A Comparison of Budgeting and Accounting Reforms in the National Governments of France, Germany, the UK and the US

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Abstract: This paper compares technical aspects of accrual-based budgeting and accounting reforms of the national governments of France, Germany, the UK and the US. It shows that there is no consensus among the four countries about the complete package of technical reform possibilities that is most appropriate; there is also no consensus among the four countries about each one of the possibilities that is most appropriate. What is clear is the resilience of traditional budgetary accounting systems. It is also clear that, in the fundamental context and content of the reforms, the UK is the striking exception.

Keywords: budgetary accounting, accrual basis, national governments, France, Germany, UK, US

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INTRODUCTION

We have witnessed about twenty-five years of accrual-based accounting reforms in national governments, in some cases preceded by accrual-based accounting reforms in lower-level governments. As influential as these reforms have been, and even as some clear drivers of reform have been identified, the reforms did not have a comprehensive blueprint. Given the complexities of the panoply of possible reforms, it is not surprising that researchers have identified clear divergence in the implementation of reform. It is natural to want to understand, at the very least and as far as possible, the current experience of the reformers. The seriousness of the current global financial crisis and its relevance for government finance added significant impetus to the need for this understanding. Moreover, national governments that are now considering reform, or are in the process of reform, have particular interest in the current experience of reformers; this provided another specific motivation for the research on which this paper reports.

Our research questions are:

- What are the key technical aspects of accrual-based budgeting and accounting reforms in each national government of four major, developed economies that had either implemented reforms during the past twenty-five years or were in the latter stages of reform?
- How does a comparative analysis of the four add to our understanding of those reforms in national governments as a whole: how different are the reforms?

A central premise of this research is that, for national governments in particular, budgeting technique is indispensable to our understanding of accounting. National governments are unique institutions: their uniqueness is in their sovereignty over – with the attendant responsibilities for – each respective country as a whole.¹ In definitive contexts, this uniqueness is in the relations between their legislatures, executives and judiciaries. Money is at the heart of all institutions and, in national governments, the budget is the fundamental expression of money: the budget expresses a national government's sovereignty in financial terms. The accounting literature has rarely addressed this unique setting directly.²

Budgeting for national governments has not been a matter of accounting,³ as defined either by the accounting profession or by standard-setting bodies independent of the profession. Within each national government setting, the budget has its own rules and conventions, and its own consequent accounting against the budget. Since the 1980s, the accounting profession and its off-shoot standard-setting bodies have exerted significant influence on theory and practice globally but the emphasis of this influence has been on *ex post* accounting; moreover, because budgeting is largely absent from the dominant forms of financial reporting addressed by these bodies, this emphasis focuses on operating

statements, balance sheet and cash flow statements, separated from budgeting. In the first case of a comprehensive reform of accrual budgeting and accounting in a national government – New Zealand – accrual budgeting was presented, in effect, as a residual of an accrual accounting reform.⁴ In most, if not all, national governments this could be said to be, given the centrality of budgets in government finance, the tail wagging the dog.

The next section identifies what prior research already knew after having compared accrual-based reforms in national governments, and then we explain our research method. Subsequently, the technical aspects of actual and proposed reforms are presented for each country in alphabetical order. We then make a comparison of those technical aspects across the four governments. The final section offers a discussion with conclusions.

PRIOR RESEARCH

The two fundamental conclusions that the comparative international literature on accrual-based reforms in national governments had already reached in relation to our research, albeit mostly in relation to the position ten or more years ago, were: first, that from whatever perspective and using whichever methodology, there was divergence of theory and practice in relation to the reforms; and second, that there was a tendency for accrual accounting to be grafted on without changing existing budgetary accounting systems.

Caperchione (2000) was an early survey of the literature on accrual-based reform, which drew on studies from all levels of governments and from reforms then underway. That literature was essentially made up of country studies, often individual ones, carried out independently of each other. The survey identified many of the technical budgeting and accounting problems involved in the confrontation of accrual-based information with traditional cash-based budgetary systems. It saw the divergence of theory and practice, within countries and between them, and raised issues concerned with harmonisation, including within the EU; it also emphasised the importance of integrating the technical accounting reforms into the wider issues of governance.

Significant individual studies of reforms in comparative-international perspective emerged subsequently. A relatively small part focuses directly on the national government context and on technical details. When it does both of those things, it does not often include both budgeting and accounting.

Lüder and Jones (2003) did provide nine European country studies that included national government budgeting and accounting, as well as a comparative overview of the nine; France, Germany and the UK were included. The research method for the country studies was to provide researchers in each country with the same set of headings, which thereby provided the same sections within each country-study chapter. Within these sections, each country study discusses current and proposed budgeting and accounting technique, introduced by discussion of governmental structure, legal framework and the roles of standard-setting bodies and the accounting profession.

The comparative-international chapter in Lüder and Jones (2003) was significantly influenced by, and also presented Lüder's final version of, the Financial Management Reform Process Model (formerly known as the Contingency Model). In this, it eschewed detailed discussion of budgeting and accounting technique. Instead, in comparing the nine countries, the overview was primarily interested in analysing and explaining the context of reforms of broadly defined traditional cash-based budgetary accounting systems to broadly defined accrualbased systems. This kind of comparative understanding was particularly justified given its ambition (to compare nine countries at all levels of government) but also because, across all nine countries, many of the reforms were proposed rather than implemented, and the implemented ones were hardly complete.

