

The Auditor-General

Audit Report No.38 1998-99

Performance Audit

Management of Commonwealth Budgetary Processes

Preliminary Study

Australian National Audit Office

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Canberra ACT
5 May 1999

Dear Madam President
Dear Mr Speaker

The Australian National Audit Office has undertaken a general performance audit in accordance with the authority contained in the *Auditor-General Act 1997*. I present this report of this audit, and the accompanying brochure, to the Parliament. The report is titled *Management of Commonwealth Budgetary Processes*.

Following its tabling in Parliament, the report will be placed on the Australian National Audit Office's Homepage—
<http://www.anao.gov.au>.

Yours sincerely



P. J. Barrett
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

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The Auditor-General is head of the Australian National Audit Office. The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits and financial statement audits of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

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Abbreviations/Glossary

ACS	Australian Customs Service
AIMS	Accrual Information Management System
ANAO	Australian National Audit Office
CPA	Commonwealth Public Account
DFaCS	Department of Family and Community Services
DOFA	Department of Finance and Administration
DSS	Department of Social Security
ERC	Expenditure Review Committee
FIRM	Finance Information on Resource Management
FMIS	Financial Management Information System
MAB	Management Advisory Board
MOU	Memorandum of Understanding
PAYE	Pay-As-You-Earn Tax
PM&C	Department of the Prime Minister and Cabinet
QA	Quality Assurance
RMSE	Root Mean Square Error
Treasury	Department of the Treasury

Part One

Summary

Summary

Introduction

1. The annual Commonwealth Budget is the Government's key annual economic statement. It is crucial to good governance and confidence in the financial and economic stewardship of the Commonwealth. It is through the annual Budget that the Government of the day presents to the Parliament its proposed fiscal strategy and policy priorities. It provides an annual statement of the macro- and micro-economic policies of the Government. Traditionally, the financial impact of those policies has been presented on a cash accounting basis, in terms of:

- revenues—how much revenue the Government will raise and how it will do so;
- outlays—how much the Government will spend in aggregate, and how this amount will be allocated between different purposes; and
- outcomes—the anticipated budgetary outcomes and/or balance, that is, a surplus or deficit.

2. In April 1997, as part of its public service reform agenda, the Commonwealth Government decided to implement an accrual-based, outcome and output-focused resource management framework for the Commonwealth, with future annual Budgets to be presented on an accrual accounting basis. The first accrual budget of the Commonwealth Government will be brought down in May 1999 for the 1999–2000 Budget. The analysis conducted in this study considered Budgets constructed under the cash accounting basis.

3. The Budget is primarily developed by the Expenditure Review Committee, a Cabinet sub-committee, against the background of the Government's priorities for economic and social development. Advice and support is provided by:

- the Department of the Treasury (Treasury) (with the Australian Taxation Office);
- the Department of Finance and Administration (DOFA);
- the Department of the Prime Minister and Cabinet (PM&C); and
- line agencies.

4. Treasury and DOFA have a key role in providing advice to Ministers to achieve an allocation of resources consistent with the

Government's fiscal priorities. As part of its role, DOFA also coordinates the preparation of the Budget and forward estimates for both new and ongoing Government outlays and non-tax revenue policies. Treasury performs a similar role in regard to tax revenues.

5. The Budget is usually presented in May each year together with the annual appropriation bills to complement expenditure authorised by Parliament under special appropriations. The integrity of the outlays and revenue estimates in the Budget is of critical importance for the Parliament, the Government and stakeholders in the broader community. These estimates provide the information upon which economic, social and political decisions are based, and are particularly important for the Commonwealth's financial and debt management strategies.

Study approach

6. The objective of the ANAO preliminary study of Commonwealth budgetary processes was to form a view regarding the quality of, and controls over, the Budget estimates and to inform the decision whether to proceed to a full performance audit at this time.

7. It is generally accepted that it is virtually impossible to eliminate variations in actual outcomes from Budget forecasts. This arises, for example, from the uncertainty regarding the estimation of economic and other parameters, the effects of post-Budget policy decisions and the non-occurrence and/or delay in forecast events. Accordingly, the preliminary study focussed on assessing whether the accuracy of Budget forecasts has changed over time; whether Budget estimates are persistently biased towards over-estimating or under-estimating revenues and outlays; and whether forecasts incorporate all relevant available information. As part of the study, the ANAO engaged the services of the Centre of Policy Studies at Monash University to provide quantitative analysis on these particular aspects of Commonwealth Budget estimates.

8. For the purposes of the preliminary study, the analysis conducted considered actual variations and did not attempt to isolate the particular reasons for the statistical variations. No separate analysis was attempted of variations in Government policy decisions and their impact on Budget outcomes. Such decisions are likely to have been made in the context of the overall fiscal outcomes announced by the then Government and/or of particular events or the economic imperatives of the time. Thus post-Budget decisions are not taken in isolation and, for the purposes of the preliminary study, were not separately analysed.

9. The study also considered current reforms of the estimates framework, including the move to accrual budgeting and the

decentralisation of outlays estimates. It assessed the administrative effectiveness of Budget statistical estimates processes, including the role of risk management, quality assurance systems, and evaluation of estimates preparation. Economic forecasting and the derivation of economic parameters were also outside the scope of the preliminary study.

10. The study considered budgetary estimates processes in DOFA, Treasury and selected line agencies, namely the Australian Customs Service (ACS) and the (then) Department of Social Security (DSS), now the Department of Family and Community Services (DFaCS)¹. It also considered the role of PM&C in supporting Cabinet consideration of Budget proposals. Fieldwork was conducted in the second half of 1998.

Overall conclusion

11. On the basis of the quantitative and qualitative analysis of the Budget process undertaken during the study the ANAO concluded that there are no apparent systemic problems in the cash-based estimating processes in the agencies reviewed that would, in themselves, lead to material statistical inaccuracies in the Budget's projected outcomes. Had the analysis shown apparent persistent material bias in Budget estimates, the ANAO would have undertaken further analysis looking at the likely causes of that bias which would have involved consideration of specific post-budget policy decision effects.

12. Key findings arising from the preliminary study were that:

- time series data produced by DOFA and Treasury indicate that, for the period 1986–87 to 1991–92, Commonwealth outlays and revenue estimating performance compared favourably with those of comparable OECD countries and of State Governments;
- on the basis of analysis of estimating performance over the 20 year period to 1996–97, the ANAO concluded that there is no statistical evidence of apparent bias towards under or over-estimation of revenues or outlays. In absolute terms, the size of variations in outcome from Budget forecast for revenue estimates is greater than for outlays, but the difference is not statistically significant;
- there is a tendency to under-estimate outlays and over-estimate revenues during recessions, resulting in variation in the expected headline net fiscal position of the Commonwealth. This appears to be largely attributable to the volatility in major economic variables and

¹ Under Administrative Arrangements Orders of 21 October 1998, the Department of Social Security was joined with elements of the then Department of Health and Community Services, the Attorney-General's Department and the Child Support Agency previously under the Australian Taxation Office, to form the Department of Family and Community Services.

the effects of changes in government policy during recessions rather than an inherent problem in the Budget process itself;

- DOFA publishes estimates targets which are quite stringent and, in the three years ended 1997–98, the targets were only partially achieved. Treasury does not publish estimates targets; and
- DOFA, Treasury and the line agencies reviewed have undertaken performance monitoring and evaluation activities in relation to budgetary processes and resulting estimates.

13. The move to accrual budgeting represents a significant change in the accounting basis for preparing the Budget estimates, replacing the cash-based, program-focused approach adopted to date. An integral part of the accrual budgeting reform is to be the decentralisation to agencies of responsibility for constructing and monitoring the Budget estimates, within a quality assurance framework managed by DOFA.

14. Accrual budgeting will introduce a new dimension in managing the statistical accuracy of Budget estimates in ensuring that there is consistency in the estimating and accounting concepts used in the construction of both the accrual Budget estimates, and the agency and whole-of-government financial statements that will be used to measure outputs and outcomes against those Budget estimates. It is likely that there will be greater volatility in the accuracy of the Budget estimates in the early years of application of accrual budgeting as the accruals basis of estimates is bedded down.

15. There is an important role for DOFA in promoting the reforms and informing Ministers, other members of Parliament and stakeholders of the implications of the changed accounting basis for the Budget estimates and its likely impacts on estimation. The Department advised the ANAO that it has put in place a program to inform these constituencies of the changes in prospect.

16. Due to the satisfactory long-run performance by DOFA, Treasury and the line agencies reviewed in the construction of cash-based Budget estimates and the prospective changes under the accrual budgeting reforms, the ANAO has decided not to proceed with a full performance audit of the management of Commonwealth budgetary processes at this time.

Agency comments

17. Agencies generally supported the preliminary study's findings concerning the cash-based budgetary estimates processes. DOFA, ACS and DFACS supported the report's findings about past Commonwealth

budgetary processes. DFaCS advised that it is continuing to seek improvement in the accuracy of its estimates forecasts wherever possible. PM&C expressed concern about the explanation of statistical variations contained in the report. Looking ahead, DOFA agreed with the report's assessment regarding the opportunities presented by the accrual budgetary reforms.

18. Treasury advised the ANAO that:

Treasury welcomed the opportunity to participate in the preliminary ANAO study into the management of Commonwealth budgetary processes and was satisfied with the processes involved in the study. Treasury endorses the outcome of the study, that there has been a satisfactory long-run performance in constructing cash-based Budget estimates.

