

Usefulness of consolidated government accounts: A comparative study

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Abstract

This comparative empirical study on consolidated government accounting reforms in the United Kingdom, Australia, New Zealand, Canada and Sweden reveals contextual differences affecting their adoption and usefulness. It can help policy makers, public managers, and academics understand the gap between claims associated with the adoption of accounting technologies and their usefulness, as well as provide insights into dichotomies between their global proliferation and localized adaptations.

Key words: consolidated government accounts; accruals accounting; New Public Management; United Kingdom; Australia; New Zealand; Canada; Sweden

Introduction

Nearly three decades since the advent of New Public Management (NPM) in the 1990s, governments in many Western nations remain interested in accruals-based accounting and budgeting reforms (Robinson, 1998; Likierman, 2003; Paulsson, 2006; Lapsley *et al.*, 2009; Ezzamel, *et al.*, 2014). More recently, research interest has branched out to also examine reforms closely related to accruals, such as consolidated government accounts, that bring together the public sector in a single set of audited financial statements (Chow *et al.*, 2007; Grossi and Pepe, 2009; Newberry and Pont-Newby, 2009; Newberry, 2011; Bergmann, 2014; Chow *et al.*, 2015; Bergmann *et al.*, 2016). In particular, there continues to be strong academic and practitioner interest in understanding the usefulness of government accounting reforms (Ezzamel, *et al.*, 2014; Kober *et al.*, 2010; Lapsley *et al.*, 2009; Barton, 2009; Chow *et al.*, 2015). Given significant investments in time and cost in developing such systems, and their potential to transform the nature of governmental accountability, the need to evaluate the value of such reforms remains important and timely.

Governments worldwide have experimented with accruals-based consolidated government accounts since accounting-based reforms were popularized in New Zealand (NZ) and Australia in the late 1980s. Reformers in these countries heralded accruals-based consolidation as a technology that can deliver significant benefits to its users. In NZ, consolidated government accounts were sold as a key technology within wider NPM reforms, for which NZ was considered a leader (Pallot and Ball, 1996). It has been proclaimed that they would enable better financial and economic management, by showing “the real significance and breadth of the role of government” (Ball, 1981, p. 26), facilitating better fiscal discipline and longer-term economic planning.

Proponents of consolidation argue that its implementation represents a logical next step in expanding accruals accounting reforms in government. For instance, in the United Kingdom (UK), the Whole of Government Accounts (WGA-UK) programme is said to extend the usefulness of accruals-based accounts and budgets by consolidating the entire public sector, which would “provide new information for macroeconomic management and the development of fiscal policy” (Likierman, 2003, p. 49). But the pace and scale of reform differs significantly by country, despite a growing consensus around consolidated government accounts. Canada, despite early interest in developing a consolidated government accounts framework (Dye and Bowsher, 1987), did not explicitly label the federal government accounts as “consolidated government accounts” until 2012. It was a nominal change only after ten years of accruals-based government-wide financial reporting. Consolidation therefore appears to be taken for granted as a natural or self-evident development of accruals accounting reforms due to its strong normative appeal as being an economic reflection of the entity (Bergmann *et al.*, 2016). However, expanding the scale of reforms on the basis of normative logic alone is problematic. This is because it assumes that accounting-led changes can indefinitely be

extended in their scope and complexity (Lapsley *et al.*, 2009). Further, Rutherford (1992) and Young (2006) question whether normative conceptualizations of users and usefulness are reflective of real world difficulties in identifying actual users.

Claims for expanding accruals accounting reforms to include full consolidation are often based on arguments borrowed from the private sector and extended to the public sector. Its main stated aims have been to improve transparency, comparability, and accountability, as well as operational efficiency (Chow *et al.*, 2009). Ball and Pflugrath (2012) view it as necessary for understanding the economic reality facing governments, improving resource allocation decisions, and resolving sovereign debt crises. Likierman (2003) claims that the realized benefits include better asset and cash management and more accurate costing amongst others. Furthermore, for Robinson (1998), consolidation can be used to develop sustainable and inter-generationally fair fiscal policy.

The growing trend for consolidation practices in government has also piqued academic interest. Coming from a stakeholder theory perspective, Bergmann *et al.* (2016) argue that full consolidation is important for both internal (e.g., politicians and public managers), as well as external stakeholders (e.g., citizens, financial institutions and rating agencies), because it provides a fuller, whole of entity, perspective on the government's financial position and performance, due to otherwise significant exclusions of agencies contributing to government activity (Heald and Georgiou, 2000; 2009). Others (Ball, 2012; Ball and Pflugrath, 2012; Grossi and Pepe, 2009) view reforms based on private sector practices and international harmonization favourably, persuaded mainly by perceived economic benefits. But there are also voices calling for more evidence that such reforms work. Chow *et al.* (2007) argue that the grand claims of transparency, accountability, and comparability need to be evidenced. Others have also reported practical and conceptual challenges in, and exaggerated benefits of, importing private sector techniques into the public sector (Wall and Connolly, 2016; Barton, 2009), as well as technical challenges related to measurement and boundary issues (Heald and Georgiou, 2011). From a financial analysis perspective, Newberry (2011) reports on the lack of transparency from the macro-aggregation of consolidated figures, obscuring the effects of privatization.