Lüder and Jones (2003) is the closest study to the present paper and it clearly identified diversity of theory and practice (p. 5). However, the reforms for France could only then be discussed as proposals; the country study for Germany could not include the subsequent proposals; and, while the country study for the UK substantially reflects the current situation, there have been developments since 2003. Within only a small group of national government reforms in process among the nine, the study did identify systems in which accrual reforms took place alongside traditional budgeting systems (Lüder and Jones, 2003, p. 35).

Blöndal (2003) reports budgeting and accounting bases for many national governments (being an OECD study) and thereby identified diversity. It also noted the trend towards maintaining traditional budgeting systems even while accrual accounting reforms were introduced:

(t)here is much greater acceptance of accruals for financial reporting than for budgeting purposes. This does not appear to be a temporary snapshot as countries migrate to accrual budgeting but rather a firm view among a number of member countries" (Blöndal, 2003, p. 44).

Paulsson (2006, p. 61) makes the same point.

Pina and Torres (2003) and Torres (2004) are very rare examples of comparative international studies across many countries (17 and 22, respectively), which use regression analysis; these do provide data, drawn from published budgets and accounts, as well as laws and regulations, but in placing the emphasis on the comparative theorising, necessarily eschew detailed country studies. This methodology was rare when they used it; it has not been replicated for national governments. As is to be expected given the use of regression analysis, which depends on variability, their studies identify diversity; the nature of crosssectional studies is that trends over time are not addressed, and so the trend of maintaining traditional budgeting is not identified.

Montesinos (2005) offers a detailed description and analysis of the accrualbased accounting reform in the institutions of the EU, in which the traditional cash-based budgetary system was retained; Grossi and Soverchia (2011) is an updated study of the same case. Ouda (2001) is an example of a comparative international study of national governments, actually two, which does include discussion of technique but not of budgeting. The use of a developed country's government and a developing country's was predicated on divergence.

The central premise of this research that, for national governments in particular, budgeting technique is indispensable to our understanding of accounting suggests that the existing literature might need to be used with care because some otherwise notable papers did, particularly in the early years of accrual reforms, tend to focus on accounting to the virtual exclusion of budgeting. This tendency was understandable in some studies of lower-level governments in contexts where the budget might not have the formal role that it plays in national governments: Brorström (1998) and Ellwood (2001) are good examples that have to be used carefully when applying them to situations in which the budget does have a formal role. But early notable papers that did address national governments have similarly to be used with care because the role of the budget was not emphasised: Guthrie (1998) and Monsen (2008) are good examples.

RESEARCH METHOD

We chose the national governments of France, Germany, the United Kingdom and the United States from the major, developed economies that had either implemented reforms during the past twenty-five years or were in the latter stages of reform.⁵ The use of four case studies, involving researchers from the respective countries, is an expansion of one of the commonest forms of comparative international research, namely pair-wise country studies (Jorge et al., 2011, p. xxii). Two are federal systems (Germany and the US); in Germany, the budgeting and accounting for the national government is aligned with the states, while in the US the states' accounting systems, if not their budgeting, are aligned with those of local government. The other two (France and the UK) are unitary systems.

In terms of budgeting and accounting, the UK and the US are countries in which the accounting profession and the standard-setting bodies independent of the profession developed first and, while their influence on national government accounting has been different in the two countries, that influence has long been felt; the influence can be associated with the terms 'Anglo-Saxon' or 'Anglo-American' accounting. In contrast, their influence in France and Germany, two model continental European systems of budgeting and accounting, is much more recent, in confronting systems which have traditionally largely been determined within each government, using the law and legal regulations. The contexts of all four countries are sufficiently similar to make them comparable (Western, developed, pluralist, market economies) but their national governments' budgeting and accounting techniques are sufficiently different to make them interesting. For each country study, the key technical aspects of accrual-based budgeting and accounting reforms in each national government were gathered from primary sources, mainly official government publications in the relevant native language and, in some cases, in the host government's official English translations, plus secondary sources. For France and Germany, these sources were supplemented by unstructured interviews in 2010 with Ministry of Finance officials (for the UK, one unstructured interview was held but the results were not material). For the US, our study drew on a longstanding, and then concurrent, project (see Jones, 2012).

This research was led by the same set of questions for each of the four countries; the context of the questions was only national governments, not lower levels of government. The questions also explicitly excluded matters relating to government finance statistics, either of the System of National Accounts (European Commission et al., 2008) or of Government Finance Statistics (IMF, 2001). Three other papers from this research project were published while the present paper was written: Jones and Lüder (2011) provided more of the technical details of the current and abortive budgeting and accounting systems in Germany, primarily with a view to influencing policy-making; Portal et al. (2012) did the same for France and Germany, and primarily for the same reason. Jones (2012) learnt from the technical details of the US system but primarily offered a historical study of accrual-based accounting ideas in context, using the UK's context as a natural comparator; the discussion of the UK and the US in the next section is in this form for the first time.

BUDGETING AND ACCOUNTING TECHNIQUE IN THE FOUR COUNTRIES

The purpose of this section is to present summaries of the technical aspects of actual (and in the case of Germany, proposed) reforms for each country in alphabetical order. In the subsequent section, these technical aspects will then be classified in the following categories: budgets and control; accrual-based reporting and ICT systems; accrual-based accounting policies; accrual-based policy-making; and cost accounting and performance measurement.

France

The system of cash-based and commitment-based budgeting and accounting against the annual budget is longstanding, and has been retained. However, since 1998, there have been fundamental reforms, embodied in a fundamental law of 2001. These reforms are almost complete. Lande (2000) and Lande and Scheid (2003) now require substantial modification. Portal et al. (2012) provides more details of the reforms.

The form of the annual budget has changed from being based on the organisational structure of departments, with highly detailed line items, to a structure of missions, programmes and actions, expressed at the lowest level in measurable outputs. The continuous cash-based and commitment-based accounting against this new form of budget has been retained.