19. DOFA advised the ANAO that:

The Department of Finance and Administration supports the report's findings about past Commonwealth budgetary processes and notes its conclusions about future processes following the move to accrual budgeting. In particular we note the report's conclusions that the accrual budgetary reforms will provide 'greater transparency of the Government's financial position and a more accurate assessment of what it costs to undertake Government activities and services' and that the reforms provide an 'opportunity for streamlining, rationalising and enhancing the budgetary processes and the information provided to Parliament'. The Department of Finance and Administration agrees with this assessment.

20. The ACS advised the ANAO that it considers the preliminary study to be a fair and accurate reflection of the budgetary processes for the ACS. DFaCS advised the ANAO that it is "pleased that (the audit) has found our approach to budgetary processes satisfactory. Nevertheless we are continuing to seek improvement to the accuracy of our estimates forecasts wherever possible."

21. PM&C commented that:

PM&C recognises the inherent difficulty in deriving budget projections. The Department has had no concerns about the cash based budget process or the results of the cash based projections.

PM&C considers that the ANAO statistical analysis would have been more robust if post-budget policy decisions had been specifically excluded in assessing the evidence of "systemic bias". Budget projections are done on a "no policy change basis". Over the period under examination there are instances of substantial post-budget policy initiatives which impact on the budget projections (eg the substantial One Nation package announced in February 1992). The ANAO's analysis compares "no policy change"

estimates with final outcomes that include policy changes. PM&C notes that the ANAO acknowledges that a more substantial analysis (beyond the preliminary stage) would have included consideration of specific post-budget decision effects. It is PM&C's a priori view that such an analysis would have found that the budget projections have been even more reliable than the results of the ANAO's preliminary analysis suggests.

22. The ANAO notes that post-Budget policy decisions are likely to have been made in the context of the overall fiscal outcomes announced by the then Government and/or of particular events or the economic imperatives of the time. The actual outlays and revenue effect of policy decisions taken after the tabling of the Budget are included in the variations considered in the ANAO analysis, with the out-year effects incorporated into subsequent Budget estimates.

Part Two

1. Introduction

This chapter outlines the reason for the preliminary study and describes the framework and process used to produce the annual Commonwealth Budget.

Commonwealth Budget framework

1.1 The annual Commonwealth Budget is the Government’s key annual economic statement. It is crucial to good governance and confidence in the financial and economic stewardship of the Commonwealth. It is through the annual Budget that the Government of the day presents to the Parliament its proposed fiscal strategy and policy priorities. It provides an annual statement of the macro- and micro-economic policies of the Government. Traditionally, the financial impact of those policies has been presented on a cash accounting basis², in terms of estimates of:

- revenues—how much revenue the Government will raise and how it will do so³;
- outlays—how much the Government will spend in aggregate, and how this amount will be allocated between different purposes⁴; and
- outcomes—the anticipated budgetary outcomes and/or balance, that is, a surplus or deficit.⁵

² Under cash accounting, financial transactions are recognised at the time cash receipts and payments occur. Traditional cash-based Budget estimates have focussed on forecasting the cash transactions for the Commonwealth in a given financial year.

³ ‘Revenue’ is the primary means of funding government, with any shortfall funded through borrowings or a rundown of financial assets. It comprises tax receipts (net of refunds) and non-tax receipts (interest, dividends, etc). However, in cash-based Budgets, receipts from business-type activities, intra-governmental collections, sale of assets and repayment of government loans or equity are not treated as revenue, but are offset against outlays (ie they are treated as negative outlays). Revenue also excludes amounts received from loan raisings, private trust monies and superannuation provisions from certain approved authorities (these are classified as financing transactions). Under cash accounting and budgeting, revenue for a given period only includes cash received in that period.

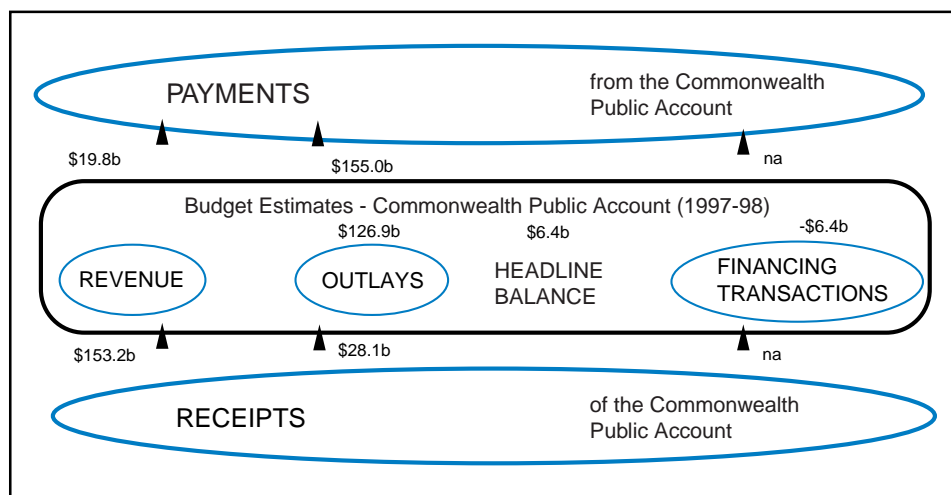
⁴ ‘Outlays’ is a concept that is particular to cash-based accounting and budgeting. In a general government context, outlays measure the economic activity of government. In particular, they measure the net cost of providing general government goods and services. They also quantify transfers and advances (loans and equity injections) made for public policy reasons. Any user charges associated with the provision of such goods and services are offset against the gross payments made by the Commonwealth. Similarly, the proceeds of asset sales and repayment of government loans or equity are treated as negative outlays. Outlays are recorded in the period in which cash payments occur.

⁵ The *headline Budget balance* is the difference between revenue and outlays. The headline balance provides a view of the Government’s cash budgetary position, that is, whether it needs to borrow money to balance the Budget or whether it has achieved a surplus, thus creating a provision for the redemption of debt. The *underlying Budget balance* is measured as revenue less underlying outlays (defined as outlays excluding net advances). Net advances consist of net policy lending (new policy lending less repayment of past policy lending) and net equity transactions (equity injections/purchases less equity sales). The underlying balance more reliably reflects the sustainability of the underlying budgetary aggregates by identifying the extent of many one-off transactions incorporated in the headline Budget balance.

1.2 Because revenues and outlays contribute to the level of the reported Budget balance, they are referred to as above-the-line transactions. Financing transactions are undertaken to finance the deficit or invest the surplus. They consist of borrowings and changes in holding of financial assets such as cash or investments (excluding advances). Financing transactions do not affect the Budget balance and are referred to as below-the-line transactions.

1.3 All Commonwealth Government cash accounting transactions are recorded in the Commonwealth Public Account (CPA) which is made up of four separate funds: the Consolidated Revenue Fund, the Loan Fund, the Reserved Money Fund and the Commercial Activities Fund. In the traditional cash-based Commonwealth Budget Papers, the terms payments and receipts have indicated money flows out of and into the CPA. These are essentially accounting concepts used to present the Appropriation Bills and tax and non-tax moneys paid to the Budget. Outlays, revenue and financing transactions view Government sector transactions from an economic perspective. Figure 1.1 illustrates the relationship between accounting and economic concepts for the 1997–98 Commonwealth Budget estimates.

Figure 1.1
Commonwealth Budget estimates 1997–98



Source: Budget Paper No.7, 1997–98 Budget Papers

1.4 The Commonwealth Government has decided that future annual Budgets will be presented on an accrual accounting basis.⁶ The primary Budget statements are to include agency and consolidated:

- budgeted operating statements⁷;
- budgeted statements of assets and liabilities⁸;
- budgeted statements of cash flows⁹; and
- capital budgets.¹⁰

1.5 The first accrual budget for the Commonwealth will be brought down in May 1999 for the 1999–2000 Budget. The analysis conducted in this study considered Budgets constructed under the cash accounting basis.

Parties involved in formulating the Budget

1.6 The Commonwealth's Budget is developed primarily by the Expenditure Review Committee (ERC), a Cabinet sub-committee. Senior ministers agree on the overall Budget strategy and key Budget priorities.

⁶ Accrual accounting records economic transactions and events at the time that they occur, irrespective of when cash is paid or received. These financial effects may take place independent of cash transactions, but they also include cash transactions. The main aims of adopting accrual accounting are to allocate costs and benefits to the particular reporting period to which they relate, and to show resources controlled by an entity at the end of that period.

⁷ Operating result is revenue less expenses and can be positive or negative. A positive result is called a surplus; a negative result, a deficit. At the end of an accounting period, the operating result either reduces or increases the equity in the Statement of Assets and Liabilities. Under accrual accounting and budgeting, revenue, for a given accounting period, includes cash earned from operations, the amounts receivable (but not collected) and the value of any resources or assets received. Revenue is recorded when it is earned, regardless of whether it has been received. Expenses, for a given accounting period, are the costs of the services and assets consumed to produce outputs. Expenses are recorded when they incurred, regardless of whether they have been paid.

⁸ The Statement of Assets and Liabilities will show the Commonwealth's financial position or health by identifying the Commonwealth's resources and obligations. Resources are termed 'assets'; obligations are termed 'liabilities'. Assets are something which provides a benefit into future accounting periods. Examples include cash, buildings, land, equipment and investments. Assets can be tangible or intangible. Assets are also classified according to whether they are current (ie cash or likely to be converted to cash within 12 months) or non-current (intended to be used or held for the long-term). Liabilities are an entity's debts, both current (short-term) and non-current (long-term). Total assets less total liabilities is the owner's equity, belonging in this case to the Commonwealth.