The persistent appeal of historic *ex-post* accounting systems, as opposed to forward-looking *ex-ante* decision tools remains puzzling, as reformers continue to advocate for these technologies despite their lack of actual use by public sector decision makers (Jones *et al.*, 2013). Evidence to date indicates that they are not actually used as intended, and that promised benefits have not materialized in ways intended (e.g., Chow *et al.*, 2015). However, current research on comparative country studies continues to be limited by a lack of both scale and analytical depth (Jones *et al.*, 2013). In particular, there is a dearth of comparative empirical consolidation studies in countries with advanced reforms, apart from a practitioner-oriented report by Chow *et al.* (2015) that focuses on the local issues within the individual countries studied. Given the significant sharing of ideas amongst such countries, there is an urgent need for an international comparative perspective on differences between national interpretations of usefulness of consolidated government accounts. This study contributes by analysing the application and usefulness of consolidated government accounts in five Organization for Economic Cooperation and Development (OECD) countries.

Literature review

The extant literature on accruals accounting reforms reveals different and seemingly contradictory definitions of usefulness and difficulties in identifying primary users. Rutherford (1992) argues that users of government financial statements are either defined normatively (a priori reasoning) or positively (through empirical methods identifying actors and how they use the statements). He notes that conceptual frameworks tend to take a normative approach when defining external users as taxpayers, voters, service recipients and investors in government securities. However, the interests of

these 'users' are often not properly served by general purpose financial statements due to their heterogeneous needs, reinforced by empirical (positive) studies that struggle to identify individuals external to the organization "who could be held to use financial statements for *any* purpose" (Rutherford, 1992, p. 269, emphasis original). The UK government's own analysis on the usefulness of consolidated government accounts in other countries, published in a scoping study (HM Treasury, 1998) prior to the introduction of UK Whole of Government Accounts (WGA) in 2010, also (unexpectedly) came to a similar conclusion. The scoping study reported vague assertions over the usefulness of consolidated government accounts for policy-making. NZ claims that it is useful (but unable to say how), in Canada discussion of benefits focus on a greater awareness of government operating costs, while for Australia and Sweden, such information is not used for policy decisions (HM Treasury, 1998). The broad conclusion drawn from the scoping study is an awareness of the heterogeneity of international approaches to the usefulness of consolidated government accounts and (lingering) ambiguity over how they are used in government policies.

As the ability to compare within an entity and across entities is what makes accounting reports useful to decision makers, significant differences in national accounting standards can undermine the usefulness of consolidated government accounts. Alignment, adoption or harmonization of standards is therefore a central preoccupation of reformers. A key debate in this regard centres on the choice of standards to implement, whether the reforming public sector chooses to develop its own standards that are in close alignment with the private sector, or jointly (or unilaterally) adopts 'sector-neutrality', with a common set of standards covering both private and public entities (Ellwood and Newberry, 2016). To improve usefulness, Walker (2009) argues for the need to re-evaluate the typical control test used to define consolidation boundaries and to improve the alignment, especially between Generally Accepted Accounting Practice/Principles (GAAP) consolidated government accounts and statistical systems.

Using extant accounting systems has significant advantages. As International Financial Reporting Standards (IFRS) already exists for the private sector, they appeal to some governments from a legitimacy standpoint (Walker, 2009), despite reservations over the appropriateness of the public sector adopting private sector concepts (Barton, 2009; Rutherford, 1992). For example, Australia decided to move towards sector neutrality (IFRS) for the public sector in 2005, as their parliamentarians struggled to interpret dual bottom line reports (Barton, 2009). These financial statements originally reported on both a GAAP and Global Finance Statistics (GFS) basis, but the contradictory out-turns were deemed too confusing for parliamentarians and other non-expert users. In contrast, the NZ public sector moved to the International Public Sector Accounting Standards (IPSAS), after auditors criticized the government for modifications made to IFRS for public entities (Cordery and Simpkins, 2016). In Canada, national public sector standards have always been different from private sector standards (except for recent adoption of IFRS for government business entities), while Sweden significantly deviates from IPSAS principles.