Two accounting systems have been added. First, there is now a continuous accrual-based accounting, with monthly reporting, from which an annual set of accrual-based financial statements for the government as a whole is produced. Second, there is an annual accrual-based accounting (deriving from the continuous accrual-based system) against the missions, programmes and actions in the budget, called annual performance reports, which are produced first as targeted performance and then as actual performance.

In structuring the budget according to missions, programmes and actions, expressed at the lowest level in measurable outputs (more than 1,200 in the 2008 Budget), of the 33 missions, 70% and their respective programmes are within one department and 30% cut across departments (though they can be traced to the relevant departments). Detailed line items are not identified but salaries line items continue to be separately identified. There is no separate capital budget: within the budget, money can move freely between operating and capital purposes. The main limits on transferring from one budget heading to another are on transfers from a non-salaries budget into a salaries budget.

The budget authorises two separate kinds of 'spending' against each budget heading. First, it authorises the commitment of the budget, defined by the issuance of an official order to a supplier, or by a contract with a supplier, or in other ways, as the case may be. Since this commitment accounting is applied to all headings in the budget, some of these commitments, for example for salaries, are notional. Second, it authorises the subsequent cash payment. In any given budget, the authorisations can be for commitments and cash payments in specific future years.

For each budget heading, there are, therefore, two financial amounts, both of which are maximums. The continuous accounting system against the budget records these two parts of each transaction. Where there are invoices, these are also recorded but the receipt of goods or services is not recorded.

There is one account in the central bank for all cash flows into and out of the government. There are many IT systems (more than 300) in the government and each one is used by all government departments. Examples include: budget preparation and nomenclature; expenditure generally; payroll and pensions; tax revenues; non-tax revenues; housing stock; debt management. A new ICT system is being developed (not for the first time: there were two previous attempts) to be used comprehensively across the government for all budgeting and accounting, which will allow the completion of the reform project. The project is known as CHORUS and is being implemented by SAP, which was awarded the project in 2008.

For the annual accrual-based financial statements, the chart of accounts (in the narrow sense of the detailed accounts of revenues, expenses, assets, liabilities and cash flows) is the same as the one for businesses, except that accounts that are not relevant to government activities are not used. The accrual accounting policies are established by a body within the Ministry of Finance (which does have members from outside the government, for example, academics). The accrual accounting policies for businesses are also set by a body within the Ministry but a different one from that for government.

In addition to the specific accounting standards (currently 15), there is a conceptual framework that sets out the scope of the accounting, its objectives and its limits. It includes accounting principles in the law for government (regularity, sincerity and fairness) and others from business accounting (materiality, going concern and consistency, and derived from the International Accounting Standards Board [IASB], understandability, appropriateness and reliability) (Ministère du Budget des Comptes Publics et de la Fonction Publique, 2009); it is also being influenced by the International Public Sector Accounting Standards Board's (IPSASB's) nascent developments of the IASB's framework.

The general-purpose financial statements for the government as a whole (which does not include local government) include the balance sheet, income statement and cash flow statement (showing comparatives for the two preceding years). The balance sheet includes all assets and liabilities, as well as the difference between them (net assets). All of the government's tangible assets are recognised (including roads). The opening balance sheet (which was for 1 January, 2006) required a major inventory and valuation of assets (at depreciated replacement cost).

There are detailed reconciliations, in theory and practice, between the budgetary accounting and the financial accounting (and when appropriate between national accounting).

There is an accrual-based accounting (deriving from the continuous accrualbased system) against the missions, programmes and actions in the budget. This accounting is referred to in English as cost accounting. Annual performance reports to Parliament are produced, firstly, as targets (PAP) and then, after the financial year is ended, as actual performance (RAP). The performance reports detail the different programmes which are part of the same mission. The indicators follow the same structure as that of the budget.

Germany

The system of cash-based and commitment-based budgeting and accounting is longstanding (and, for example, Budäus et al., 2003, is still relevant, with a few changes). Since 2006, the Federal Ministry of Finance had a project to change the system (known as the MHR, in English in full it is given as 'Modernisation of the Budgeting and Accounting System') but the reform was abandoned in 2010 (see Jones and Lüder, 2011, which also provides more details), although aspects of it may be resurrected.

The MHR was produced by the federal Ministry of Finance; discussions with the Federal Court of Audit, as well as with the International Monetary Fund, confirmed that the MHR was 'the right overall approach and...suited to bring about the modernisation that is needed' (Federal Ministry of Finance, 2009, p. 1). The approach explicitly rejected a full accrual basis of budgeting and accounting.

The concept of the MHR retained the existing system's focus on the budget for the whole of the federal government, and on accounting against that budget. There were three sets of changes to the existing system. The first set related to those parts of the budget that would be binding. The second set related to those parts of the budget that might not be binding. The third set related to additional accounting information provided at the federal level and in the departments.

The first set of changes was that, at the upper tier, the budget would remain structured according to the departments (which reflect the organisational structure). The chapters, however, would be replaced with one or more 'products', with a maximum of 1,000 products for the whole of the federal government (the current equivalent is approximately 4,000 line items). The budgets for every product would be binding. For each product there would be non-financial output measures. Within each product there would be highly aggregated line items; these line items would be binding but transfers between some or all of them might be permitted. And accounting against the binding budgets, and within them the line items, would be cash-based.

The second set of changes was that, alongside the cash-based accounting of the binding budgets, there would be a non-binding accrual-based accounting, reconciling the cash payments to expenses (or receipts to revenues, as the case might be). These two sets of changes would relate to the 98% of the existing budget book and budget-actual book.

