for government by the Treasury, with the approval of the Financial Reporting Advisory Board. Compliance adjudication is the responsibility of the NAO with its reports considered by the PAC. The NAO qualifies WGA when the Treasury departs from IFRS consolidation standards. WGA adjudication in respect of performance is limited by the delay in WGA publication and the limited range of users.	The UK follows ESA10, which was a treaty obligation prior to Brexit. Eurostat now has no compliance adjudication role for the UK. Compliance and performance adjudication are promoted by international organizations such as the IMF (Article 4 consultations) and OECD (country reviews). Performance adjudication is strengthened by rapid and close attention from debt and currency markets, which may lead to a loss of confidence in a country's fiscal discipline.	Finance ministries have a lot of discretion on budget coverage, although there is monitoring by international organizations such as the IMF and the OECD. Domestically, compliance adjudication involves statutory responsibilities given to the OBR although these may be circumvented in the budget process by determined political actors. Performance adjudication is strengthened by considerable media interest and the Institute for Fiscal Studies is an influential commentator.	The OBR took over responsibility from the Treasury for the long- term fiscal projections which started in 1999. The WGA provides a more secure foundation for long-term fiscal projections. The OBR is an adjudicator of budget reports as well as the preparer of economic forecasts and fiscal sustainability projections. Repeatedly, the OBR shows that current policies would lead to spiralling public debt, but these receive little public attention. This suggests that there is little performance adjudication arising from these reports.
Subjectivization	Government action is constrained by following external standards. Under fiscal pressure, governments may seek to subvert their own rules, for example by recourse to borrowing and liabilities which are not reported. Public entities lower down the hierarchy will justify evasion of constraints by claiming they are irrational.	Subjectivization is strong because governments are constrained by their need to access debt markets and to protect their currency. Countries using an international currency, such as the Euro, will be subject to fiscal scrutiny by a higher-level authority. When deficits are believed to be too high, ultimate fiscal discipline comes from financial markets.	Budgeting involves subjectivization at all levels. Governments are constrained by macro-fiscal realities because of the importance of debt and currency markets. Public organizations are exposed to instabilities they would not face if they had full control over their own funding and financial decisions. There may be resistance to constraints imposed by higher authorities.	Subjectivization is limited because fiscal sustainability projections extend the usual shortish time horizon to 50 years or more, which is far beyond the time horizon of electoral politics. Resistance may come in the form of ignoring the warning signs, with the result that future adjustments become more severe. Some declared policies may not be credible in the longer term, and these may eventually result in policy change and resistance to such change.

Source: Authors' construction.

Subjectivization operates both downwards (imposing fiscal discipline on public entities while sometimes gaming central government's own rules) and upwards (entities subjected to such discipline seek to evade it). The implicit

assumption behind advocacy of fiscal transparency is that increasing it will lead to improved fiscal sustainability.

The Treasury deserves credit for persevering with the WGA, notwithstanding that it took seven years to publish

the first accruals-based departmental resource accounts (2001–02) and a further seven years to publish the first WGA (2009–10). Stewart and Connolly (2021) situate WGA in a series of NPM reforms which, once initiated, have an inertia that is unaffected by the non-achievement of the intended benefits of the previous reform. Using institutional theory, they interpret such behaviour as isomorphic.

The WGA territorializes by conceptualizing the whole of government as an entity. The compliance adjudication role has mainly been performed by the NAO, and some of the continuing qualifications stem from the NAO's insistence on financial reporting standards always being followed. In contrast, the Treasury in some circumstances wishes to follow statistical accounting (for example public sector banks are outside general government) and in others wants 'constitutional overrides' (for example not consolidating parliament or the NAO which are part of general government, on the grounds that the Treasury does not control them). The performance adjudication role of WGA is more limited, perhaps as a result of continuing delays in publication. However, the latest WGA claims that the underlying data set is used by several bodies including the Chartered Institute of Public Finance & Accountancy (Treasury, 2023, p. 103). As almost all UK government activities appear in the WGA, it may encourage more centralized public financial management, but it puts afterthe-event constraints on the Treasury gaming its own rules (for example on the use of off-balance sheet financing) by invoking external financial reporting standards to limit subjectivization.