The current literature on users and usefulness of accounting (Kober *et al.*, 2010; Ezzamel *et al.*, 2014; Hyndman, 2016) mainly focus on how accruals and accounting vs performance information (van Helden, 2016) are used, but do not evaluate information generated from consolidated accounts *per se* (Newberry, 2011 and HM Treasury, 1998, are exceptions). Kober *et al.* (2010) reported that, for most purposes, GAAP-based accruals information was perceived to be more useful than statistical information in Australia, particularly by those with private sector experience. Internal users were more likely to rate GAAP as more useful, whereas external users were indifferent. With two-thirds of Kober *et al.*'s respondents having an accounting background, applicability of their results to other structural, political, and cultural contexts remains largely unknown. Studies on consolidated government accounts (e.g., Bergmann *et al.*, 2016; Grossi and Pepe, 2009; Heald and Georgiou, 2011) mainly explicate the potential (normative) benefits for adoption, but some have also revealed inconsistencies

in defining control criteria and other accounting measures (e.g., Walker, 2009). Related research is further complicated by claims that users are difficult to reliably identify and define, leading standard setters to construct users (Young, 2006). Chow *et al.* (2015) attempted to address the issue of misaligned normative versus empirical expectations of usefulness in a comparative international study that examines how consolidated government accounts are used. They reported on the difficulties that key stakeholders such as parliamentarians and/or credit ratings agencies face in the UK, Australia, and NZ when trying to use consolidated government accounts for policy making. Their analyses of Canada and Sweden also reveal limited usefulness of consolidated government accounts, as other accounting systems are used for policy decisions.

Recent studies continue to support Rutherford's (1992) distinction between normative and positive definitions of users/usefulness. These studies reveal a recurring contradiction between (rhetorical) claims of improved accountability, with questions over the usefulness of accruals accounting information and continued reliance on budgetary and statistical systems (Connolly and Hyndman, 2006; Ezzamel *et al.*, 2014; Jones *et al.*, 2013; Wall and Connolly, 2016; van Helden, 2016; Heald and Hodges, 2015; Brusca *et al.*, 2013). For example, the implementation of IFRS in devolved UK governments (Wall and Connolly, 2016) and IPSAS in Spain (Brusca *et al.*, 2013) has had minimal effect on the actual use of information from GAAP-based systems by politicians. Similarly, van Helden (2016) and Kobayashi *et al.* (2016) found that politicians' professed appreciation of accruals accounting information does not necessarily mean that they actually use them, as they still generally prefer cash-based budgetary systems in policy making. Ezzamel *et al.* (2014) note the irony that an accounting reform aimed at enhancing accountability is disconnected from, and not used by, parliamentarians.

Therefore, the sustained momentum for accruals accounting reforms in government, which includes consolidation, can reflect a desire for symbolic legitimacy by key players (Arnaboldi and Lapsley, 2009; Lapsley, 2009; Pollanen and Loiselle-Lapointe, 2012). Legitimizing behaviours have been observed in various jurisdictions and for different NPM-inspired accounting reforms. Key actors create the necessary conditions for sustaining reform momentum through legitimizing strategies (Hyndman and Liguori, 2016). Accounting reforms can also be legitimized through wide-scale prior acceptance of NPM values as norms and through their localized modifications needed to achieve buy-in (Lapsley, 2009; Hyndman and Lapsley, 2016; Hyndman and Liguori, 2016). The focus on outputs embedded in such reforms often results in dysfunctional outcomes and processes, such as a compliance mentality at the expense of intended *bona fide* service improvement (Lapsley, 2009). The main issues discussed in this review are explored in this study and discussed in the findings section.

Method

The UK, Australia, NZ, Canada, and Sweden were selected because they are considered to be global leaders in accounting-led NPM reforms. For example, Bergmann *et al.* (2016) classifies them as countries that have the most extensive reforms, implementing not just accruals but also consolidated government accounting reforms (see Bergmann *et al.*, 2016). Wall and Connolly (2016) classify them as countries with the highest intensity of NPM reforms and also most experienced in adopting accruals accounting reforms. Grossi and Pepe (2009) compared these five countries' approaches to consolidated government accounts, but their study was not empirical and conducted before the completion of WGA-UK reforms. Accounting developments in the other four countries selected in this study were also important reference points for the UK. For example, before deciding on whether to proceed with WGA-UK, the UK government conducted an extensive comparative analysis of experiences with consolidation from countries such as Australia, NZ, Canada, and Sweden (HM Treasury, 1998).

Semi-structured interviews were conducted with public officials, parliamentarians, and individuals with standard setting and other relevant experience by a local researcher residing in each country. In a few cases, the lead author also travelled to other countries to conduct joint interviews. The targeted interviewees were purposively sampled, based on their expertise and experience in key functions. The interviewees represented treasury, finance, fiscal policy, accounting, comptrollership, audit, statistics, and parliamentary functions, and in some countries, external parties, such as credit rating agencies (Table 1). Citizens' interests were assumed to be represented by parliamentary representation and supreme audit institutions. Due to difficulties in recruiting some types of participants (e.g., parliamentarians in some countries), there may be some unavoidable selection bias. Position titles, responsibilities, and institutional structures, which vary significantly between countries, were also examined, but they cannot be disclosed in order to guard anonymity of the interviewees that is required by the mandatory pre-approved research ethics protocols of most study countries. Some interviewees have requested additional privacy measures, stressing that even revealing the organization they work for would compromise their anonymity, given the highly specialized nature of their work.