⁹ Although the funding received by agencies will reflect accrual-based expenses, the effective management of cash remains important. As part of the reforms, a regime is being introduced with the aim of ensuring cash is effectively managed on a whole-of-government basis. This includes a requirement for agencies to submit budgeted cashflow statements, the devolution to agencies of responsibility for their banking operations in regard to departmental receipts and expenditure, and the development of agreed schedules for the drawdown of cash by agencies.

¹⁰ A Capital Use Charge will be levied on an agency's net departmental assets to ensure the full costs of outputs are included in the agency output price.

Portfolio ministers decide on priorities for their portfolio and, through submissions prepared by their departments, put forward proposals for new policies or savings. The ERC, chaired by the Prime Minister, is responsible for examining major outlay or savings proposals and recommends to Cabinet which should be included in the Budget.¹¹ Cabinet meets as Budget Cabinet to consider the Committee's recommendations and to formally agree the contents of the Government's Budget to be presented to the Parliament.

1.7 Agencies involved in the preparation of the Commonwealth Budget are:

- the Department of the Treasury (Treasury) and the Australian Taxation Office, which are responsible, in consultation with other relevant agencies, for the preparation and periodic revision of Budget revenue estimates. Treasury also provides advice on the outcome of the previous Budget, the fiscal outlook and the strategy and processes for the current Budget. In formulating this advice, Treasury takes into account the impact of policy decisions and changes in the economic outlook. Treasury also provides advice to the Treasury portfolio Ministers concerning taxation and expenditure proposals as part of the Budget formulation process;
- the Department of Finance and Administration (DOFA), which provides advice to the Minister for Finance and Administration and the ERC on aggregate Budget figuring, economic developments, the implications of spending proposals for the Government's fiscal position and consistency with its policy priorities. It also provides advice on the outcome of the previous Budget, the fiscal outlook of outlays and the processes for the current Budget. DOFA is responsible, in consultation with agencies, for the preparation of Budget outlays estimates, and for the monitoring and review of estimates through the course of the financial year;
- the Department of the Prime Minister and Cabinet (PM&C), which provides administrative support for Cabinet's consideration of Budget proposals and supports the Prime Minister in his role as Chairman of Cabinet and in his other relationships with State Premiers, Chief Ministers and Ministers; and

¹¹ Smaller proposals involving \$5 million or less in each year are dealt with by the specific minister and the Minister for Finance and Administration, in consultation with the Prime Minister and Treasurer.

- line agencies which assist in the preparation of budgetary estimates of payments and receipts for existing programs and policies, prepare bids for funds for new policy proposals and prepare, or respond to, proposals for achieving savings.

The role of the Parliament

1.8 The Treasurer presents the Government's Budget in Parliament. Under the Constitution it is only the Parliament that can authorise the raising of taxes and duties or appropriate public money for expenditure¹². Key provisions within the Constitution include:

- section 51, under which the Parliament has the power to make laws for taxation and the borrowing of money on public credit;
- section 90, under which the Parliament has the exclusive right to impose customs and excise duties;
- section 83, which provides that no money can be drawn from the Treasury of the Commonwealth except under appropriation by law; and
- section 56, under which the Executive has the sole right to present expenditure proposals to the Parliament.

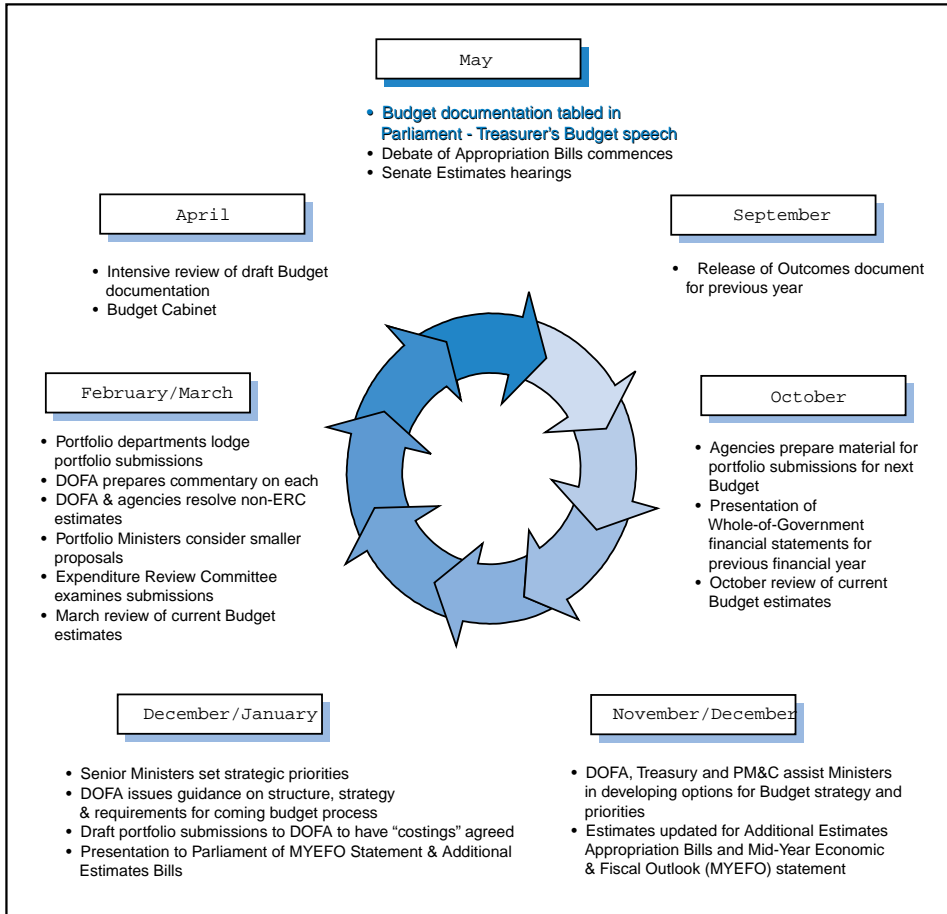
1.9 The integrity and accuracy of the outlays and revenue estimates in the Budget is of critical importance for the Parliament, the Government and stakeholders in the broader community. These estimates provide the information upon which economic, social and political decisions are based, and are particularly important for the Commonwealth's financial and debt management strategies.

The Budget cycle

1.10 The process through which the annual Commonwealth Budget is formulated is a cyclical activity covering the full year, with the various phases overlapping from year to year. The precise nature and timing of the activities undertaken each year are determined to some degree by the economic and political circumstances existing at the time. However, there are a number of features consistently present. Figure 1.2 illustrates the main elements and approximate timing of a typical Budget cycle.

¹² An appropriation is an authorisation by Parliament to spend an amount from the Consolidated Revenue Fund or the Loan Fund for a particular purpose. An appropriation authorises the Commonwealth to withdraw moneys from the Treasury, but it also restricts the expenditure to the particular purpose specified by the appropriation and may be limited as to either amount and/or timing.

Figure 1.2
Main elements of typical Budget cycle



Source: User Requirements, Accrual Information Management System, DoF, August 1997 and ANAO analysis

1.11 The Commonwealth Budget process is based on a system of rolling forward estimates—each time a Budget is brought down it is accompanied by estimates of outlays for the next three years. This is intended to provide the Government and the public with information about the level and composition of public outlays over the following three years in the absence of policy changes.

1.12 The forward estimates are based on existing policies and available estimates of economic parameters such as unemployment levels and the CPI. As such they provide the benchmark for all budgetary deliberations—all new policy proposals are proposals to vary the forward estimates.

1.13 The current Budget estimates, as well as the forward estimates, are updated at various stages throughout the year to reflect changes in economic parameters, policy changes and other variations. Estimates are reviewed in October and March. In November/December each year, DOFA and Treasury, in consultation with departments, update the forward estimates to reflect post-Budget government decisions, changes in economic parameter assumptions, changes in projected beneficiary numbers and other unavoidable revisions to the estimates. These results, together with a submission on the economic outlook, are reported as the Mid-Year Economic and Fiscal Outlook by the Treasurer and the Minister for Finance and Administration.

1.14 At about the same time of year, certain departments seek supplementation through Additional Estimates of the funds provided in the preceding Budget for price increases during the year and Government initiatives introduced after the Budget.¹³ Implications for future financial years are incorporated into the forward estimates. In addition, DOFA produces a monthly report of Commonwealth Financial Transactions which monitors actual performance against current year estimates.

Study approach

1.15 Given the importance of the economic, social and political decisions made each year based upon the Budget estimates, the ANAO considered the process by which those estimates are derived to be an important topic for performance audit coverage. The objective of the ANAO preliminary study was to form a broad view regarding the quality of, and controls over, the Budget estimates and to inform the decision whether to proceed to a full performance audit at this time.

1.16 It is generally accepted that it is virtually impossible to eliminate variations in actual outcomes from Budget forecasts given, for example, the uncertainty regarding the estimation of economic and other parameters, the effects of post-Budget policy decisions and the non-occurrence and/or delay of forecast events. Accordingly, the preliminary study focused on assessing whether the accuracy of Budget forecasts has changed over time; whether Budget estimates are persistently biased towards over-estimation or under-estimation of revenues and outlays;

¹³ Changes in funding requirements for programs subsequent to the presentation of the Budget may lead to the consideration of additional estimates. Additional funds for government programs are agreed to by the Government if the amounts provided in Appropriation Acts (No 1 or 2), or Appropriation (Parliamentary Departments) Act are not enough to meet approved expenditure in a financial year. This additional funding is normally incorporated in Appropriation Bills (3 and 4) and the Appropriation (Parliamentary Departments) Bill (No 2) and does not become available until after the Bills have been passed by the Parliament and received royal assent.

and whether forecasts incorporate all relevant available information. As part of the study, the ANAO engaged the services of the Centre of Policy Studies at Monash University to provide quantitative analysis on these particular aspects of Commonwealth Budget estimates.