The third set of changes related to the other 2% of the budget book and the budget-actual book and to the systems within each government department. The existing selected details of financial assets and liabilities in the 2% of the budget book and the budget-actual book would be expanded to provide two comprehensive lists, one of (non-financial and financial) assets and one of liabilities, of the federal government. The difference between the aggregates of these two, namely net assets, would not be shown. [There would be no operating statement, and no management report, for the federal government as a whole.] The data for these assets and liabilities would not be held by the Federal Ministry of Finance but would be derived from accrual-based accounting systems in each department. The accrual-based accounting systems in each department would be comprehensive systems but with the cash flow data being provided by the existing federal IT system of cash accounting against the budget; there would therefore be a technical IT link between the federal IT cash system and each department's accrual-based system.

These accrual-based accounting systems in each department would provide two sets of accrual-based data: first, the data for the assets and liabilities in the two budget books (thereby expanding the existing 2%); second, the data for the expenses and revenues in those books (relating to the existing 98%). They would all use one chart of accounts (different from the structure of products and line items in the budget) that would be based on the chart of accounts for business accounting. This accrual-based accounting uses historic cost (not fair values).

The accrual-based accounting in each department is usually referred to in English translation as cost accounting. It would be part of an Enterprise Resource Planning (ERP) ICT package in each department but each one would be based on one ERP package developed by/for the Federal Ministry of Finance.

Either as part of an ERP system or not, some departments have used such accrual-based systems since 1998, under a guideline for standardised cost accounting. However, use was partial, with some expenses, revenues, assets and liabilities not being recorded. In addition, there were no accrual-based accounting standards and no standard-setting body.

The accrual-based accounting in the MHR would be standardised across the federal government. It would include a mandatory 'basic form' that is comprehensively used by all departments, and an 'extended form' that would allow each department to increase the detail and complexity of the accounting (for example, in a departmental unit that prices goods or services for sale) as each saw fit.

In 2009, a law was passed that requires a body to be set up by the federal and state governments to ensure a standardised approach and a uniform data base for the federal government and all of the state governments applying performance budgeting and/or accrual accounting systems (Article 1, No. 22, Haushaltsgrundsaetzemodernisierungsgesetz; this also includes legal provisions for future budgeting and accounting practice but these provisions must subsequently be included in federal law to have effect). This body, which has no members who are external to the federal government or state governments, was specifically charged with producing the first set of standards for the accrual-based and performance-based systems. The standards for the accrual-based system were published by 30 November, 2010 (Standards für die staatliche doppelte Buchführung) and revisions and additions are continually being made.

The abandonment of the reform in 2010 was followed by a proposal (of July 2011) to resurrect some parts of it, while leaving the traditional budget structure unchanged. This envisages further standardisation of accrual-based accounting information and that the balance sheet for the federal government as a whole (which will not include the Länder or local governments) will report 'net assets'. The proposal is also that accrual-based information will be produced to support future budgetary decisions – but this will not be shown in the budget.

UK

The current accrual-based budgeting and accounting system was introduced in 1999–2000 (Jones, 2003, is still largely relevant). One part of the system, relating to the Whole of Government Accounts, was only published in 2011 (for the year ended 31 March, 2010). Effective for 2009–10, the accrual aspects of the system

were changed to refer to International Financial Reporting Standards (instead of the Financial Reporting Standards of the UK's Accounting Standards Board). Though the law requires reference to business accounting, it does not require compliance.

Budgeting and accounting are not separate but there are separate elements to each. All budgeting and accounting requirements of the system are set by the Treasury, in three linked publications. *Managing Public Money* (HM Treasury, 2007) sets out the fundamentals of money in central government, including the role of the Treasury. An important fundamental relating to budgeting and accounting is that all commitments by government to spend money in future, for which there is no budget, should be approved by the Treasury in advance of making the commitment. The Treasury also states that it is 'best practice' for specific legal authority to be obtained (*Managing Public Money*, para. 5.4)

The publication that deals mainly with budgeting is called 'Consolidated budgeting guidance from 2009–10 (IFRS updated)' (HM Treasury, 2009). The one that deals mainly with financial accounting is called the Government Financial Reporting Manual (FReM) (HM Treasury, 2010–11).

On the relation between the accounting in the financial statements and budgeting, FReM states:

Accounting policies are generally common to both accounting and budgeting. In selecting relevant accounting policies, entities should have regard to budgetary and control requirements, but should give paramount importance to the need for financial statements to give a true and fair view (FReM, 2010–11, para. 1.3.1).

Preparers of financial statements need to consult with the relevant authority... before changing significant accounting policies and estimation techniques where it appears that there could be a potential impact on budgets and on the National Accounts (FReM, 2010–11, para. 1.3.2).

The structure of the budgets is, first, by government department and then, within each department, by programme (though these can be the same as by function, e.g., salaries). This is not called a chart of accounts and, being primarily by programme, is not uniform across departments. The annual financial statements provide (in the notes) reconciliations to budgets, at a high level of aggregation; these reconciliations are also shown in the budgets. The Treasury has a database (known as COINS) which gathers budgeting and accounting data from across the government departments (HM Treasury, 2010c).

There are different kinds of audited financial statements for central government. For central government as a whole, the Consolidated Fund, National Loans Fund and Contingency Fund: these are bank accounts at the central bank but a set of financial statements is produced for each of them. For each government department (or other reporting entity), there is an accrualbased set of consolidated financial statements. For each other kind of reporting entity, there is a set of accrual-based financial statements; some major pension schemes are examples. And then, for central and local government as a whole (as well as many other public bodies – over 1,500 [HM Treasury, 2012, p.7]), there now is the accrual-based Whole of Government Accounts that consolidate the financial statements for each government department or other reporting entity, including each local government.