[Insert Table 1 about here]

Interviews were conducted between September 2014 and March 2015. The interviews were recorded and transcribed, except in a few cases, where consent to record was not granted and notes were taken instead. Two Swedish interviews were conducted in Swedish and translated into English. The interviewees were offered an opportunity to review transcribed interview notes for accuracy. In describing the findings, they are identified only by their local country abbreviation. Interview data were supplemented by analysis of public documents and academic and professional literature, and some observations, where practicable. Thus, the research method was guided by van Helden's (2016) proposition that semi-structured interviews, combined with observations, are preferred methods, as questionnaire surveys can oversimplify complex behaviours and overestimate actual use of accounting information. Caperchione and Lapsley (2011) agree that qualitative methods are more appropriate for comparative research in governmental accounting, as quantitative approaches can be inadequate for capturing cultural nuances in accounting practices.

Findings

A number of overlapping themes emerged from the comparative analysis on usefulness, which are discussed in turn: challenges for global comparability due to national differences in defining consolidation boundaries; difficulties in identifying actual users and defining usefulness; and the competition that consolidation reforms face from extant systems of accounting.

Variations in defining consolidation boundaries

Global comparability requires uniformity in defining national consolidation boundaries, but long-standing historical definitions of government boundaries pose a significant challenge to the usefulness of consolidated government accounts. Government boundaries have traditionally been determined by jurisdictional definitions of stewardship as established by constitutional law, such as central, provincial, regional, and local government boundaries. In contrast, consolidated government accounts rely on economic control to define boundaries. The rhetorical advantages in using control is clear, as it can discourage financial innovations (such as off-balance sheet financing) created solely for the purpose of obscuring the economic substance of transactions (Heald and Georgiou, 2011).

The UK has the most extensive, single-tier consolidation model that incorporates not only the central government, but also local governments and all non-departmental public bodies, i.e., all bodies funded through public resources. In NZ, consolidation at the central government level is similar to the

UK, but local authority reports remain unconsolidated (except to the extent of the entity's control within local municipality boundaries). Australia and Canada's consolidation boundaries do not include consolidation at the national level, but they are disaggregated into multiple consolidation entities at the state/provincial and local government levels in a three-tier model, reflecting their devolved jurisdictional remit. Sweden also consolidates separately across two tiers at the central government and local government levels. In each country, however, some bodies/agencies have been exempted from consolidation, which further limits global comparability.

In the UK, the WGA-UK programme focuses on integrating the various accounts of central and local governments and public corporations and was intended to be useful for both macroeconomic policy making and accountability reporting (Chow *et al.*, 2007). It aimed to address political concerns, such as the need to improve asset maintenance, account for unfunded pension liabilities, and integrate accounting functions with fiscal management. On the other hand, in Australia, historical jurisdictional boundaries and institutional forces, rather than user needs, steered the development of whole of government reports (WGR-AU). Following the *Financial Reporting Act* (1993), NZ initially applied a sector neutral approach from 1993 to 2013 (before it switched to IPSAS), with the sector neutral consolidation standard in 2001 leading to the implementation of consolidated central government financial reports (WGA-NZ).

In Canada, the Public Sector Accounting Board (PSAB) can only recommend accounting standards for the sovereign federal and provincial governments with distinct jurisdictional responsibilities, but municipalities are required by provincial laws to follow PSAB standards. The federal government financial statements were first prepared using full accruals accounting for 2001-2002, but they were only labelled as "consolidated" a decade later. The departments are not required to, and many still do not voluntarily, use full accruals accounting for departmental statements. The PSAB revised the control criteria for government reporting entities in 2005, but all municipalities and Ontario universities were exempted from provincial consolidations. In Sweden, the requirement to submit consolidated central government annual reports has been stipulated by law since 1996. The Swedish consolidation model follows the central and local government boundaries defined in the constitution. Each accounting entity is required to submit monthly financial information to the Swedish National Financial Management Authority (ESV) database.

[Insert Table 2 about here]

The sheer variety of approaches in all five countries share a common element, with significant adaptations of the consolidation boundary to fit localized interpretations of usefulness, blending jurisdictional and control definitions. More generally, boundary definitions and consolidation methods (e.g., full consolidation or equity method) vary by jurisdiction (Bergmann *et al.*, 2016). Table 2, building on Chow *et al.*'s (2015) comparison of boundary definitions, summarizes key related legislation and jurisdictionally defined consolidation boundaries (and exceptions) and the main uses (claimed and actual) found in this study. The next theme on identification of users extends the findings of Chow *et al.* (2015) by comparing the challenges faced by each country in making localized adaptations of consolidated government accounts useful.

Identifying users and usefulness

Variations in the way in which consolidation boundaries are drawn has not hindered reformers across all five countries from similarly defining users of consolidated government accounts. Key stakeholders are said to include government officials, parliamentarians, community, media, analysts, and credit rating agencies. However, as Young (2006) and Rutherford (1992) found, actual users can sometimes be quite difficult to identify and engage with. For example, **AU1** felt that there is a lack of clarity over who the actual users of WGR-AU are. This is further exacerbated by **AU1**'s perception of the general

public's indifference to government financial reporting initiatives, with a lack of visibility over who the constituent users are. **AU1** explained: "I don't feel ... that the public are particularly engaged with any of it". Similarly, **UK1** observed that reviews by the UK Financial Reporting Advisory Board (FRAB) struggle to identify actual users within the government who had made decisions based on WGA-UK reports. In Canada, interviewees were avoiding admitting to being major users of consolidated government accounts by downplaying their own role while talking up that of others, making it difficult for a consensus to emerge.

