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Company tax receipts forecasts and deviations in Australian budgets from 2013-14 to 2017-18: Assessing the quality of government justifications

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Forecasting tax revenue is an important government element of budgeting. Forecasting is also difficult to do, even by well-resourced countries with budget institutions, data and economic and modelling capacity. fiscal Different challenges arise for forecasting of different kinds of taxation and non-taxation revenue. and for overall revenue. This report presents a case study of company tax receipts forecasts and deviations in Australian (national) budgets for the last five completed financial years from 2013-14 to 2017-18, in the context of overall taxation receipts forecasts. We identify the size of deviations in each year and evaluate the justification provided by the Australian Government for the deviations, based on five criteria developed by the International Budget Partnership (IBP). We also suggest how the Government can improve the way it reports and justifies company tax deviations in the future.

Company tax forecasts, outcomes and deviations

Australian Government budgets including revenue forecasts are produced by the Australian Treasury for financial years ended 30 June, in relation to the budget year, and three additional years (the forward estimates period). We set out in Table 1 for the last 10 financial years, the forecast estimate of company tax receipts (col. 2) for the budget year, and the final outcome of company tax receipts for that

year (col 3). In column 4, we identify the forecast deviation, or error, for company tax receipts in millions of dollars and as a percentage. We present the company tax forecast in context of total forecast taxation receipts in Columns 5 to 8 of Table 1. Columns 5 and 6 present the forecast and outcome for taxation receipts in each financial year and the deviation in total tax forecasts. In Column 8, we identify the contribution of the company tax deviation to the total tax deviation. In most years, the company tax deviation is a substantial share of the total tax deviation.

For example, in 2015-16, the forecast for company tax receipts was \$68,200 million (\$68.2 billion) and the final outcome was \$62,897 million (\$62.9 billion). This resulted in an overestimate of \$5,303 million, or 7.78% of the forecast. In the 2015-16 financial year, the company tax deviation comprised nearly 65% of the total tax deviation.

Recognising the issue, in 2012, the Treasury commissioned a major 'health check' review on its economic and revenue forecasting process and performance (Treasury (2012), *the 2012 Review*). The 2012 Review concluded that Australia's budget forecasts of tax revenue exhibit 'little evidence of bias' and are 'reasonably accurate' (p. xv). However, the review suggested several improvements to company tax receipts forecasting. ² One recommendation was for Treasury to adopt

¹ The Treasury is the only agency authorised to carry out revenue and economic forecasting for Australia. The Parliamentary Budget Office (PBO) must use the economic forecasts and parameters and fiscal estimates contained in the most recent Australian Government Economic and Fiscal Outlook for the forward estimates period and will use the parameters underlying its ten year projections for longer time periods.

² The Treasury uses a 'base plus growth' methodology to estimate future tax receipts. Australia's company income tax is imposed on corporate operating profits and capital gains and there are two modelling exercises involved in forecasting receipts, the first for company income tax on profits and the second for capital gains tax (CGT) paid by companies. However, these two forecasting elements are not presented separately in budget documents because CGT is not separately identified in company tax collections by the Australian Taxation Office (ATO). Further information about company income tax forecasting is in the 2012 Review Appendix A, pp. 64-65; for further information about CGT forecasting, see Clark (2014).

three-sector model that better а acknowledges the different characteristics of mining and finance sectors compared to the rest of the economy. recommendation was implemented in the 2013-14 Budget forecasts.³ There were two further reviews in 2016 and 2017, respectively, that each sought to improve Treasury's capabilities in forecasting macroeconomic indicators, which serve as underlying parameters for forecasting tax revenue.4 Despite these modifications, as indicated in Table 1, forecast errors were still significant in 2013-14, 2014-15 and 2015-16.

When the 2017-18 Budget was tabled, there were calls in the media for the Treasury to be stripped of its forecasting function, and economists questioned the validity of its forecasts. 5 commentators argued that biased budget forecasts lead to misguided fiscal choices and make it easy for politicians to avoid making tough decisions, particularly at a time when the Australian budget faced a prolonged period of deficits (Daley and Wood, 2017). Company tax receipts grew more rapidly in 2017-18 but nothing indicates that the significant deviations in tax forecasts have eliminated. In contrast to the recent decade of over-estimates, the previous decade from 1996 to 2007 saw consistent underestimating of company tax receipts (Fisher and Kingston 2017b).