Impact of the WGA on other modes of accounting

The WGA has exerted influence over the other three modes of government accounting, as set out in Table 5. Regulators of government financial reporting and of statistical accounting pay more attention to divergent treatments that are accidents of path dependence rather than reflections of different purposes and users (IPSASB, 2014). The ONS (2021) is exploring improved measures of the public sector balance sheet, with improvements being planned to the statistical accounting measures of public sector net worth. As UK budgeting aligns with statistical accounting, the balance sheet focus of the WGA feeds indirectly through to budgeting, thereby putting some constraints on gaming definitions for presentational reasons, as in relation to offbalance sheet finance such as PPPs (Hodges & Mellett, 2012) and government guarantees (Heald & Hodges, 2018). Fiscal sustainability projections benefit from the wide coverage of the WGA and the improved data it has generated. Preparing WGAs each year has revealed inconsistent information about intra-group balances, with the NAO's qualification for this (item 'd' in Table 4) only being removed in 2019–20, the 11th year of WGA publication.

The existence of the WGA alleviates some of what Heald (2012) labelled 'constructed obstacles' to fiscal transparency designed to impede mediation and adjudication. The main suspect is the Treasury seeking to relieve constraints imposed on itself by its own rules. Accepting one's own discipline is often uncomfortable when subjectivization rebounds. Such techniques may limit the mediating and adjudication roles of the WGA, for example by: denial of the legitimacy of claims for information, often on grounds of

'commercial confidentiality'; arbitraging accounting treatments and exploiting the porosity of accounting boundaries; and using opaqueness and technical complexity to neutralize criticisms. WGAs do not necessarily prevent such tactics but limit their lifespan because external stakeholders catch up, albeit after lags of varying lengths. The NAO's contribution to adjudication in relation to the WGA has been valuable.

The relevance of the WGA to fiscal sustainability

Issues relating to intergenerational equity are always difficult on an ethical, as well as technical, level:

- To what extent is it reasonable to pass net burdens (i.e. where there are no compensating assets) onto future generations, except in the context of major wars?
- Are pandemics and climate change a modern counterpart of war?
- To what extent will future generations value the assets they have inherited from earlier generations?

Moreover, model-based fiscal sustainability projections always have difficulty knowing on which current spending and tax policies to base projections: the UK's current vogue for fiscal drag on spending entitlements and taxation thresholds cannot plausibly go on for ever.

A cynic might expect a finance ministry to prefer the more pessimistic 'WGA net expenditure on public services' to PSCBD (see Figure 3), but the fact that this has not happened may reflect the comparative status of accounting and economics within the Treasury, as well as the much higher profile of speedily produced and internationally comparable statistical accounting. The Treasury's 1998 golden rule, which was contemporaneous with the decision to prepare the WGA (Treasury, 1998), was about balancing the current budget within the economic cycle. This would be more difficult if WGA net expenditure on public services were more adverse than PSCBD, as it has been in all years since data began for 2013-14.

Managing the public sector balance sheet

The most optimistic signs of strategic use of WGA information come from the Treasury's (2020) Balance Sheet Review and the WGA Accounting Officer's Performance Report attached to WGA 2019–20 (Little, 2022). The WGA is the most complete record of what the government spends, receives, owes and owns at a point in time and over a number of years. It is claimed that the WGA and underlying data are used for decision-making and risk management. The Treasury recognizes that a strong balance sheet can result in a lower cost of borrowing and can act as a buffer against risk. Accordingly, there has been a greater focus on analysing the WGA balance sheet.

The Balance Sheet Review (Treasury, 2020) sets out a public sector balance sheet framework that aims to manage the balance sheet efficiently in three areas:

- Transparency: increasing transparency over the long-term impacts of policies on the public sector balance sheet.
- Asset management: delivering better value for money from assets.

 Risk management: strengthening control of long-term risks and costs of liabilities.