A similar discrepancy arises when considering the claims made for the usefulness of consolidated government accounts, with similar broadly defined claims of improved economic decision making and enhanced accountability. The reality, however, suggests that countries vary in the emphasis placed on such claims. For example, macroeconomic or fiscal policy decision making was a central focus behind NZ's accounting reforms. The UK government had also made similar strong claims that WGA-UK can aid policy making, for example, with respect to long-term unfunded debt such as pensions (Chow *et al.*, 2007), as well as, improve accountability. There is some support for this, with reformers such as **UK2** claiming that WGA-UK has highlighted previously hidden and unaccounted for assets that had fallen between departmental boundaries, issues also raised by Heald and Georgiou (2000; 2011). Moreover, WGA-UK has benefited by serving as a catalyst for the harmonization of accounting policy across the UK government and provided useful measures for asset management (**UK2**).

NZ's accounting reforms have, however, been facilitated by its relatively small size and unique political and cultural climate, with close links between government, practitioners and academia all located in Wellington. **NZ4** saw NZ as a well-governed country that is proud of its reform achievements, a country small and flexible enough to accomplish them, and one driven by a strong political will for reform (**NZ1**). **NZ6** agreed with that synopsis, stating: "If I want to know what was going on, I could ring up the person running the area [and] talk to the deputy". Despite some lingering ambiguity in NZ over benefits and criticisms of consolidation entity definitions (Newberry and Pont-Newby, 2009), **NZ2** was optimistic about the potential usefulness of WGA-NZ for fiscal policy and also planning decisions. **NZ4** contended, however, that another decade of reporting is required to be able to conclude whether or not the reforms implemented have actually improved the quality of reporting in this sector.

Compared with the UK and NZ, Canadian interviewees were more sceptical on the value of consolidated government accounts for uses other than accountability reporting to the Parliament. **CA1** believes that consolidated government accounts are produced primarily for the Auditor General's use, in order to assess the government's efficacy in managing its operations, assets, and finances. The *Federal Accountability Act (2006)* is seen to have significantly improved ministerial accountability by bestowing formal financial management responsibilities on deputy ministers. Such legislation does not exist at the provincial level, and **CA6** and **CA4** described fierce political battles over standard-setting authority and lobbying for exemptions from PSAB consolidation standards for provincial consolidations. Nonetheless, **CA6** remarked that an informal cultural shift has also gradually occurred at other levels of government and resulted in improving the financial literacy of senior public officials at all levels. Like in Canada, GAAP-based consolidation in Australia was perceived mostly as a compliance tool, as **AU2** and **AU4** suggested that the media are more interested in budgets and hence politicians prefer to use them instead. This finding is contrary to the usefulness of GAAP-based accruals found by Kober *et al.* (2013) in a study with accounting-oriented interviewees.

In Sweden, interviewees commented that the move to consolidated government accounts was not an original, intended aim of the government. It is instead viewed as a windfall outcome from existing accruals accounting reforms, as there was no prior demand for consolidation (**SE1**, **SE2**). Consolidation was seen as a taken-for-granted extension or by-product of accruals accounting implementation at the central government, for which accruals government-wide annual reports have been required by

law since 1996 (Paulsson, 2006). **SE2** explained: “We have a history of accruals and that made it easy for us to transfer the rest. We had a package of rules for the accruals already set down”. According to **SE4**, a key indirect benefit of consolidated central government accounts in Sweden is that they have resulted in a framework for improved governance and internal control. Swedish interviewees considered the UK consolidation model as potentially providing a better perspective on debt. However, it is seen as less relevant (for Sweden) due to differences between jurisdictional and control-based definitions of government boundaries, as the former is prioritized.

Politicians face significant hurdles in trying to use consolidated government accounts. Some Members of Parliament (**UK3, AU5**) commented that those without expertise or interest in accounting reforms struggled to engage. For instance, **UK2** remarked that parliamentarians have difficulty in understanding the “subtle differences between National Accounts, public sector net deficit, and WGA-UK net liability”, echoing earlier Australian debates (Barton, 2009) on confusion caused by dual bottom lines. **AU2** called for simplifications in the presentation of, and **AU5** noted the lack of training and incentives for new MPs to use, WGR-AU. **CA1** believes that parliamentarians need analysts to simplify and interpret multiple un-reconciled financial reports to improve their ability to understand and use consolidated reports. Interestingly, **CA1** (cynically) notes that more transparent reporting can invite unwanted probing, reducing political incentives to champion improved usefulness. **CA6** argues that parliamentarians need accruals-based financial reports to be linked to performance data to be useful for decision making. Swedish interviewees (**SE1, SE2**) fear that consolidation along the lines of the UK model could reduce the timeliness of financial reports, due to the scale and complexity of the boundaries.