1.17 For the purposes of the preliminary study, the analysis conducted considered actual variations and did not attempt to isolate the particular reasons for the statistical variations. No separate analysis was attempted of variations in Government policy decisions and their impact on Budget outcomes. Such decisions are likely to have been made in the context of the overall fiscal outcomes announced by the then Government and/or of particular events or the economic imperatives of the time. Thus post-Budget decisions are not taken in isolation and, for the purposes of the preliminary study, were not separately analysed.

1.18 The study also considered current reforms of the estimates framework, including the move to accrual budgeting and the decentralisation of outlays estimates. It assessed the administrative effectiveness of Budget estimates processes, including the role of risk management, quality assurance systems, and evaluation of estimates preparation. Economic forecasting and the derivation of economic parameters were also outside the scope of the preliminary study.

1.19 The study considered budgetary estimates processes in DOFA, Treasury and selected line agencies, namely the Australian Customs Service (ACS) and the (then) Department of Social Security (DSS), now the Department of Family and Community Services (DFaCS). It also considered the role of PM&C in supporting Cabinet consideration of Budget proposals. Fieldwork was conducted in the second half of 1998. The preliminary study was conducted in accordance with the ANAO Auditing Standards and cost approximately \$177 500.

2. Accuracy of Budget Estimates

This chapter presents statistical analysis of published Budgets data over the 20 years to 1996–97. It discusses the accuracy of Budget estimates over that time in the context of the extent to which actual outcomes varied from Budget forecasts. It also discusses the extent to which the agencies responsible for Budget estimates assess both the accuracy of those estimates and the overall efficiency of the Budget processes.

Budget estimates

2.1 There are a number of inherent difficulties in estimating future revenue and portfolio outlays. In particular, the accuracy of these estimates can be affected by changes in economic parameters such as unemployment, economic growth, household income, world economic growth and inflation. In addition, Budget estimates must be adjusted during the year to account for the financial impact of changes in Government policy that may arise.

2.2 However, it is important that Budget estimates are as accurate as possible given the information available at the time. Relatively small variations from Budget outlay and revenue forecasts can have quite significant impact on the accuracy of the estimation of the Government Budget balance. For example, the 1990–91 Budget overestimated the Budget surplus by \$6.2 billion. This \$6.2 billion over-estimate was produced by a 4.2 per cent over-estimation in respect of revenue and a 2.38 per cent under-estimation in respect of outlays. PM&C advised the ANAO that post-budget policy decisions made up \$1.2 billion of the \$2.1 billion increase in outlays.¹⁴

2.3 Estimates performance, in terms of the accuracy of Budget estimates, can be measured in terms of the extent to which actual budgetary outcomes vary from Budget estimates, expressed as Budget estimate variation.¹⁵ Internal reviews undertaken by DOFA and Treasury indicate that the Commonwealth's estimates performance between 1986–87 and 1991–92 compared favourably with that of other countries. A DOFA study showed that, for the period 1986–87 to 1990–91, Australia

¹⁴ Table 3, 1991-92 Budget Paper No. 1, page 3-7

¹⁵ For the purposes of this study, 'Budget estimate variations' are defined as the percentage points difference between the actual growth rate with respect to revenue or outlays for a given financial year and the Budget forecast of that growth rate for the year. It is equivalent to the dollar difference between the outcome and the Budget estimate expressed as a percentage of the outcome for the previous year.

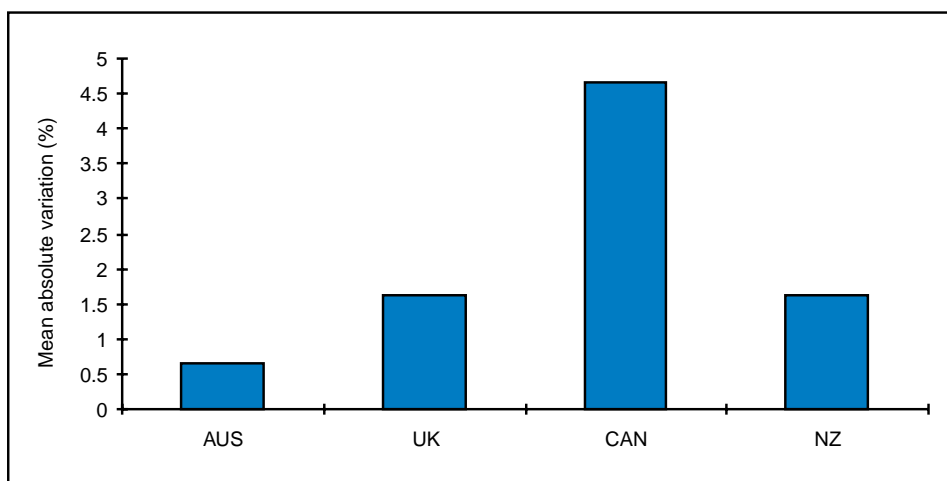
had superior performance in terms of outlays estimates when compared to New Zealand, United Kingdom and Canada (Figure 2.1). Similarly, a Treasury review found that the Australian revenue estimating performance over the four year period to 1991–92 also compared favourably with international performance.¹⁶

2.4 Although the basis of each country’s Budget estimates is quite different, these benchmarks provide some measure of assurance on Commonwealth estimates performance. DOFA has also benchmarked Commonwealth estimates performance in the period 1986–87 to 1990–91 with that of State Governments. On a comparison basis, Commonwealth estimates performance during that time period was favourable relative to that of other jurisdictions.

2.5 Finding: Time series data produced by DOFA and Treasury indicate that, for the period 1986–87 to 1991–92, Commonwealth outlays and revenue estimating performance compared favourably with those of comparable OECD countries and of State Governments.

Figure 2.1

**Comparison of Budget outlays forecasting performance¹⁷
(1986–87 to 1990–91)**



Source: DOFA analysis

¹⁶ The Treasury study reported that the mean absolute variations between actuals and Budget forecasts of total revenue between 1987-88 and 1991-92 were 2.4 per cent for Australia, 2.3 per cent for Canada, 2.7 per cent for New Zealand, 2.3 per cent for the United Kingdom and 2.2 per cent for the United States. Recent US data indicates estimation variations there have grown considerably since the late 1980s. For example, in 1997 revenue was under estimated by 5.3 per cent (\$80 billion) and outlays over estimated by 3 per cent.

¹⁷ Figure 2.1 reflects mean absolute variation of outcome from Budget outlays estimate between 1986-87 and 1990-91. Mean absolute variation for Australia over the period was 0.65 per cent, 1.61 per cent for the UK, 4.66 per cent for Canada and 1.61 per cent for New Zealand. DOFA has set a performance target of 0.5 per cent difference between Budget outlays estimates and final outcome (after adjusting for the impact of new policy decisions and the effects of economic parameter changes).

Outlays and revenue estimates

2.6 Analysis commissioned by the ANAO applied statistical testing to published Budget data over the 20 year period to 1996–97 to determine, for both revenue and outlays, the mean or average Budget estimate variation, mean absolute Budget estimate variation (ie ignoring the sign or direction of the variation), the associated standard deviation for each¹⁸ and the root mean squared variation.¹⁹ Regression analysis was then applied to these results to test three hypotheses concerning the performance of Budget estimates—that is, that:

- Budget estimates, on average, have equalled the outcome (that is, whether there is any statistically significant bias toward under or over-estimation)²⁰;
- there has been no significant change in the accuracy of successive Budget estimates (by analysing the size of the variation of outcome from estimates over time); and
- the estimates reflect the best available information at any point in time.

2.7 Figure 2.2 traces Commonwealth outlays and revenues estimates performance from 1977–78 to 1996–97 in terms of the efficiency of Budget growth forecasts. An outcome below zero (which marks the X-axis) implies that the Budget has over-estimated outlays or revenue; above zero indicates the Budget under-estimated outlays or revenue. A perfect outcome would be for Budget outlays and revenue growth estimates to equal the outcome and therefore track the X-axis.