³ Treasury (2013), 'Statement 5: Revenue', Budget Paper no. 1: Budget strategy and outlook 2013-14, p. 42.

Research sources and methodology

We review published government justifications in budget documents for deviations from forecasts and assess against five IBP criteria to judge whether they are adequate. We check our understanding of the issues and to identify any non-public reasons for company tax receipt deviations, we carried out a discussion with the Parliamentary Budget Office.⁶

To identify government justifications, we look at three documents: Budget Paper no. 1: Mid-Year Economic and Fiscal Outlook (MYEFO): and Final Budget Outcome. The Budget Paper no. 1 is the main budget document usually tabled in Parliament in May before the financial year commencing 1 July. It presents budget estimates and discusses the underlying economic forecasts. 7 The chapter on 'Forecasting Performance and Scenario Analysis' discusses performance of current year forecasts and refers to Statement 5 on tax revenue.8

Budget Paper no. 1 accounts only for deviations incurred up until the tenth month of the current year. The MYEFO, usually published in December half way through the financial year accounts for deviations during the first half of that year. For deviations relating to the final two months of the financial year, the Final Budget Outcome published in September after the

for comment. The PBO provided comments on factual statements only. We have not received any comment from other agencies at the time of submission of this report.

⁴ Tease (2015) (*the 2015 Review*); Murphy (2017) (*the 2017 Review*).

⁵ B Potter, 'It's time to strip Treasury of forecasting: Bob Gregory', Australian Financial Review (2017), https://www.afr.com/news/its-time-to-strip-treasury-of-forecasting-bob-gregory-20170529-gwfv8z; see Fisher and Kingston (2017): Sinning (2017).

⁶ We approached the Treasury's Revenue Group, the Australian National Audit Office and the Parliamentary Committee on Tax and Revenue and the PBO and provided a draft of this report to them

<sup>Underlying economic forecasts are in 'Statement
Economic Outlook' of the</sup> *Budget Paper 1*.

⁸ Budget Paper no. 1, 'Forecasting Performance and Scenario Analysis' (usually Statement 7 or 8) presents scenarios to illustrate the sensitivity of estimates to changes in economic forecasts and assumptions. Factors that may influence budget outcomes are also discussed in the 'Statement of Risks' (usually Statement 8 or 9).

end of the financial year provides information.

Summary of findings: Justifications for company tax deviations

We present company tax deviations for the last decade in Table 1, but carry out a detailed analysis of the justifications for company tax deviations for the last five years. Government justifications for company tax receipts deviations for 2013-14 to 2017-18 are extracted in Appendix A to this report and our detailed evaluation of justifications in budget documents is in Appendix B.

During 2013-14 to 2017-18, economic reasons, especially fluctuations in global commodity prices, were the most cited reason in budget documents for deviations in company tax receipts because of their effect on corporate gross operating surplus. This has long been acknowledged as a key driver of volatility in company revenues. 9 The 2012 Review concluded that the mining sector, in which profits depend heavily on commodity prices, has always been a source of forecast errors in macroeconomic and revenue estimates; these fluctuations therefore have impacts on the Australian economy as a whole (Treasury 2012, pp. 43-64).

For example, in 2014-15 and 2015-16, commodity prices were lower than expected and this led to over-estimates of company tax receipts by 7.58 per cent and 7.78 per cent respectively. Prices were stronger in 2016-17 but this did not lead to an immediate strong growth in company

receipts; however, it may have moderated the deviation, as the outcome was not significantly different from the forecast in that year. Budget Paper no. 1 *MYEFO* 2017-18 and the 2016-17 explained the delayed effect of the commodity price increase, as arising from the company tax instalment payments system and the offsetting of previous years' accumulated losses (Figure 1). 10 In the large payments system, companies (including mining companies) pay tax in monthly instalments based on turnover at a predetermined rate. The final tax return and any balancing payment is settled after the end of the financial year. This means that the full impact of commodity price changes in 2016-17 is reflected in 2017-18. Consistent with this analysis, company tax receipts in 2017-18 were above forecast by 8.73%.