These findings add to the growing evidence (Ezzamel *et al.*, 2014) that parliamentarians face significant challenges in using GAAP-based accounting reports, but it does not deny their usefulness for some internal users in the UK and NZ who are able to articulate observed benefits. Making them more accessible to elected politicians still largely remains to be seen, with competing systems representing a threat to the wider acceptance of consolidated government accounts, as discussed next.

Competing systems

A significant hurdle faced by GAAP-based reforms, as already evident in Australia, is the implicit (but often strong) competition with extant systems based on national statistics (e.g., GFS for Australia; European System of Accounts 2010, or ESA10 for UK). Despite claims that consolidated government accounts are appropriate for measuring the stock of government debt, interviewees (**UK5, AU3**) explain that they are generally less relevant for credit-rating evaluations, which continue to focus on cash flow forecasts as a proxy of entities’ ability to repay debt. These agencies instead source their data from national statistics, which were seen as facilitating comparability due to their widespread use globally. The UK government also uses National Accounts for policy and decision-making purposes, given that this is the system used by the International Monetary Fund (IMF) and the OECD, as testified by Sir Nicholas Macpherson, a senior civil servant, to the Public Accounts Committee (2013, Q3) on the second WGA-UK report. Caruana (2016), in citing Heald and Georgiou (2011), notes that the UK government’s consolidation boundary is intentionally aligned with that of National Accounts for this reason.

In contrast, NZ interviewees agree that WGA-NZ is sufficiently reliable and trustworthy. However, local authority financial reporting remains unconsolidated. Regarding its use by the government itself and by credit rating agencies, interviewees recognize that consolidated government accounts have led to some positive changes in behaviours and accounting practices. They perceive clear benefits of their use for macroeconomic policy making as well as for planning and maintenance of public sector assets. WGA-NZ was designed as an accounting information system to enable NZ Treasury to advise the

government on fiscal policy, provide a basis for forecasts, and on asset management (**NZ2**). Of the five countries studied, NZ interviewees were the most positive with respect to the usefulness of consolidated government accounts. Australia, on the other hand, had to embark on developing a new standard in an effort to reconcile statistical (GFS) and GAAP systems, by merging the dual bottom line approach into a single reporting framework (AASB 1049) in 2009 (Kober *et al.*, 2013). **AU2** claims that the new framework enables statistical and GAAP consolidation out-turns to be aligned more closely.

As in the UK, national statistics are primarily used for macroeconomic fiscal policy decisions in Canada (**CA1**). All interviewees agree that the primary objective of consolidated public accounts of Canada is to enhance parliament's ability to hold government to account, in accordance with the *Financial Administration Act* (1985), motivated by legitimacy concerns (Pollanen and Loiselle-Lapointe, 2012). Legitimacy was a central concern of **CA5**, who believes that Canadian PSAB standards are more useful than global standards, stating: "[IPSAS] are not as comprehensive or as high quality as PSAB ... they [IPSAS board] are still trying to build legitimacy ... that is much harder to do internationally than it is to do domestically ... PSAB has been able to accomplish more simply because of its domestic focus". Of the five countries, the Canadian system is the most diverse with little, if any, efforts to reconcile their inputs or outputs.

While Swedish public sector accounting standards generally align with IFRS/IPSAS, consolidated government accounts boundaries are jurisdictionally defined, rather than reflective of IPSAS' control principles (Bergmann *et al.*, 2016). These standards are simpler than those in the UK and thus facilitate the implementation of consolidation (**SE3**). Swedish public sector accounting and audit functions are statutorily separated from the private sector, with public sector accountants and auditors precluded from ever holding private sector posts or professional memberships (**SE1**, **SE2**). Of the five countries, Swedish interviewees were the only ones to suggest that extensive consultations with academics positively shaped the development of consolidated government accounts, resulting in less conflicting understanding from statistical and GAAP out-turns.

Discussion

This study provides new insights on the users and usefulness of consolidated government accounts, building on Chow *et al.*'s (2015) findings. GAAP-based consolidated government accounts appear to have limited user appeal for some interviewees, but they nevertheless remain attractive for many reformers and auditors. The countries selected in this study have significant experience in their own national reforms and are also seen as global pioneers. Consolidated government accounts are appealing perhaps because they enable countries do to many things at once. Perceived internal decision-making inefficiencies, the lack of accountability, and the need to actively participate in shaping international ideas on public sector accounting are all reasons for reform. They are also seen as a logical 'next step' in some jurisdictions.