The balance sheet framework divides assets and liabilities into three categories: policy, financial and commercial. For each category, there is consideration of composition, management objectives, governance and exit strategy.

The Balance Sheet Review has enabled the government to distinguish between core assets and liabilities (relevant to policies or the public interest) and non-core assets and liabilities, as shown in Figure 4 which reproduces a Treasury diagram (Treasury, 2020, p. 12). This provides adjudication through a framework for managing the balance sheet, with examples being given of how the elements in the balance sheet might be optimized. It has the potential to enhance both subjectivization and mediation by creating a framework for thinking of assets as relevant to government decision-making and for considering current and future public policy options.

Although the use of the WGA to stimulate better management of assets and liabilities, and the associated risks from these and from contingent liabilities, is commendable, some cautions are necessary. First, these are the assets and liabilities of more than 10,000 bodies (Treasury, 2023, p. 9), some with their own democratic accountabilities and some with constitutional protections of independence. Care is needed when making any comparison to the actions of a listed corporate in relation to subsidiaries which it owns and/ or controls. This concern is increased given that the UK is one of the most fiscally centralized democracies in the world and that this is problematic in terms of governance and economic performance. Second, what is core and what is non-core is not straightforward: a telling reminder is that compulsory outsourcing of hospital cleaning adversely affected the delivery of medical care due to problems of reduced cleanliness (Elkomy et al., 2019). What is seen as non-core from the vantage point of the Treasury might be seen as core by entity management. Third, there is tension

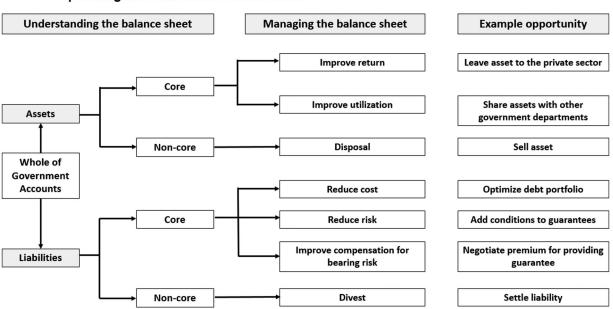
between devolving management responsibility to public organizations, a key component of NPM, and centralized directions (for example asset sales targets) that may not be in the best interests of those organizations. Fourth, one should not assume benevolent behaviour by UK governments which at times are looking around desperately for assets to sell to offset public borrowing and have truncated time horizons due to the election cycle. Classic examples are the ongoing consequences of the 1997 privatization of Railtrack (NAO, 2021) and the sale and leaseback of Ministry of Defence residential accommodation in the 1990s (NAO, 2018).

Aggressive management of the public sector balance sheet by the centre of government would be interpreted as subjectivization at lower levels. We might then expect selfinterested responses from these subjectivized departments and agencies, with potentially adverse consequences for accountability and performance.

Conclusion

Measures of public sector deficits and debt reside in a world of massive numbers that are difficult to take in, even for preparers and specialists, let alone the general public or the political and bureaucratic decision-makers to whom they are directed. The conclusion to be drawn from our analysis is that the WGA has been a qualified success, though its usefulness has been damaged by delays in publication and the reversal of the progress in speeding up publication that the Treasury had been making up to WGA 2017–18.

The WGA can be a valuable innovation in delivering greater comprehensiveness and improved fiscal transparency through a more inclusive mapping of the territorialization of government. The WGA is less vulnerable to creative accounting than statistical accounting because its perimeter is less porous and so constrains subjectivization. The WGA, particularly the reconciliations between PSND and WGA net liabilities,



Optimizing the Public Sector Balance Sheet

Source: Treasury (2020, p. 12)

Figure 4. Optimizing the public sector balance sheet.

constitutes an improved platform for fiscal sustainability projections. Significant items in the reconciliations, such as public sector pension provisions, attract only limited attention in the accounting literature, despite their importance in the determination of future fiscal policy.