Focusing on the audited financial statements for each government department, each government department uses self-contained double-entry bookkeeping, and each has its own bank accounts, in some cases with the central bank, in other cases with commercial banks. Each can adopt its own chart of accounts subject to the overall requirements of the Treasury.

The Government Financial Reporting Manual (FReM) is the 'technical accounting guide to the preparation of financial statements' (FReM, 2010–11, para 1.1.1) for each government department's consolidated financial statements; it also refers to Whole of Government Accounts. FReM is updated for each fiscal year (though it is possible to update it within a fiscal year). It is produced by the Treasury. The Treasury takes advice from the Financial Reporting Advisory Board (FRAB) on accounting standards for government (from 2010–11 including for local government). Some of the Board's members are from the private sector.

The accounting policies in FReM are taken from accounting in the private sector (termed Generally Accepted Accounting Practice [GAAP]) 'to the extent that it is meaningful and appropriate in the public sector context' (FReM, 2010–11, para. 2.1.1). This GAAP has four main sources: the law for companies; the law and accounting recommendations (made by a government agency) for non-profit entities (known specifically as charities); and 'EU adopted IFRS'. GAAP can also include 'the body of accumulated knowledge built up over time and promulgated in (for example) textbooks, technical journals and research papers' (FReM, 2010–11, para. 2.1.1).

This reference to GAAP most obviously excludes reference to IPSAS. This was interesting because FRAB had a hierarchy of GAAP that FReM was expected to use, which had 'EU adopted IFRS' at the top and IPSAS second (FRAB, 2010, para. 3.7); clearly the 2010–11 FReM did not refer to IPSAS. Moreover, FRAB subsequently removed the hierarchy, leaving only direct reference to 'EU adopted IFRS' (FRAB, 2012, para. 2.10).

FReM does not require the same form and content for all sets of financial statements. These can vary according to the relevant authority (for example, in Scotland). The Treasury is the relevant authority for the central government departments and the form and content of these financial statements are uniform.

FReM (2010–11, para. 2.3.4) expects the accounting policies within each set of consolidated departmental financial statements to be uniform but allows that there might be some differences (for example, in the selection of useful economic lives of depreciable assets). However, FReM (2010–11, para. 2.3.5) states that there will be 'sufficient convergence of accounting policies' for the production of Whole of Government Accounts. A charge was made, in the budgets and the financial statements, for the opportunity cost of capital. The percentage was fixed by the Treasury and was applied to an average of net assets during the year. It was withdrawn from all budgets in 2010 (HM Treasury 2010a, p. 3) and subsequent financial statements (e.g. Ministry of Defence, 2011).

As for the accounting policies, the overall statement of accounting policies for each set of accrual-based financial statements is that they are:

prepared under the historical cost convention, modified by the revaluation of fixed assets, and, where material, current asset investments and stocks [inventories] to fair value (FReM, 2010–11, para. 2.1.4).

US

The obligation-based and cash-based budgeting system is longstanding and still exists. The accounting literature has rarely addressed this but Jones (2012) does. The federal government has actively discussed accrual accounting since 1948 and has had a formal accrual accounting system since 1990. Since 1995, there has been continual discussion of accrual budgeting.

Budgeting and accounting are not separate but there are separate elements to each. The budget is obligation-based and cash-based, as determined by law and its implementation overseen by the Office of Management and Budget (OMB). The financial statements are accrual-based but include reconciliations to the obligation-based and cash-based budget.

The Treasury is the central agency for collecting receipts and making payments. It maintains the government-wide bookkeeping system (but not the financial management systems of each department). The Treasury accounts use funds, which in different forms largely correspond with the budgets. There are so-called federal funds (general fund, special funds, and revolving funds) and trust funds. Federal funds comprise the larger group. Among the trust funds, social insurance programmes (such as social security and unemployment compensation) have the largest amount of funds and federal employee programs (such as retirement and health benefits) the second largest; together these make up about 90% of all trust fund receipts. Other trust funds include excise tax financed programs for highway construction, airports and airway operations, and other public works.

The Treasury maintains the Standard General Ledger (Treasury, 2009), which includes a uniform chart of accounts for use across the government. This Standard General Ledger includes so-called 'crosswalks' between the ledger and specific aspects of accounting against the budget and financial reporting. It also maintains a government-wide database: the Governmentwide Financial Report System (Treasury, 2006).

The OMB oversees the implementation of the President's budget once authorised by Congress (Schick, 2007, p. 100). It makes regulations about the reconciliation of obligation-based, cash-based budgets with accrual-based financial statements. OMB also has a cash management role in budgeting in that it releases authority for the departments to enter into obligations in the so-called 'apportionments' at stages (usually quarters) during the fiscal year.

The structure of most of the budgets is, first, by government department (or other unit within the organisational structure) and then, within each department, by programme (though these can be the same as by inputs, e.g., salaries). Each of the main elements of the budget is called an 'appropriation'. The structure of appropriations is not called a chart of accounts and, being primarily by programme, at the highest level is not uniform across departments. Each appropriation, however, is also presented using a classification of detailed inputs that is standard across the federal government.

Each appropriation has an accounting that accounts for obligations and outlays of that appropriation. This accounting for any one fiscal year refers to many fiscal years because a current budget can authorise obligations for many years beyond the current fiscal year (even indefinitely), and because outlays of a fiscal year can be liquidating obligations incurred in previous fiscal years. There is a standard chart of accounts for this accounting, determined by OMB.