The implementation of consolidated government accounts is subject to jurisdictional and political pressures, which necessitate localized interpretations (Hyndman and Lapsley, 2016; Hyndman and Liguori, 2016). Despite adopting universal principles, these adjustments dilute the intended benefits of their global comparability, which results in further calls for reform to safeguard their usefulness. For instance, control-based consolidation criteria vary in different countries (Grossi and Pepe, 2009; Heald and Georgiou, 2011; Caruana, 2016; Bergmann *et al.*, 2016), and using control to define what is included in consolidated government accounts can be problematic, as governments are limited by the need to respect jurisdictional boundaries. Highly centralized countries, such as NZ and the UK, can more easily rationalize the need to consolidate nationwide. However, geographically dispersed countries with federal structures, such as Australia and Canada, are more limited in their scope to do likewise, because of their decentralized and autonomous jurisdictions.

In Australia, problems from the use of dual bottom line reporting appear to have affected use of GAAP consolidation for decision making; GAAP is seen primarily as a tool for financial reporting. In Canada, decentralized governmental and professional structures have led to heavy politicization of accounting reforms and challenges to institutional powers and influence. Consequently, there has not been the cross-jurisdictional consensus and cooperation needed to enable consolidation at the national level, or across provincial and municipal levels, despite some early interest (Dye and Bowsher, 1987). Given the ambiguity over their usefulness, extensive resources spent and sparse political support for many of the countries analysed, the main use of consolidated accounts is limited to accountability reporting for legislative compliance purposes, and/or functioning as a catalyst to spur improvements elsewhere in the public sector.

Furthermore, this study reveals that users in some countries appear to be rhetorically constructed and difficult to pinpoint. The supportive political environment for consolidated government accounts in NZ is *sui generis*, nurtured by close links between government, academia and professional practice. This is not replicated in the UK and Australia, which have an established tradition of using macroeconomic data, seemingly appreciated by users such as politicians and credit ratings agencies. Sweden, on the other hand, is a *de facto* user of consolidation, benefiting from close links between academia and government (but not the accounting profession).

Moreover, GAAP-based consolidated government accounts as a policy tool face substantial competition from other systems, such as government statistics and budgets. Extant systems have the benefit of significant historical usage on their side and have evolved to also incorporate some accruals and consolidated information. For instance, the UK's Office for National Statistics started using some data from WGA-UK. The wide support for statistical systems stems from their universal comparability and acceptance for classifying government functions; whereas, cash-based budgetary systems have been the main accountability and policy decision tool used in countries before the adoption of accrual accounting. Therefore, actual uses are shaped by pre-existing private sector practices and the institutional contexts of different countries. Questions over the effectiveness of historical *ex-post* accounting systems for their intended *ex-ante* decision-making purposes raised by Jones *et al.* (2013) remain unanswered.

Conclusions

The manner in which consolidation boundaries are defined reflect conflicting forces at play, where attempts to make it more useful for economic comparisons clash with jurisdictional definitions of government boundaries. GAAP-based systems of consolidation that attempt to deal with this contradiction are less appealing than extant systems that focus on economic outcomes. Despite continuing ambiguity over the usefulness of consolidation for economic policy decision making, there are some wins where consolidation has revealed the limitations of existing approaches to reporting. The usefulness of consolidated government accounts can be improved if politicians are better incentivized and supported in using them, but this is predicated on the assumption that they can be made to give up their established preferred systems. The practical implication of this study is that it demonstrates an undiminished universal appeal of NPM-led government accounting reforms, despite long-standing observations that such reforms often struggle to identify actual users, and to adequately articulate their usefulness.

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Impact

Policy-makers and public officials need to be mindful of importing private sector accounting reforms, such as consolidation, to the public sector, or even from one public jurisdiction to another. Due to legal, regulatory, institutional, and cultural differences, they often require significant adaptation to fit the local context. Thus, their users and usefulness can vary, in spite of common rhetoric, impeding cross-jurisdictional comparability.

Table 1. Stakeholders interviewed

Stakeholders	Main topic of focus in interview or formal role of interviewee (broadly defined for anonymity)
United Kingdom	
UK1	Government statistics function
UK2	Treasury function
UK3	Elected member of parliament
UK4a	Audit function
UK4b	Audit function
UK5	Credit ratings
Australia	
AU1	State Treasury function
AU2	State Treasury function
AU3	Credit ratings
AU4	Budget function
AU5	Elected member of parliament
New Zealand	
NZ1	Government accounting function
NZ2	Treasury function
NZ3	Audit function
NZ4	Big four accounting firm involvement with public sector standard setting
NZ5	Credit ratings
NZ6	Government statistics function
Canada	
CA1	Government economic analysis
CA2	Treasury accounting
CA3	Comptrollership, involved in standard setting
CA4	Provincial legislative audit
CA5	Departmental audit, involved in standard setting
CA6	Senior departmental administration
Sweden	
SE1	Public sector accounting standard setter
SE2	State auditor
SE3	State auditor
SE4	Government finance function (Regeringskansliet)
SE5	Government finance function