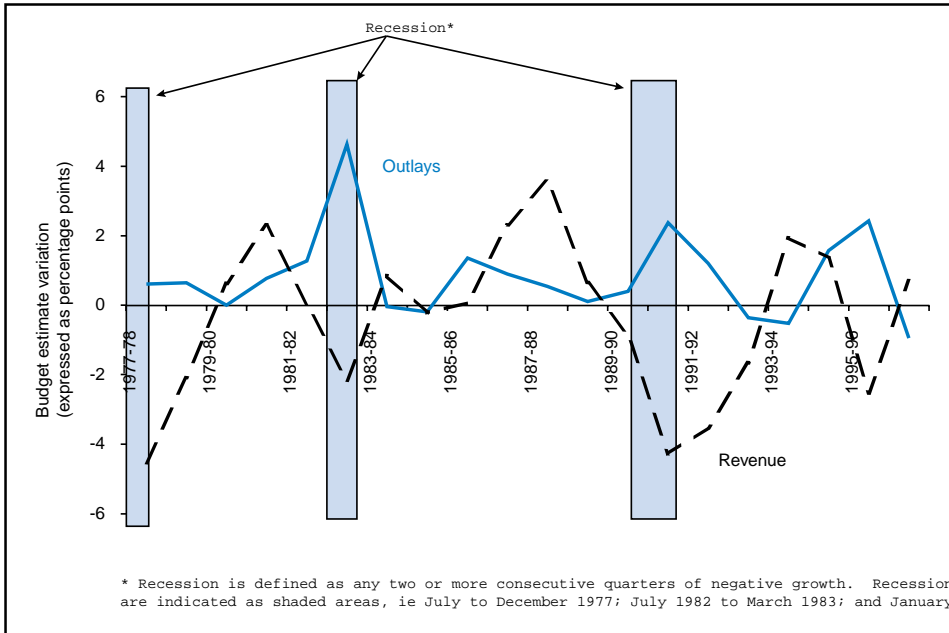
¹⁸ The standard deviation is a measure of how widely Budget estimate variations are dispersed from the average value (mean).

¹⁹ The root mean squared variation like the standard deviation is a statistical measure of dispersion. However, this measure is preferred as it attaches greater weight to variations of greater magnitude.

²⁰ Statistical significance tests whether a variation could have arisen simply by chance or reflected a deliberate bias.

Figure 2.2

Variation of Budget growth estimates from outcome: 1977–78 to 1996–97



Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

2.8 Figure 2.2 indicates a tendency within Commonwealth Budgets to under-estimate outlays and over-estimate revenues, particularly during recessions. However, over the 20 year period to 1996–97, the average variation of Budget growth forecasts from final outcome was not statistically significant, 0.84 per cent (under-estimated) for outlays, and -0.37 per cent (over-estimated) for revenues.²¹ These variations include the outlays and revenue implications of post-Budget policy decisions. The associated standard deviations were 1.26 and 2.28 per cent respectively. On this basis, the ANAO concluded that there is no statistical evidence of apparent bias towards under or over-estimation of revenues or outlays.²²

2.9 In terms of the absolute value of variations in outcome from Budget estimate, revenue variations appear, on average, to be larger than those for outlays.²³ For example, the average absolute value of revenue variations was 1.82 per cent compared with 1.05 per cent for outlays.

²¹ See footnote 15.

²² Since the average variations in both cases are less than the standard deviation this implies that the variations could easily have arisen by chance and do not reflect deliberate bias.

²³ Here we are only interested in the size of the variation rather than the direction of any bias toward under or over-estimation.

However, the difference between the mean of the outlay and revenue variations is -0.77 per cent. The standard deviation is 1.50 per cent, i.e. double the estimate of the mean. This implies that statistically there is no difference between the two sets of variations.

2.10 The accuracy of Budget estimates over time has not displayed any clear trends. Figures 2.3 and 2.4 demonstrate the relative volatility of the variations that occur within outlays and revenue estimates as a whole, and in some of the individual elements that go to make up those estimates. Figure 2.3 compares five-yearly average absolute variations in Budget outlays with those in the (then) Social Security portfolio (a subset of overall outlays). Figure 2.4 compares growth forecasting efficiency for specific heads of revenue against that of total revenue.²⁴ In both cases, there is no clear pattern to the variation occurring in regard to overall Budget estimates, or of the individual portfolio or items.

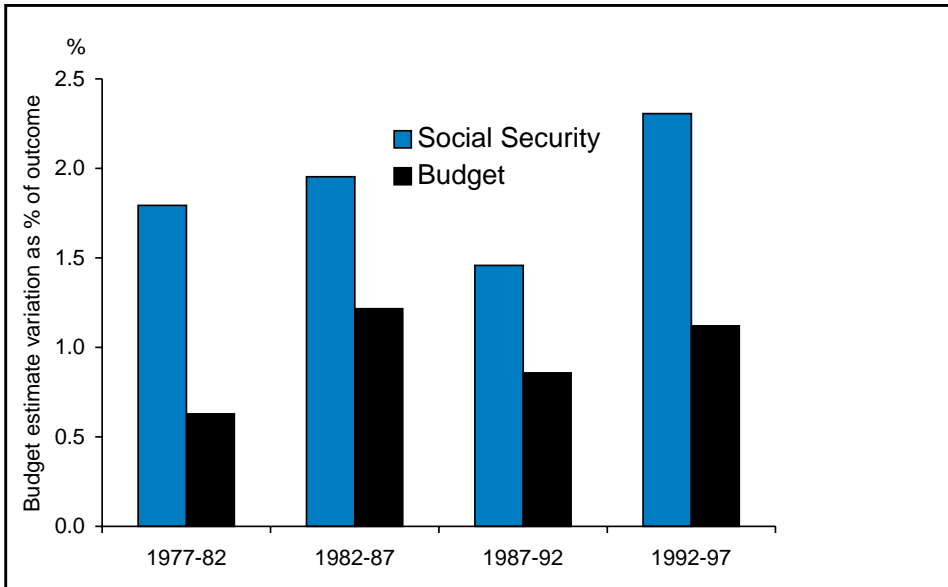
2.11 Analysis of revenue and outlays variations over the 20 years to 1996–97 found no statistical evidence of any improvement or deterioration in Budget forecasting accuracy over time. The irregular movement in forecast accuracy over time suggested by Figures 2.3 and 2.4 may reflect the marked impact of external influences on Budget estimates and outcomes (for example, changes in policy and economic parameters) rather than necessarily being explained in terms of administrative effectiveness. The relatively greater volatility in revenue estimates in general, and certain heads of revenue in particular (such as company tax and customs duty), is to be expected to some degree given the impact of such factors.

2.12 Finding: On the basis of analysis of estimating performance over the 20 year period to 1996–97, the ANAO concluded that there is no statistical evidence of apparent bias towards under or over-estimation of revenues or outlays. In absolute terms, the size of variations in outcome from Budget forecast for revenue estimates is greater than for outlays, but the difference is not statistically significant.

²⁴ Root Mean Square Error (RMSE) is a statistic that is commonly used for comparing forecasting efficiency—that is, the variability of Budget estimates with respect to actual outcomes. RMSE is considered a useful statistic as it places greater weight on variations of greater magnitude. This incorporates the idea that variability in forecasting performance is undesirable.

Figure 2.3

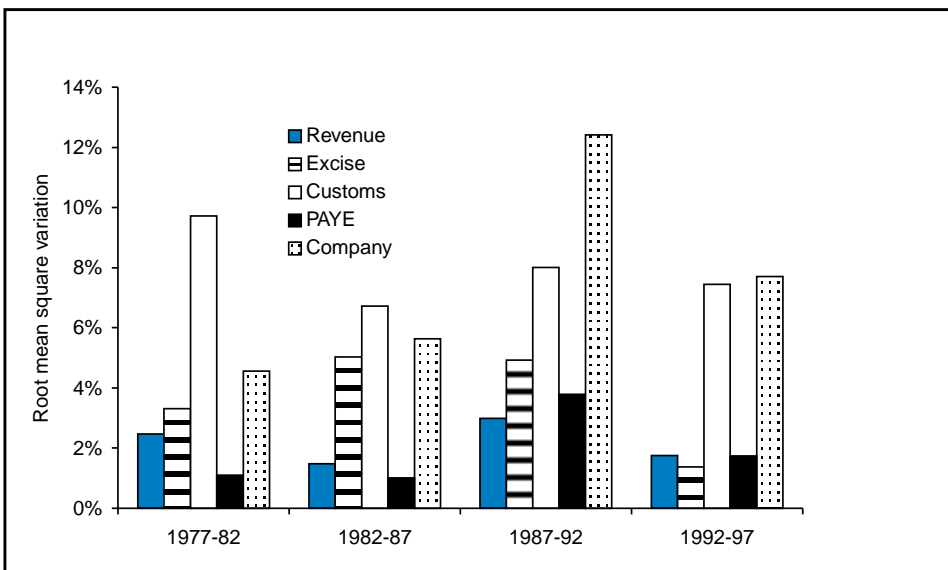
Absolute variation in outlays—Social Security compared with total Budget
 (Average outlay estimate variation as percentage of outcome in year of estimate)



Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

Figure 2.4

Budget forecast variation for selected heads of revenue
 (variation expressed as the difference in percentage points between Budget forecast growth and outcome)



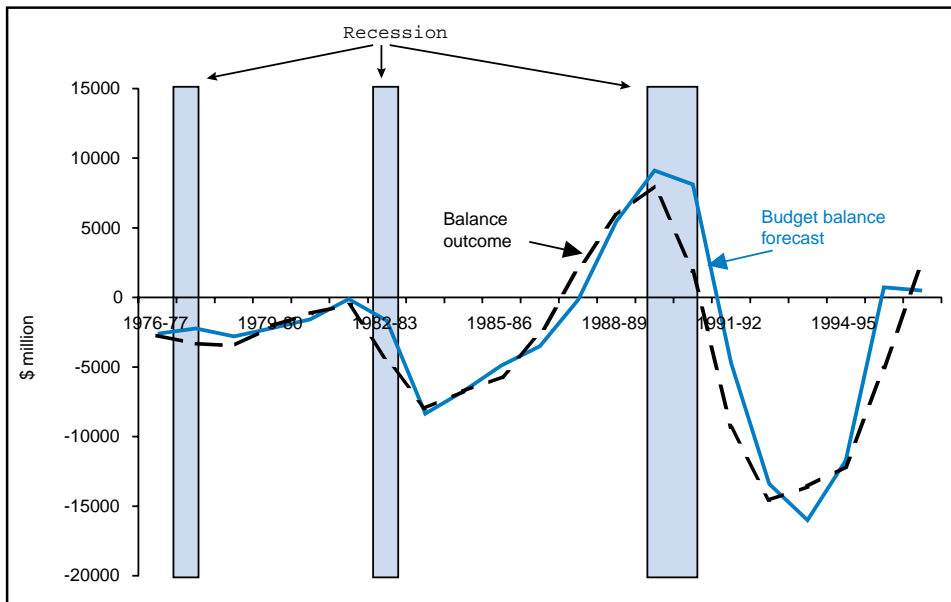
Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

Budget balance estimates

2.13 Analysis over the 20 year period shows that overall Budget estimates appear robust. Figure 2.5 shows the Budget balance forecast at the time of the Budget since 1976–77, together with the headline Budget balance finally achieved in each year. The published Budget forecasts track the Budget outcomes fairly closely although there are some timing differences.