WGA net liabilities will never replace PSND because of the inevitably inferior timeliness and the lack of international comparability. Nevertheless, greater timeliness could give WGA a broader audience and increase the benefits from mediation. While WGAs will always be an arena for intermediate users, more rapid publication would have enabled enhanced mediation between the UK government and the wider political community by providing additional perspectives on the multiple crises (for example Brexit, Covid 19, cost-of-living, higher borrowing costs and threats from climate change) now afflicting UK public finances. The Accounting Officer's 'Performance Report' (Smewing, 2023) is a useful narrative on what the 2020-21 WGA shows but limited in usefulness by delayed publication. An obstacle to its use is that the extended delay in publication of WGAs in recent years might have diminished the number and type of users.

The usefulness of the PAC's annual hearings with the Treasury would be enhanced if it previously took oral evidence from intermediate users, which would only add about two or three weeks to the present timetable and would support the PAC in performance of its adjudicating role. Those consulted might include academic researchers, professional institutes, think-tanks with broad cross-sectoral interests and capital market actors.

This article has drawn on economization's roles of accounting to show how the modes of government accounting contribute to the process objective of fiscal transparency and to the substantive objective of fiscal sustainability underlying the Treasury's (1998) decision to prepare a WGA. The WGA is the pinnacle of government financial reporting and is the level of aggregation which gains greater comparability with other modes. The four modes of government accounting can discipline each other by drawing attention to what each includes or omits, and they facilitate some external monitoring of each mode's vulnerability to manipulation. Considerable efforts have been made by IPSASB and Eurostat to remove differences between government financial reporting and statistical accounting that are not based on divergent measurement principles but are just historical legacies. The modes interact, but will remain separate as they have different rationales, measurements and audiences.

Continuing improvements to the WGA, such as addressing lack of timeliness, would enhance its usefulness and hopefully attract a wider audience. Though tempting for hard-pressed political decision-makers, trying 'to do good by stealth' (i.e. by manipulations) will damage fiscal transparency and is likely to damage fiscal sustainability. The WGA provides useful protection against inadequate information and damaging effects from subjectivization. Much will depend on how effectively intermediate users penetrate the policy domain.

There are a number of limitations in the scope of this article. The availability of multi-year data and the risks to the fiscal sustainability of UK public finances provide research opportunities to extend the analysis of WGA and to further develop the Miller and Power framework.

First, improvements in timeliness led to the second-fastest delivery on 31 May 2019 of WGA 2017–18, an audit lag of 14

months. Covid 19 then affected 2019–20 (26 months) and 2020–21 (27 months). Yet, what is striking about WGA 2020–21 is the deterioration in the quality of accounts, with 155 entities not consolidated and 120 consolidated using draft accounts. The Treasury does not know why so many entities did not submit their WGA 2020–21 returns before the deadline (Comptroller and Auditor General, 2023, para. 5 on p. 262) and it proceeded with publication accepting the deterioration of quality and a further audit qualification (h2 in Table 4). Further research could examine the causes of these delays and the effects on the quality of the WGA.

Second, does the continued delay in the publication of the WGA and the relative lack of its influence on the development of public policy reflect the greater prestige of economists over accountants in UK government? Research might explore the backgrounds and perspectives of those holding senior positions in the Treasury and those working in and around fiscal policy. It might also investigate whether the UK is unusual in this regard.

Third, there are research questions relating to the narrative reports accompanying WGA. These include what should be provided in the WGA, rather than being cross-referenced to constituent accounts. With such delays in publication, it is difficult to handle post-balance sheet events in the Performance Report. In WGA 2020–21 some of the Performance Report relates to 2021-22 rather than 2020–21. This will always be an issue but greater timeliness would improve the position.

Fourth, the Miller and Power framework has been used in this analysis as a lens to illustrate the potential benefits of WGA and to establish what can be learned from the experience of adopting WGA in the UK. An extension would be to consider these matters in the opposite direction, i.e. to use the WGA to confirm or extend our understanding of the potential of the Miller and Power framework. In particular, do high-level forms of consolidation promote or limit the potential of the mediating, adjudicating and subjectivizing roles of the framework? It might be that these roles are more effective when applied to narrower forms of consolidation than the full-government approach adopted in the UK.

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