The budget papers refer to additional reasons for deviations between forecasts and outcomes being compliance activity (in 2017-18) and policy decisions (in 2016-17 and 2014-15). A discussion of policy decisions that affect tax revenues is provided in Budget Paper no. 2 and MYEFO, however this concerns their impact on total taxation receipts and not company tax or other heads of revenue specifically. The budget papers also provide a discussion of CGT as a significant source of forecast error for 2013-14, 2014-15, 2015-16 and 2016-17 but the impact on company tax estimates was not specified. No further explanation about the nature of the compliance activity undertaken by the government in 2017-18 is provided in the budget documents.

⁹ Confirmed in our background discussion with the PBO.

 $^{^{10}}$ Treasury (2016a), pp. 41-42; Treasury (2017), p. 20.

Table 1: Forecast and deviations for company tax receipts from 2007-08 to 2017-1811

Financial Year	Forecast estimate Company tax (\$m)	Final outcome Company tax (\$m)	Deviation Company tax (\$m/ %)	Forecast estimate total tax ¹² (\$m)	Final outcome total tax (\$m)	Deviation total tax (\$m)/ %)	Company tax deviation as share of total tax deviation (%)
2017-18	77,800	84,591	6,791	404,302	418,053	13,751	49.39%
			8.73%			3.40%	
2016-17	69,000	68,390	-610	382,769	379,271	-3,498	17.44%
			-0.88%			-0.91%	
2015-16	68,200	62,897	-5,303	370,140	361,962	-8,178	64.84%
			-7.78%			-2.21%	
2014-15	71,600	66,174	-5,426	360,372	351,675	-8,697	62.39%
			-7.58%			-2.41%	
2013-14	71,650	67,273	-4,377	354,854	338,368	-16,486	26.55%
			-6.11%			-4.65%	
2012-13	73,480	66,911	-6,569	343,107	326,426	-16,681	39.38%
			-8.94%			-4.86%	
2011-12	72,800	66,584	-6,216	321,103	309,943	-11,160	55.70%
			-8.54%			-3.48%	
2010-11	64,160	56,262	-7,898	294,338	280,839	-13,499	58.51%
			-12.31%			-4.59%	
2009-10	53,040	52,209	-831/	259,436	260,973	1,537	-54.07%
			-1.57%			0.59%	
2008-09	71,720	60,391	-11,329/	292,644	272,627	-20,017	56.60%
			-15.80%			-6.84%	

Source: Budget Paper no. 1 and Final Budget Outcome for years 2008-09 to 2017-18, the Treasury. Note: \$AUD (Author calculations).

¹¹ The Australian budget is presented on both a cash and accruals basis. For this report, we utilise only the cash

reported estimates.

12 This refers to Total tax receipts in the budget, which comprise the bulk of Total revenues of the government.

Overall, we find that the budget papers did identify the determinants of company tax receipt forecasts, particularly in identifying commodity prices as one significant factor that changed underlying parameters and caused deviations. In relation to the 2016-17 year, the budget documents also explained why there was no significant forecast error for company tax receipts even though commodity prices were higher

than expected. However, the budget documents lacked a further explanation about why commodity prices deviated from initial predictions and the extent to which this caused a deviation in company tax receipts. The budget documents referred to other factors such as policy decisions and compliance activity affecting tax receipts but did not identify how, and to what extent, this occurred.

Figure 1: Budget Paper no. 1 2017-18, explanatory box on company tax timing

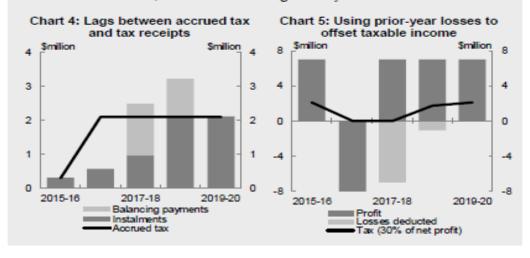
Box 2: Company tax timing

The design of the company tax payments system means that there may be significant delays between companies accruing profit and paying the associated tax liability. For example, in 2011-12 company tax grew by 18 per cent while corporate gross operating profits grew by only 5 per cent in that year but by 11 per cent the previous year. Two key reasons for the delays are the operation of the instalment system and deducting prior year losses.