Figure 2.5

Estimates of the Budget balance forecast versus Balance outcome



Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

2.14 Although overall Budget estimates appear robust, there are some areas that have higher volatility than others. For example, in absolute size the variation in outcomes from Budget estimates in Social Security portfolio outlays has been consistently larger than that for total Budget outlays (Figure 2.3). Figure 2.6 sets out the contribution made by each portfolio to the overall absolute variation in outlays from Budget forecast in 1996–97. The relative contribution of a particular portfolio is calculated over the sum of all variations regardless of sign.

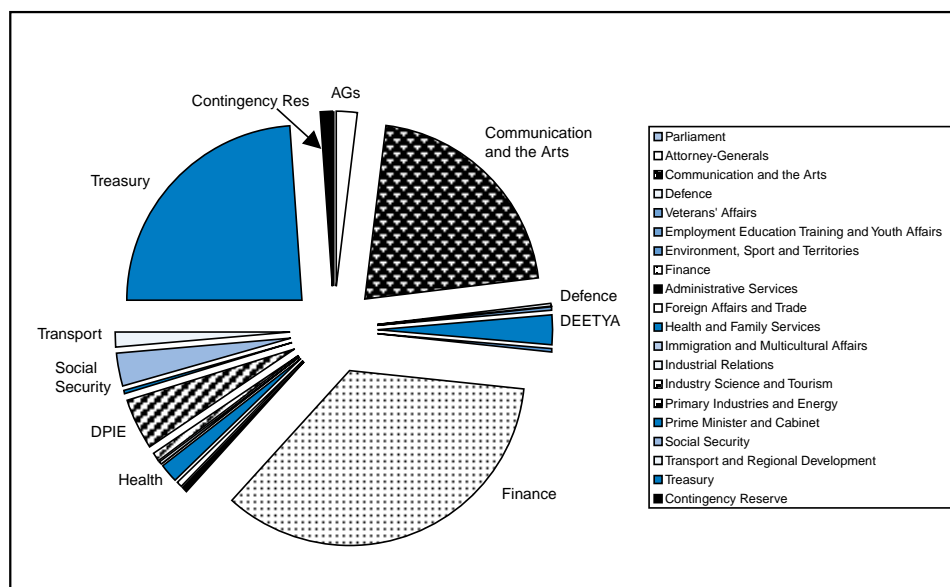
2.15 In 1996–97, the Finance, Treasury and Communication and the Arts portfolios made the most significant contributions to the overall absolute variation. The relative contribution made by each portfolio is a function of the magnitude of the variation and the size of the portfolio. A relatively large contribution, therefore, does not necessarily imply a relatively large forecasting error. For example, although the contribution

of the Treasury portfolio to the overall variation is significant, the difference between forecast outlays growth and actual growth in 1996–97 for the Treasury portfolio was -14.57 percentage points. The variation was +901.25 percentage points in the case of the (then) Finance portfolio, and -782.79 percentage points in the case of the (then) Communication and the Arts portfolio.

2.16 The significant contribution made by the Finance portfolio to the overall Budget outlays forecast variation in 1996–97 resulted from problems in accurately estimating the size and timing of asset sale receipts. As such receipts are classified as negative outlays, variations in outcome from estimated asset sale receipts impact on the accuracy of outlays estimates. Estimates variations of this nature have been apparent since the late-1980s but were accentuated in the 1990s and are associated with significant volatility in the quantum and timing of receipts from the sale of Commonwealth assets.

2.17 The 1996–97 outlays variation in the Communication and the Arts portfolio is largely related to the receipt of a \$3 billion special dividend associated with the recapitalisation of Telstra. As with the proceeds of asset sales, this transaction was treated as a negative outlay. Because no provision for the receipt was included in the Budget estimates, this contributed significantly to the overall Budget outlays estimate variation for 1996–97.

Figure 2.6
Portfolio analysis of contribution to overall outlay variation in 1996–97

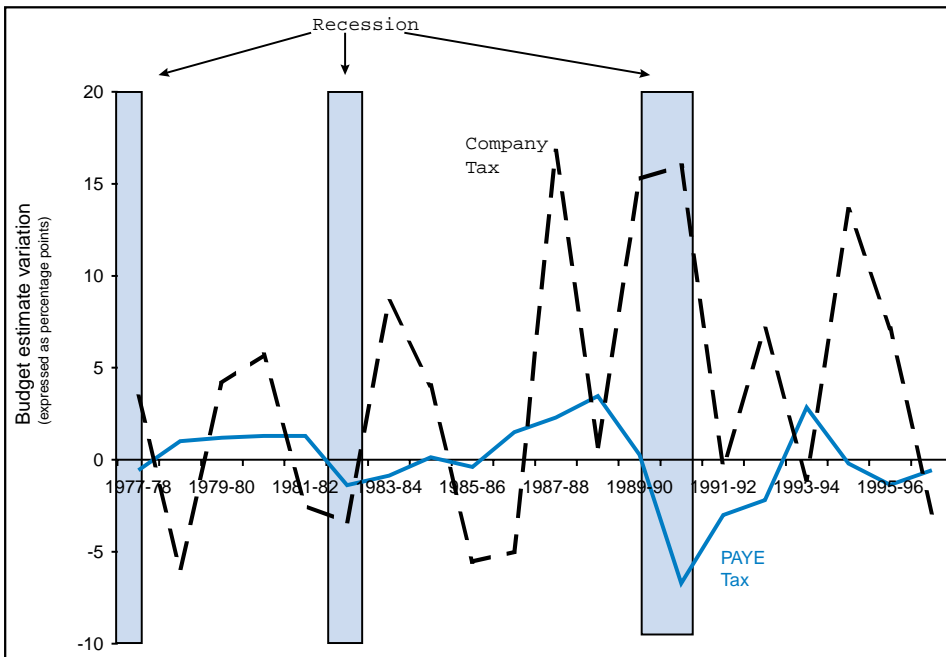


Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

2.18 As highlighted in Figure 2.4, certain heads of revenue appear to display greater variability over time in terms of the difference between Budget estimate and outcome. Company tax and customs duty were the most volatile revenue items over the 20 year period analysed.²⁵ The relative volatility of company tax is highlighted in Figure 2.7 which compares the Budget estimate variation for company tax over the 20 year period with that for PAYE tax estimates.²⁶

Figure 2.7

Estimates performance over time—company tax and PAYE tax
(Variation between Budget forecast of growth and the outcome)



Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

2.19 Prevailing economic conditions can also contribute to volatility in the accuracy of Budget estimates. Figure 2.8 illustrates that there is a sharp increase in forecast variation during a recession. This reflects the difficulty in predicting the timing and extent of economic slowdown and other influences on the integrity of the Budget. An inherent problem in economic forecasting has been correctly estimating major turning points in the economic cycle.

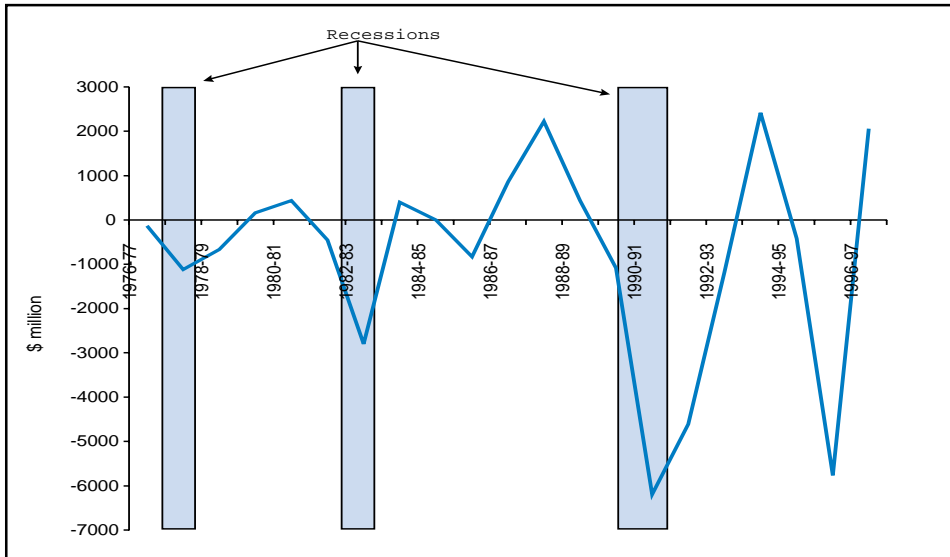
²⁵ The root mean square error over the 20 year period to 1996-97 for revenue overall was 2 per cent, compared to 8.152 per cent for company tax and 8.05 per cent for customs duty.