Table 2. Consolidation boundaries and uses of consolidated financial statements

Country	Government expenditures and debt*	Related legislation	Level of consolidation	Exclusions from consolidation	Findings: Major uses (claimed and actual)
United Kingdom	<ul style="list-style-type: none"> • EPC \$17,910 • EGDP 43% • CETE 75% • DGDP 113% 	<ul style="list-style-type: none"> • <i>Exchequer and Audit Departments Act (1866)</i>—establishes framework for Comptroller and Auditor Generals to hold the government accountable • <i>Government Resources and Accounts Act (2000)</i>—required creating a new body to provide advice and monitor implementation of WGA-UK • <i>Budget Responsibility and National Audit Act (2011)</i>—provides the charter for Office of Budget Responsibility and structure for National Audit Office 	Single-tier, national consolidation entity: <ul style="list-style-type: none"> • central government • all local governments • public corporations 	<ul style="list-style-type: none"> • Parliament • National Audit Office • Nationalized banks • Royal Household 	<ul style="list-style-type: none"> • Macroeconomic policy decisions • Asset management • Accountability reporting • Financial planning
Australia	<ul style="list-style-type: none"> • EPC \$17,483 • EGDP 37% • CETE 62% • DGDP 44% 	<ul style="list-style-type: none"> • <i>Charter of Budget Honesty Act (1998)</i>—requires that Final Budget Outcome Report presents budget and fiscal outcomes for the fiscal year based on external reporting standards • <i>Public Governance, Performance and Accountability Act (2013)</i>—requires consolidated financial statements in accordance with Australian Accounting Standard AASB 1049, Whole-of-Government and General Government Sector Financial Reporting. 	Three-tier consolidation, multiple entities: <ul style="list-style-type: none"> • Commonwealth (federal) government • 6 states and 2 territorial governments • all local government municipalities 	<ul style="list-style-type: none"> • No consolidation for the whole of Australia as a single entity • All governments within and between tiers have their own separate consolidations 	<ul style="list-style-type: none"> • Compliance reporting • Accountability reporting (transparency) • Reconciliation of GAAP-reports with Global Finance Statistics

New Zealand	<ul style="list-style-type: none"> • EPC \$14,891 • EGDP 40% • CETE 89% • DGDP 36% 	<ul style="list-style-type: none"> • <i>Public Finance Act (1989)</i>—requires consolidated Crown reports • <i>Financial Reporting Act (1993)</i>—adopted sector-neutral financial reporting standards for the public and private sectors (applied from 1993 to 2013) • <i>Fiscal Responsibility Act (1994)</i>—requires the government to publish regular statements of forward estimates of its short-term and long-term fiscal strategy 	Two-tier consolidation, multiple entities: <ul style="list-style-type: none"> • central government (including Crown entities and state-owned enterprises) • local authorities; but only to the extent of control within local municipality boundaries. 	<ul style="list-style-type: none"> • No consolidation for the whole of New Zealand as a single entity • Central government consolidation does not include local government entities 	<ul style="list-style-type: none"> • Macroeconomic policy decisions • Asset management • Financial planning and forecasting • Credit ratings (along with statistical data)
Canada	<ul style="list-style-type: none"> • EPC \$18,167 • EGDP 41% • CETE 25% • DGDP 98% 	<ul style="list-style-type: none"> • <i>Constitution Act (1867)</i>—sets federal and provincial responsibilities • <i>Financial Administration Act (1985)</i>—requires annual Public Accounts of Canada to be tabled in Parliament (plus each province has its own Act) • <i>Federal Accountability Act (2006)</i>—bestows financial management responsibility and accountability on federal deputy ministers 	Three-tier consolidation, multiple entities: <ul style="list-style-type: none"> • federal government • 10 provincial and 3 territorial governments • all municipalities 	<ul style="list-style-type: none"> • No consolidation for the whole of Canada as a single entity • All governments within and between tiers have their own separate consolidations • Government business enterprises excluded at all three levels 	<ul style="list-style-type: none"> • Accountability reporting to Parliament • Meeting legislative and PSAB requirements

Sweden	<ul style="list-style-type: none"> • EPC \$24,003 • EGDP 50% • CETE 38% • DGDP 53% 	<ul style="list-style-type: none"> • <i>Budget Act (2011)</i>—sets requirements for budget policy, investments, financing, auditing, and accountability reporting by the central government • <i>Swedish Local Government Act (1992)</i>—regulates municipal boundaries and determines organization and powers of municipalities and county councils 	<p>Two-tier consolidation, multiple entities:</p> <ul style="list-style-type: none"> • central government • all local governments 	<ul style="list-style-type: none"> • No consolidation for the whole of Sweden as a single entity • Central government consolidation separately from individual local governments consolidations • Government-owned enterprises and pension funds excluded 	<ul style="list-style-type: none"> • Compliance reporting • Supplement to budget for fiscal policy decisions • Framework for governance and internal control
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*Source: OECD (2017, pp. 63, 75, 81). EPC = 2015 total government expenditures per capita (in US\$); EGDP = 2015 total government expenditures as percentage of Gross Domestic Product (GDP); CETE = 2015 central government expenditures as percentage of total government expenditures; DGDP = 2015 total government gross debt as percentage of GDP.