As to accounting standards for the accrual-based financial statements, the Federal Accounting Standards Advisory Board (FASAB, 2004, p. 1) promulgates 'standards and principles for the federal government, after considering the financial and budgetary information needs' of congress, executive agencies [of federal government] and other users of federal financial information.

It was established in 1990. Its 'sponsors' are the Treasury, the Office of Management and Budget (both of the executive) and the Government Accountability Office (in the legislative branch). The board of FASAB (2004, p. 1287) has 10 members: one from each of the three sponsors, one from the Congressional Budget Office, and six non-federal members 'from the general financial community, the accounting and auditing community, and academia'.

FASAB's standards have no explicit relation to those of the Governmental Accounting Standards Board (GASB, which promulgates standards for state and local government) or of the Financial Accounting Standards Board (FASB, which promulgates standards for business), though these are referred to in a few places. Moreover, FASAB is explicit that its standards consider the needs of internal users of the federal government, as well as external users.

FASAB considers this different from GASB and FASB, both of which 'do not need to weigh heavily managers' information needs' (FASAB, 2004, p. 14) because those managers have direct access to information about their own entities. In contrast, in the federal government, officials may not have access, partly because of the

'size and complexity of the government, the rapid turnover among senior political executives compared with the time required to install information systems in large bureaucracies, and the division of authority in the federal government' (FASAB, 2004, p. 14).

Put another way, FASAB considers GASB and FASB to be primarily concerned with external financial reporting, not with internal financial accounting. Indeed, the whole conceptual framework begins by asserting that the first objective of financial reporting is accountability for budgetary integrity, an objective that FASB's business accounting does not, of course, share (FASAB, 2004, p. 5).

The sets of accrual-based financial statements in the federal government have two distinct focuses: the consolidated financial statements for each government department or agency; and the financial statements for the federal government as a whole (which do not include state and local governments). FASAB's standards were initially concerned mainly with the consolidated financial statements for each government department or agency. In 2003, FASAB issued a standard (number 24) that comprehensively addressed the financial statements for the federal government as a whole. FASAB's standards are, for the most part, historic cost based.

COMPARISON

The four national governments addressed here have all introduced accrual-based reforms during the past twenty-five years: first, the US, then the UK, followed by France, and with Germany still in its formative stages.⁶ In answering the first of our research questions, the previous section presented summaries of the technical aspects of the reforms. To begin to answer the second of our research questions (How does a comparative analysis of the four add to our understanding of those reforms in national governments as a whole: how different are the reforms?), Table 1 classifies these in the following categories: budgets and control; accrual-based reporting and ICT systems; accrual-based accounting policies; accrual-based policy-making; and cost accounting and performance measurement.

In national governments, the budget is, and for as long as there have been budgets always has been, the fundamental financial expression of each government's sovereignty over, and attendant responsibilities for, its economy as a whole. The context of this expression is generically that in which the legislature determines the budget and directs the executive to carry it out; *ex post*, the executive accounts to the legislature for the extent to which it did or did not carry it out.⁷ Long before the spike in influence of the accounting profession on national governments from the 1980s on, this was what accounting in those governments meant: accounting against that budget.

In one essential sense, then, the four sets of reforms started from the same technical position: that of a traditional, cash-based budgetary accounting system. In this, neither the budgeting nor the accounting was defined by the accounting profession or by standard-setting bodies independent of the profession. Within each national government setting, the budget had its own rules and conventions, and its own consequent accounting against the budget. As it happened, the core of each national government's accounting was not accrual-based; it was, rather,

Table 1

Comparative-International Overview of Budgeting and Accounting Techniques in the Four Countries

CONTROL The based ACCRUAL- BASED REPORTING & ICT SYSTEM Goven	udgetary ac		0,	Executive control Accrual basis	
CONTROL The based ACCRUAL- BASED REPORTING & ICT SYSTEM Goven	udgetary ac	accounting retained counting databases are	0,	Accrual basis	
ACCRUAL- BASED REPORTING & ICT SYSTEM Gover			government-wi		
ACCRUAL- BASED REPORTING & ICT SYSTEM Goven	each gover	mment department to u	The budgetary accounting databases are government-wi		
ACCRUAL- BASED REPORTING & ICT SYSTEM Goven		each government department to use and conform to them Only			
Gover	Consolidated Financial Statements for government as a whole			consolidated financial statements for government as a whole after more than 10 years of reform	
	Government as a whole does not include lower levels of government			Government as a whole includes local government	
	ICT system from business for each departm				
	e governm	ent is seen as one	0	nent is seen as	
ACCRUAL	aggregation				
ACCRUAL	Valuation basis = historic cost			Valuation basis = current value	
	Only accrual-based financial statements for the whole of their government		(D) + one set for the federal government as a whole	Accrual accounting for each government department (D)	
Diffi	Difficulties in establishing accrual accounting policies for pensions and other forms of social securities, and for taxation				
e	Each set of accounting policies is explicitly based on business accounting (A)		Policies are not based on business accounting	Idem (A)	
ACCRUAL- BASED POLICY-	Budgetary accounting regulation and accrual accounting policies are made within each government				
	Regulation and policies insulated from the accounting profession or from standard-setting bodies independent of the profession				
Ex	plicit ceptual	No explicit conceptual	Idem (B)	Idem (C)	
	work (B)	framework (C)			
	Output measures are included in the budgeting and accounting reform				
COSTDirectACCOUNTING ∧ thePERFORMANCEdirect	t link betw e cash-base	veen output measures sed budgeting system; veen output measures		ect link between neasures and the g and accounting system	

cash-based and, in France, Germany and the US, to varying extents commitmentbased.