²⁶ The average Budget estimate variation for PAYE tax receipts over the twenty year period was -0.1 percentage points with a standard deviation of 2.27 percentage points; average variation for company tax receipts was 3.79 percentage points with a standard deviation of 7.40 percentage points.

Figure 2.8

Variation from forecast headline Budget balance

(Difference in current dollars between the outcome and the forecast Budget balance)



Source: Analysis by Centre of Policy Studies, Monash University commissioned by ANAO

2.20 Finding: There is a tendency to under-estimate outlays and over-estimate revenues during recessions, resulting in variation in the expected headline net fiscal position of the Commonwealth. This appears to be largely attributable to the volatility in major economic variables and the effects of changes in government policy during recessions rather than an inherent problem in the Budget process itself.

Internal estimates performance assessment

2.21 Responsibility for the central coordination of budgetary processes is shared between DOFA and Treasury, with PM&C also playing a role. The Committee of Budget Officials is formed by representatives from these three agencies and provides a mechanism to coordinate budgetary processes. DOFA and Treasury monitor the accuracy of Budget estimates, both through periodic updates of estimates during a given year and through post-year performance assessment and analysis. These coordinating agencies have also undertaken review of budgetary processes.

2.22 The central coordinating departments undertake *post-mortems* after each Budget. Typically, these are done within each coordination department in consultation with key Ministers and their staff. In some cases there is considerable consultation with other agencies. The focus is on support of central decision-making processes with an emphasis on

outlays issues, resource allocation processes and instilling fiscal discipline. The Budget *post-mortems* and the sharing of experiences in the Committee of Budget Officials have allowed for continual refinement of lessons learned in developing budgetary processes.

2.23 DOFA has also conducted a series of reviews of outlay estimates processes including the 1992 *Keeping the Score* study, which was a comprehensive evaluation of estimates processes in the then Department of Finance. It included comparisons with a number of overseas jurisdictions and led to the development and publication of performance indicators for outlays estimates.

2.24 DOFA now publishes performance information on the accuracy of outlay estimates in its annual report. The performance targets have been set at quite stringent levels to encourage good performance. DOFA achieved only one of the four targets after adjusting for the impact of new policy decisions and economic parameter changes in both 1995–96 and 1997–98 but achieved two of the targets in 1996–97 and missed a further target by a small margin (Figure 2.9).

2.25 Treasury does not publish quantitative information on revenue estimates performance in its annual report. However, it does analyse its revenue estimating performance internally. When significant forecast variations become apparent (such as in relation to the mid-year company tax estimate in 1996–97) corrective action was taken to establish the sources of variations and propose remedial action.

2.26 Finding: DOFA publishes estimates targets which are quite stringent and, in the three years ended 1997–98, the targets were only partially achieved. Treasury does not publish estimates targets.

Figure 2.9

DOFA measurement of accuracy of outlays estimates, excluding decisions and the effect of economic parameter changes

Indicator	Target %	Outcome %		
		1995–96	1996–97	1997–98
i) Difference between first forward year estimate and final outcome	1.0	0.4	0.8	0.2
ii) Difference between Budget estimate and final outcome	0.5	1.5	0.9	0.7
iii) Difference between revised estimate at Mid-year Review and final outcome	0.3	2.9	0.2	1.2
iv) Difference between revised estimate at Budget time (May) and final outcome	0.25	n/a	0.27	0.60

Source: 1997–98 Annual Report, Department of Finance and Administration

2.27 Since 1992, there has been significant review and further development of the outlays estimates function. For example, the 1995 *Future of the Estimates* Review has seen DOFA adopt a risk-based approach to the construction of Budget estimates, with increased reliance on developing assurance over estimates constructed by the spending agencies themselves. DOFA's 1997–98 Annual Report noted that it has initiated a major reform process with a view to improving further the accuracy of the estimates. This involves greater decentralisation of the estimates to agencies. DOFA will remain responsible for ensuring the accuracy of the estimates to Government, and is introducing a quality assurance framework to manage the decentralised construction of estimates. This is discussed further in Chapter 3.

2.28 Treasury has undertaken a review of the processes used in the development of the 1998–99 Budget, including the coordination and production of the budget papers and associated material, to identify areas for improvement. The Department's 1997–98 Annual Report indicated that the results of this review will assist in the planning process for the 1999–2000 Budget.

2.29 The selected line agencies considered in the preliminary study regularly monitor performance against estimates to highlight any variations to the major budget items. In 1997–98, ACS markedly improved its monitoring of excise revenue and this now provides a basis for liaison on the estimates with Treasury (responsibility for excise revenue was transferred to the Treasury portfolio in the Administrative Arrangements Order 21 October 1998). The monitoring of revenue from customs duty is less developed in this respect. ACS advised the ANAO that it is currently trialing a customs duty forecast model which, providing the model performs adequately, will be used as a basis for liaison on customs duty estimates with Treasury.

2.30 As part of the move to formally decentralise responsibility for estimates construction, the (then) DSS undertook a joint review with DOFA of methods for estimating program expenditures. There has been modification to some of the main DSS estimates models to improve their ability to predict changes to client numbers.

2.31 Finding: DOFA, Treasury and the line agencies reviewed have undertaken performance monitoring and evaluation activities in relation to budgetary processes and resulting estimates.

3. Budget Process Developments

This chapter discusses the reforms currently underway within the Commonwealth resource management framework, the implications those reforms will have for the construction of future Budget estimates and the basis for the ANAO's decision not to proceed to a full performance audit of the management of Budgetary processes at this time.

Accrual budgeting reforms

3.1 Traditionally, resource management within the Commonwealth public sector has involved a focus on annual cash appropriations and outlays, allocated to departments and agencies on a program basis. The annual Commonwealth Budget estimates of revenues, outlays and forecast Budget balance have been based upon estimates of cash flows within the relevant financial year.

3.2 Increasingly in recent years, annual and whole-of-government financial statements have been prepared on an accrual basis. Consolidated financial statements for the year ended 30 June 1997 were the inaugural audited accrual-based statements for the Commonwealth. However, the adoption of accrual reporting, which was strongly supported by the ANAO, has been largely separate from the overall Budget process which to date has been cash-based.

3.3 In April 1997, as part of its public service reform agenda, the Commonwealth Government decided to implement an accrual-based, outcome and output-focused resource management framework for the Commonwealth. The new framework will change significantly how and what is measured within the Commonwealth public sector for budgeting, accounting and reporting purposes.

3.4 This will represent a significant change in the accounting basis for the preparation of Budget estimates. Aggregation of estimates produced by individual agencies (prepared for both departmental and administered items) will result in Budget estimates provided in terms of revenues and expenses (resulting in a projected operating position for the Commonwealth—ie operating deficit or surplus), and assets and liabilities (resulting in a projected net equity position for the Commonwealth).

3.5 The reforms will improve the linkages between plans and reported performance by providing greater transparency of the Government's financial position and a more accurate assessment of what it costs to

undertake Government activities and services. They also provide an opportunity for streamlining, rationalising and enhancing the budgetary processes and the information provided to Parliament in consultation with the Parliament. The first accrual budget of the Commonwealth Government will be brought down in May 1999 for the 1999–2000 Budget. The timetable for the preparation of the 1999 Budget is set out in Figure 3.1.

Figure 3.1

Accrual Budgeting Project Implementation timetable

October 1998	Trial Accrual Budget completed
30 October 1998	Agencies initial outcomes and output structures developed under the new framework.
30 November 1998	Agencies enter initial accrual estimates into AIMS.
May 1999	First accrual Budget 1999–2000
August 1999	Monthly ex-post accrual reporting by agencies commences.
October 2000	Annual reports produced by agencies under the new framework.

Source: 1997–98 Annual Report, Department of Finance and Administration

Decentralisation of Budget estimates

3.6 An integral part of the accrual budget reform is to be the decentralisation to agencies of the responsibility for constructing and monitoring the Budget estimates. All Commonwealth agencies now have, or are in the process of introducing, accrual-based financial management information systems (FMIS) to enable them to support the new framework. At a whole-of-government level, DOFA is replacing the existing cash-based financial management information system, Finance Information on Resource Management (FIRM) with the Accrual Information Management System (AIMS).

3.7 Together with a number of other resource management reforms, the introduction of AIMS, which is being progressively introduced between November 1998 and July 1999, will see Commonwealth agencies becoming responsible for:

- the maintenance of detailed transactional information in regard to payments and receipts on their Departmental FMIS (including the production of full accrual financial statements);
- the generation and entry of Budget estimates into AIMS, and maintaining estimates in the system; and
- the management of departmental cash requirements.