A company pays monthly tax instalments, calculated using the company's ordinary business income ('turnover') multiplied by a rate determined from the company's last assessed tax return, and a balancing payment around six months after their reporting year ends which is the difference between the sum of instalments already paid and their final tax liability.

Because the company's tax instalments are determined from its turnover, rather than its profit, if profitability increases then the instalments paid may not cover the final tax liability. As a result, a large balancing payment may be required in the following year. Therefore, there can be significant delays between increases in income and payment of the tax liability. This situation is illustrated in Chart 4. For a more detailed example see Mid-Year Economic and Fiscal Outlook 2016-17, Part 3, Box C.

Turning to company tax losses, if a company makes a loss, then the loss can be used in a later year to offset income. Chart 5 illustrates a company that makes a large loss in 2016-17, which is then used to completely offset its taxable income in 2017-18 and partially offset its taxable income in 2018-19. By 2019-20 the company has exhausted its stock of losses and resumes paying tax on its full profit. Deductibility of prior year losses is particularly important for companies that incur substantial costs before income is earned, such as in the mining industry.



Source: Treasury (2017), p. 20.

These gaps may arise from the way in which budget documents are designed and used in Australia. The purpose of the annual Budget Papers is to present the budget plan of the Government and forecasts of revenue for the coming budget

year. They provide a brief evaluation of the past performance of budget forecasting but this is not their main focus. Often, justifications for past deviations are conflated with forward looking discussion (for example, see Figure 2).

Figure 2: Budget Paper no. 1 2016-17, Explanation provided for revision in 2015-16 company tax estimate

Company tax

Company tax receipts are forecast to fall by 2.2 per cent in 2015-16, owing to weaker current year collections, and grow by 6.6 per cent in 2016-17, consistent with increasing corporate profits. Since the 2015-16 MYEFO, receipts are expected to be around \$2.4 billion lower in 2015-16 and \$2.1 billion lower over the four years to 2018-19. This fall in expected tax is primarily due to weaker-than-expected collections in the current year and lowering of the company tax rate for eligible businesses from 2016-17.

Excluding new policy decisions, company tax has been revised down by \$2.4 billion in 2015-16 and up by \$1.0 billion over the four years to 2018-19. Collections for 2015-16 are weaker than expected at MYEFO, primarily owing to lower receipts from the mining sector. This has flow-on impacts to company tax in 2016-17. Higher-than-expected mining profits are not expected to be reflected in increased company tax collections until 2017-18 and 2018-19.

Significant new policies affecting company tax include a reduction in the company tax rate, commencing with a reduction for small businesses, and increasing the small business entity turnover threshold. A more competitive company tax rate will encourage investment, raise productivity, and over time raise real wages and living standards.

In addition, the tax integrity package encompasses measures to reinforce the corporate tax base by preventing multinational corporations from avoiding tax by profit shifting and fighting tax avoidance.

Source: Treasury (2016b), p.11.

Conclusion

In the decade since the 2007-08 Global Financial Crisis, Australian budgets saw over-estimates of company tax receipts for nine years in a row, before recording an under-estimate and higher-than-expected growth in company tax receipts in 2017-18. Many of the deviations in company tax receipts are substantial, as defined by the IBP (higher than 5 per cent), although the overall deviation in total taxation receipts is low, being approximately 3 per cent in most

years. Shortfalls in company tax receipts contributed significantly to the shortfall in total tax receipts, and the deviation in company tax forecasts is a significant share of the total deviation in forecasts in most years. There is evidence that the errors in Australian tax revenue estimating in general, and company tax revenue estimating in particular, are consistent with, or lower, than the error in other comparable countries at least in past years (see, e.g. Muhleisen et al 2005).