In all four cases, the budgetary accounting databases are government-wide and require each government department to use and conform to them. In Germany, the UK and the US, each government department can have, and often does have, a different accrual-based accounting system, using a comprehensive ICT package originally written for businesses. However, each departmental system has to be capable of producing the information required for government-wide budgeting and budgetary accounting.

In France, Germany and the US, the longstanding cash-based and commitment-based budgetary accounting was retained, even as the form of the budget shifted from an emphasis on the organisational structure and inputs, to one on programmes and outputs. Of these three, only in Germany was the accrual-based information to have an explicit role in budgeting – but that part of the reform was abandoned.

The UK is alone in explicitly introducing accrual-based information into the budget and the budgetary accounting. This distinction is unequivocal but the details are not necessarily always clear in UK practice. The purely cashbased system⁸ was retained and, since cash-based budgets appear alongside the accrual-based equivalents, there are important respects in which it could be assumed that significant decisions are still being taken with reference to the cash basis.

The traditional budgetary accounting system in each government reflects the traditional relationship between the legislature and the executive. The US's budgetary accounting is primarily a legislative control, whereas the UK's is primarily an executive control. There are two important dimensions to this distinction. The first relates to the extent to which the budgetary accounting system itself controls the executive's power to commitment by the government to future spending: in the US, the system is strong; in the UK, the system has no control at all, it being left to the executive. The second relates to the extent to which the annual voted budget restricts spending to that year: in the US, the extent is very large, because a relatively large proportion of next year's spending cannot be incurred without the authority of the next year's budget; in the UK, very small.

On these two dimensions, France and Germany are closer to the US's system of legislative control, primarily because both systems provide formal controls of commitments; however, in both cases, their annual voted budgets do not largely restrict the executive's spending to that year.

As additions to the budgetary accounting systems, all four reforms recognise the usefulness of accrual-based information but there are fundamental technical differences between them; in these differences, the UK is again exceptional in that it was the only one that produced accrual-based financial statements for each government department and not for the government as a whole.⁹ In France and Germany, only accrual-based financial statements for the whole of their government were required, not for each government department. The US does produce accrual-based financial statements for each government department, but also one set for the federal government as a whole.

These different definitions of the reporting entity for accrual-based financial statements reflect fundamental differences in the nature of the respective governments. Each government of France and Germany sees itself as one; in the UK and the US, the emphasis is on seeing themselves as aggregations of agencies. The reporting entity for whole-of-government financial statements is very different for the UK in comparison with the other three: the UK includes lower-level governments whereas the other three do not; and indeed the whole-of-government financial statements consolidate about 1,500 public bodies (HM Treasury, 2012, p.7).

The accrual accounting bases are different in the four countries. In France, Germany and the US, the valuation basis is essentially historic cost (even if the original opening accrual-based balance sheet used other bases when historic cost was not known); in the UK, it is essentially current value (now fair value). The UK was unique (among the four) in charging (budgeted and actual) operating statements with the opportunity cost of capital, the percentage as determined by the Treasury. This aspect of executive control was striking for two reasons: first, the charge is unheard of in business accounting standards; second, while the charge was made when the reform was introduced and subsequently, it was progressively withdrawn from 2010 – by the Treasury.

In all four countries, the budgetary accounting regulations and the accrual accounting policies are made within each government. In France, Germany and the UK, this means within the Ministries of Finance, although, in the UK's case, with advice from a Ministry-appointed body for the accrual policies. In the US, with their separation of powers, the Office of Management and Budget implements the budgetary accounting regulations; the accrual accounting policies are made by a separate body within the federal government. In all four cases, the regulations and policies are formally insulated from the accounting profession and the standard-setting bodies that are independent of the profession. One clear consequence is that the turbulence of standardsetting for businesses, in which the standards are typically controversial and often contested and changed, does not apply, even as the governments have continually learned from business accounting.

In France, Germany and the UK, while each set of accrual accounting policies does not wholly comply with business accounting policies, each set is explicitly based on business accounting. In France and Germany, the business accounting policies are not those of the IASB; in the UK, they were not those of the IASB but they are now. In none of those three cases are the policies explicitly based on those of International Public Sector Accounting Standards Board. The US policies are not explicitly based on business accounting policies (or on those for US state and local government). In France and the US, there are explicit conceptual frameworks for government accounting. In France, the conceptual framework only applies to the accrual-based financial accounting (not to the budgetary accounting) and its approach is to identify concepts and definitions of assets and liabilities that are peculiar to government accounting, as well as those that are similar to business accounting; in doing so, it uses the IASB's conceptual framework and IPSASB's nascent developments of that framework. The US framework applies to all of government accounting and emphasises the centrality of budgets, in so doing distancing itself from the business accounting of the IASB and FASB (which do not, of course, address budgeting), and does not compare its detailed concepts to those of FASB.

In all four cases, there remain difficulties in establishing accrual accounting policies for pensions and other forms of social security, and for taxation. In an important sense, this is surprising. Twenty years ago, traditional government accounting systems at least had the data on which to measure financial revenues and liabilities; data on non-financial assets were the ones most glaringly absent. It might, therefore, have been expected, at least from a technical point of view, that more than two decades of accrual-based influence would have comprehensively addressed financial flows.

In all four cases, output measures are included in the budgeting and accounting reforms. In France, a fundamental part of the reform was the restructuring of the budget from one based on the organisational structure and detailed line-items (of inputs) to one based on outputs, including quite detailed non-financial output measures; associated financial inputs are measured on an accrual basis but, since the budget has retained its cash- and commitmentbasis, this measurement takes place outside of the budgetary process. The same restructuring of the budget was to take place in Germany, in that case with output-associated accrual-based financial inputs on an accrual basis. Nonfinancial output measures pervade the governments in the UK and the US but the direct link between these measures and the comprehensive budgeting and accounting system is less clear.