3.8 DOFA will then use AIMS to consolidate Budget and estimates information to report at the general government sector level. This movement away from the traditional central control of detailed transactional and estimates information reflects a wider recognition of the need for change in the role of central budget agencies. This was noted in the 1997 report by the Management Advisory Board (MAB), *beyond bean counting: Effective Financial Management in the APS: 1998 & Beyond*, on which much of the current reform process is based. That report referred to a comment by Dr Allen Schick noting that:

*The traditional role of the central budget office is incompatible with the management reforms unfolding in various Member (OECD) countries. The traditional role of the budget office has been to function as a central command and control post, specifying the items of expenditure, monitoring compliance with regulations, ensuring that the inputs are those agreed in the budget, and intervening as deemed appropriate. This role cannot coexist with the discretion accorded managers in the new public management.*²⁷

3.9 Under the revised Administrative Arrangements Order of June 1998, DOFA's previous responsibility for 'expenditure and staffing estimates' was redefined as responsibility for 'budget policy advice and process'.²⁸ DOFA has also undertaken a major restructure of its Budget Group. This will continue over the period of the next Budget cycle with the recent consolidation of the Accrual Budgeting Project into the Budget Group. DOFA's 1997–98 Annual Report indicated that the re-engineering of its Budget Group is designed to take advantage of, and make best use of, the new information becoming available with the introduction of accrual budgeting. The redesign teams established are required to focus on:

- aggregate financial discipline—keeping the numbers under control;
- allocative efficiency—spending money on the right things; and
- technical efficiency—looking at how the Budget can assist the delivery of services.

3.10 Although agencies will now enter their own accrual estimates into AIMS, DOFA has ultimate responsibility for assuring Cabinet that the estimates are accurate (with Treasury retaining responsibility for revenue estimates). This will be managed through the development of quality assurance (QA) systems involving DOFA entering into a series of

²⁷ Dr A Schick *The Changing Role of the Central Budget Office* OECD Working Paper 1997, quoted in *beyond bean counting: Effective Financial Management in the APS: 1998 & Beyond*, MAB, December 1997.

²⁸ This change was continued in the current (October 1998) administrative arrangements.

Memoranda of Understanding (MOU) with agencies. To facilitate this decentralisation, in October 1997 DOFA formed a working group to develop guidelines and procedures to assist agencies to prepare decentralisation plans, quality assurance procedures and MOUs. DOFA advised the ANAO that it now has MOUs in place with all agencies for the operation of joint QA systems.

Risk management in transition to accrual accounting

3.11 There are a number of risks to be managed in the transition to accrual budgeting. Of importance is the readiness of line agencies in terms of appropriate financial management systems and skills (and understanding of the respective roles and responsibilities in the new framework) to provide accurate and reliable statistical information upon which to base accrual estimates.

3.12 During 1998 DOFA conducted a trial accrual budget with a number of agencies. The outcomes of that trial indicated that significant further development was required in order to successfully implement the budget reforms, both in terms of agency readiness and in the guidance material and structures provided to agencies by DOFA. The trial accrual budget did not attempt to comprehensively address issues such as the performance information to be provided by agencies for each output to be provided.

3.13 Similarly, it is important that Ministers, other members of Parliament and stakeholders are properly informed of the implications of moving to the accrual basis of budgeting and its likely impacts on estimation. DOFA advised the ANAO that to inform these constituencies of the changes in prospect it is conducting a program of detailed briefings for Senators, Members, their staff and key Parliamentary committees.

3.14 It is likely that there will be greater volatility in the accuracy of the Budget estimates in the early years of application of accrual budgeting as the accruals basis of estimates is bedded down. An issue that will require close management by DOFA and Treasury is ensuring that there is consistency in the accounting concepts and treatments used in the construction of both the accrual Budget estimates, and the agency and whole-of-government financial statements that will be used to measure outputs and outcomes against those Budget estimates.

Conclusions

3.15 On the basis of the quantitative and qualitative analysis of the Budget process undertaken during the study the ANAO concluded that

there are no apparent systemic problems in the cash-based estimating processes in the agencies reviewed that would, in themselves, lead to material statistical inaccuracies in the Budget's projected outcomes. Had the analysis shown apparent persistent material bias in Budget estimates, the ANAO would have undertaken further analysis looking at the likely causes of that bias which would have involved consideration of specific post-budget policy decision effects.

3.16 Key findings arising from the preliminary study were that:

- time series data produced by DOFA and Treasury indicate that, for the period 1986–87 to 1991–92, Commonwealth outlays and revenue estimating performance compared favourably with those of comparable OECD countries and of State Governments;
- on the basis of analysis of estimating performance over the 20 year period to 1996–97, the ANAO concluded that there is no statistical evidence of apparent bias towards under or over-estimation of revenues or outlays. In absolute terms, the size of variations in outcome from Budget forecast for revenue estimates is greater than for outlays, but the difference is not statistically significant;
- there is a tendency to under-estimate outlays and over-estimate revenues during recessions, resulting in variation in the expected headline net fiscal position of the Commonwealth. This appears to be largely attributable to the volatility in major economic variables and the effects of changes in government policy during recessions rather than an inherent problem in the Budget process itself;
- DOFA publishes estimates targets which are quite stringent and, in the three years ended 1997–98, the targets were only partially achieved. Treasury does not publish estimates targets; and
- DOFA, Treasury and the line agencies reviewed have undertaken performance monitoring and evaluation activities in relation to budgetary processes and resulting estimates.

3.17 In April 1997, as part of its public service reform agenda, the Commonwealth Government decided to implement an accrual-based, outcome and output-focused resource management framework for the Commonwealth. The first accrual budget of the Commonwealth Government will be brought down in May 1999 for the 1999–2000 Budget.

3.18 The move to accrual budgeting represents a significant change in the accounting basis for preparing the Budget estimates, replacing the cash-based, program-focused approach adopted to date. An integral part of the accrual budgeting reform is to be the decentralisation to agencies

of responsibility for constructing and monitoring the Budget estimates, within a quality assurance framework managed by DOFA.

3.19 Accrual budgeting will introduce a new dimension in managing the statistical accuracy of Budget estimates in ensuring that there is consistency in the estimating and accounting concepts used in the construction of both the accrual Budget estimates, and the agency and whole-of-government financial statements that will be used to measure outputs and outcomes against those Budget estimates. There is also an important role for DOFA in promoting the reforms and informing Ministers, other members of Parliament and stakeholders of the implications of the changed accounting basis for the Budget estimates and its likely impacts on estimation. The Department advised the ANAO that it has put in place a program to inform these constituencies of the changes in prospect.

3.20 Due to the satisfactory long-run performance by DOFA, Treasury and the line agencies reviewed in the construction of cash-based Budget estimates and the prospective changes under the accrual budgeting reforms, the ANAO has decided not to proceed with a full performance audit of the management of Commonwealth budgetary processes at this time.

Agency comments

3.21 Agencies generally supported the preliminary study's findings concerning the cash-based budgetary estimates processes. DOFA, ACS and DFACS supported the report's findings about past Commonwealth budgetary processes. DFACS advised that it is continuing to seek improvement in the accuracy of its estimates forecasts wherever possible. PM&C expressed concern about the explanation of statistical variations contained in the report. Looking ahead, DOFA agreed with the report's assessment regarding the opportunities presented by the accrual budgetary reforms.

3.22 Treasury advised the ANAO that:

Treasury welcomed the opportunity to participate in the preliminary ANAO study into the management of Commonwealth budgetary processes and was satisfied with the processes involved in the study. Treasury endorses the outcome of the study, that there has been a satisfactory long-run performance in constructing cash-based Budget estimates.

3.23 DOFA advised the ANAO that:

The Department of Finance and Administration supports the report's findings about past Commonwealth budgetary processes and notes its

conclusions about future processes following the move to accrual budgeting. In particular we note the report's conclusions that the accrual budgetary reforms will provide 'greater transparency of the Government's financial position and a more accurate assessment of what it costs to undertake Government activities and services' and that the reforms provide an 'opportunity for streamlining, rationalising and enhancing the budgetary processes and the information provided to Parliament'.

The Department of Finance and Administration agrees with this assessment. The new accrual-based, outcome and output focussed resource management framework will change significantly how and what is measured within the Commonwealth public sector for budgeting, accounting and reporting purposes. We believe that the framework is a major step forward in improving financial clarity, accountability and performance assessment. The accrual budgeting emphasis on clearly defined deliverables and full costs will result in better financial and management practice, thereby improving overall public sector performance and benefiting the whole community.

3.24 The ACS advised the ANAO that it considers the preliminary study to be a fair and accurate reflection of the budgetary processes for the ACS. DFaCS advised the ANAO that it is *"pleased that (the audit) has found our approach to budgetary processes satisfactory. Nevertheless we are continuing to seek improvement to the accuracy of our estimates forecasts wherever possible."*

3.25 PM&C commented that:

PM&C recognises the inherent difficulty in deriving budget projections. The Department has had no concerns about the cash based budget process or the results of the cash based projections.

PM&C considers that the ANAO statistical analysis would have been more robust if post-budget policy decisions had been specifically excluded in assessing the evidence of "systemic bias". Budget projections are done on a "no policy change basis". Over the period under examination there are instances of substantial post-budget policy initiatives which impact on the budget projections (eg the substantial One Nation package announced in February 1992). The ANAO's analysis compares "no policy change" estimates with final outcomes that include policy changes. PM&C notes that the ANAO acknowledges that a more substantial analysis (beyond the preliminary stage) would have included consideration of specific post-budget decision effects. It is PM&C's a priori view that such an analysis would have found that the budget projections have been even more reliable than the results of the ANAO's preliminary analysis suggests.

3.26 ANAO comment: The ANAO notes that post-Budget policy decisions are likely to have been made in the context of the overall fiscal outcomes announced by the then Government and/or of particular events or the economic imperatives of the time. The actual outlays and revenue effect of policy decisions taken after the tabling of the Budget are included in the variations considered in the ANAO analysis, with the out-year effects incorporated into subsequent Budget estimates.

A handwritten signature in black ink, appearing to read 'P. J. Barrett', written in a cursive style.

Canberra ACT
5 May 1999

P. J. Barrett
Auditor-General

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