The Australian Government does regularly provide justifications for deviations between company tax forecasts and outcomes in its budget papers. However, the justifications are rather brief and ad hoc. Justification of forecasts, deviations and errors is scattered in different sections of the budget papers each year and is hard to find even for a specialist reader.

The Final Budget Outcome report could be improved by consolidating explanations of company tax receipt forecasts outcomes and discussing the reasons for and implications of deviations. To date, there is little public attention paid to the Budget Outcome report because it is released three months after the end of the budget year; most attention is focused on the annual budget papers released before the year commences. However, if the Outcome report provided a clear and consistent evaluation of forecasts. deviations and errors in company tax (and other) receipts every year, we suggest that it would become a useful source for understanding, evaluation and debate of these issues by the legislature and the public.

We observe that since 2017-18, the Outcome report has started to account for whole year deviations in company tax receipts, which is a useful step forward. explanations However, current deviations in the *Outcome* report are often brief and do not identify causal factors or quantify the extent to which each factor causes the deviation. One approach that the Treasury could consider is to emulate the UK Office for Budget Responsibility in providing an annual forecast evaluation report after the end of every budget year (for example, see OBR 2017).

We recommend that the Final Budget Outcome report be established as the main place in which government explanations, justifications and evaluation of company tax forecasts and deviations are provided, in a consolidated, coherent and consistent manner, after the end of each financial year. The different factors contributing deviations between forecasts and outcomes for company tax could be quantified and graphically presented to assist readers in understanding the issues. For the annual budget process, a shorter and more accessible discussion could be presented in Budget Paper 1 released in May.

Appendix A: Government justifications to company tax receipts deviations from 2013-14 to 2017-18

Financial Year	Forecast Error (AUD \$ million)	Forecast Error (%)	Government justifications for variation in Mid-Year Economic and Fiscal Outlook (December)	Government justifications in Forecasting Performance and Scenario Analysis Budget Paper 1 (May)	Government justifications in Final Budget Outcome (September)
2017-18	6,791	8.73%	Accounts for the deviation occurred in the first half of the budget year: underestimated by \$2.1 billion "This is driven by stronger-than-expected collections in the year to date (partly reflecting higher mining profits in 2016-17) [and] successful ATO enforcement activity" (p. 40, MYEFO 2017-18)	Accounts for the deviation occurred in the first ten months of the budget year: underestimated by \$5.7 billion "This is primarily driven by higher-than-expected company profits, including upward revisions to profits in 2016-17." (p. 10, Statement 8, BP1 2018-19) No mention of the forecast error on capital gains tax.	Accounts for the whole-year deviation: underestimated by \$6.8 billion "consistent with higher-than-expected growth in corporate profits and stronger-than-expected results from ATO compliance activity." (p. 3, FBO 2017-18)
2016-17	-610	-0.88%	Accounts for the deviation occurred in the first half of the budget year: overestimated by \$1.2 billion "Excluding policy decisions, company tax receipts have been revised down by \$1.0 billion (-1.4 per cent) in 2016-17[t]his largely reflects weaker non-mining corporate profits." (p. 41, MYEFO 2016-17) The remaining overestimation appears to be caused by a policy decision to defer the start date of the 2014-15 Budget measure, Research and Development Tax Incentive — reducing the rates of the refundable and non-refundable tax offsets, as part of the Budget Savings (Omnibus) Bill 2016 passed the Senate. This cost the budget \$220 million in	Accounts for the deviation occurred in the first ten months of the budget year: overestimated by \$1.2 billion, referring to Statement 5 for explanation. Statement 5 explains why higher commodity prices did not lead to immediate increase in company tax receipts: "Recent higher mining profits from higher-than-expected commodity prices in 2016-17 are expected to contribute to higher company tax receipts in 2017-18, reflecting delays between when profit is accrued and when company tax is paid. However, the impact of higher mining profitability on tax receipts is tempered by the balance of accumulated losses held by some mining companies – a consequence of a period of	Accounts for the deviation occurred in the final two months of the budget year: underestimated by \$590 million "This reflects stronger-than-expected outcomes from assessments, mainly from smaller companies due in May." (p. 4, FBO 2016-17)