CONCLUSIONS AND DISCUSSION

After twenty-five years of accrual-based budgeting and accounting reforms in the national governments of four major, developed economies, it is clear that there is no consensus among the four countries about the complete package of technical reform possibilities that is most appropriate for all four; there is also no consensus among the four countries about each one of the technical reform possibilities that is most appropriate for all four. In three of the governments, the resilience of traditional budgetary accounting systems in the face of the accrualbased arguments is clear. It is also clear that, in the fundamental context and content of the reforms in these four countries, the UK is an exception: most strikingly in that it has its own budgeting basis and its own basis for accrual valuations, and it defines the reporting entity for the whole of government uniquely. The summary answer to our second research question, of how different the technical aspects of the budgeting and accounting reforms are, is: very different.

Our research was largely limited to budgeting and accounting technology, explicitly excluding the two (converging) technologies of government finance statistics. Moreover, we were concerned with the formal technologies not explicitly with their use. In practice, the exception that is the UK's accrual budgeting and accounting system may not be as clear an exception as the formal system suggests. And turning from the four cases, however important these governments are, they are not the world, not even the world of those national governments that have implemented accrual-based reforms: we have to be wary of generalisation beyond these four countries, of course, and it may well be that replication of this research for more countries would change the perspective on the UK.

Our research was conscious that the literature's comparative-international understanding of the relationships between budgeting, budgetary accounting and accrual-based financial statements in national governments had not been strong during the emergence of accrual accounting in national governments; and that the understanding we did have needed updating. Our research was also carried out, regrettably, within the context of the global financial crisis. It makes a very limited contribution to the resolution of the crisis.

It does show the limits of the influence that the accrual policies of the accounting profession, and its off-shoot standard-setting bodies, have had in budgeting and accounting for national governments. Those policies are entitybased and focused on expost results of a specific period seen on the day at the end of that period; for decades, the policies have also increasingly concentrated on external financial reporting. Unsurprisingly, then, they have had limited influence on national government budgeting, even at the level of what might be called entity-based government budgeting. They also conflict with the policies and perspectives of the sector-based budgeting and accounting of government finance statistics, which focus on rolling-forecasts of economic income and wealth, the sectors being all levels of government within each national economy, within each regional economy and the world's. Reconciliation of the entity-based planning, execution and monitoring systems and the sector-based planning, execution and monitoring systems, for internal and external use, remains weak and surely must be one of the challenges following the global financial crisis.¹⁰

However, it is to be hoped that harmonisation, let alone standardisation, of government budgeting and accounting is not a necessary part of the resolution of the crisis – even of the eurozone crisis – because, in the light of our research into these four governments, the likelihood of harmonisation of national government budgeting and accounting anytime soon beggars belief.

NOTES

- 1 In some countries, the sovereignty of the national government is constitutionally shared in federal governments with their states, in European Union governments with the EU – yet the definitive cases are in the national governments themselves. It is also true that sovereignty is significantly challenged by powerful institutions in the private sector, for-profit and sometimes not-for-profit, perhaps particularly multi-national institutions. Yet the case of national governments remains definitive.
- 2 Aiken (1994) is a very rare example of accrual-based accounting explicitly in the context of legislatures and executives, all the more useful in being rare. It focuses on measurement of "full costs" into a business-type periodic financial reporting context' (p. 31) and as such does not address the challenge that this information might have for the budget. It does not refer to specific national governments and is, therefore, only comparative to the extent that its contextual generalisations might apply to a specific context.
- 3 In all countries, central matters of budgeting are to some extent separate from what an accountant would understand as an entity-based budgeting system. The System of National Accounts (European Commission et al., 2008) and Government Finance Statistics (IMF, 2001) are often of much greater import than any system of government accounting.
- 4 Ball (1994, Abstract) provides five elements of the 'present status' of the 'financial management reform program' in New Zealand; none of the five mentions budgeting, let alone accrual budgeting. Similarly, the only budgeting in New Zealand's first set of accrual-based financial statements was cash-based (Government of New Zealand, 1991).
- 5 Using these criteria, the next case we would explicitly have chosen was that of Australia.
- 6 This overview treats the original reform in Germany in the same way as the actual reforms in the three other governments (even though the complete reform was abandoned in 2010) to avoid having to add cumbersome qualifiers about the reforms having been 'proposed' etc. In 2011, there was a partial resurrection of the reform and the essential elements of that do not change any of the emphases in this overview – indeed, they rather reinforce them.
- 7 The main sense in which the judiciary, or quasi-judicial institutions, have been involved is in France and Germany, in which legislative auditors, as either *ex ante* or *ex post* auditors, or both, are still the norm.
- 8 For these purposes, the UK government's core system was purely cash, although there were small uses of some accruals.
- 9 The UK government has also recognised the usefulness of one set of accrual-based financial statements for the government as a whole (including local government) but, although the law that required accrual-based information explicitly also required one set for the government as a whole, such a set was only published in Autumn 2011 (and for the year ended 31 March, 2010). The fact that the Whole of Government Accounts have now been published does not affect the argument that, for more than ten years of the reform, what mattered were the accrual-based departmental financial statements.
- 10 Had Australia been chosen as our fifth case study, we would have identified its government as one that has long had accrual budgeting, the accrual basis for which is now exclusively that of government finance statistics (Barton, 2011).

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