Financial Year	Forecast Error (AUD \$ million)	Forecast Error (%)	Government justifications for variation in Mid-Year Economic and Fiscal Outlook (December)	Government justifications in Forecasting Performance and Scenario Analysis Budget Paper 1 (May)	Government justifications in Final Budget Outcome (September)
			2016-17. Details in Appendix A, MYEFO 2016-17 (p. 111).	extended deflated commodity prices — which can be used to reduce tax payable in coming years (see Box 2 for a discussion of losses and company tax timing). Improved corporate profitability across the broader economy, as the economy transitions toward broader-based activity, is expected to increase company tax receipts from 2017-18." (pp. 12-13, Statement 5, BP1 2017-18) Statement 8 also has a chart concerning the forecast error on capital gains tax, which shows the estimated forecast error for 2016-17 has reduced significantly. But, it is unsure that what proportion of it is related to companies. (p. 10, Statement 8, BP1 2017-18)	
2015-16	-5,303	-7.78%	Accounts for the deviation occurred in the first half of the budget year: overestimated by \$1.1 billion "mainly owning to weaker expected mining profitability associated with lower commodity prices." (p. 40, MYEFO 2015-16)	Accounts for the deviation occurred in the first ten months of the budget year: overestimated by \$3.5 billion "This is primarily driven by the fall in commodity prices in recent years, lowering profitability in the mining sector." (p. 8, Statement 7, BP1 2016-17) Statement 7 also has a chart concerning the forecast error on capital gains tax, which shows the estimated forecast error for 2015-16 has turned from positive to negative (which means an under-	Accounts for the deviation occurred in the final two months of the budget year: overestimated by \$1.8 billion "consistent with continued subdued growth in company profits. In particular, receipts relating to the 2015 income year, mainly from the mining industry, were lower than expected." (p. 4, FBO 2015-16)

Financial Year	Forecast Error (AUD \$ million)	Forecast Error (%)	Government justifications for variation in Mid-Year Economic and Fiscal Outlook (December)	Government justifications in Forecasting Performance and Scenario Analysis Budget Paper 1 (May)	Government justifications in Final Budget Outcome (September)
				estimate). But, it is unsure that what proportion of it is related to companies.	
2014-15	-5,426	-7.58%	Accounts for the deviation occurred in the first half of the budget year: overestimated by \$2.64 billion \$2.3 billion of the overestimate: "the impact of sharper-than-anticipated fall in commodity prices, particularly the iron price partly offset by the improved outlook for the non-mining economy which as increased expected company tax." (p. 45, MYEFO 2014-15) The remaining overestimation appears to be caused by a decision taken as part of Senate negotiation to amend the start date of the targeting access measure for the Research and Development tax incentive, costing the budget \$350 million in 2014-15 (p. 23, MYEFO 2014-15). Details are provided in Appendix A, MYEFO 2014-15.	Accounts for the deviation occurred in the first ten months of the budget year: overestimated by \$3.6 billion "largely a result of lower than expected commodity prices, particularly iron ore." (p. 10, Statement 7, BP1 2015-16)	Accounts for the deviation occurred in the final two months of the budget year: overestimated by \$1.8 billion "This was primarily caused by lower-than-expected monthly instalments in the mining sector." (p. 4, FBO 2014-15)
2013-14	-4,377	-6.11%	Accounts for the deviation occurred between the release of Pre-election Economic and Fiscal Outlook in August 2013 and the release of MYEFO in December 2013: overestimated by \$200 million \$180 million of the overestimate: "tax receipts have been affected by the	Accounts for the deviation occurred between the release of MYEFO 2013-14 in December 2013 and the release of Budget Paper 1 2014-15 in May 2014: overestimated by \$1.0 billion "owing to lower than expected collections relating to the 2012-13 income year. Further information on the reasons	Accounts for the deviation occurred in the final two months of the budget year: overestimated by \$727 million "consistent with lower than expected monthly instalments

Financial Year	Forecast Error (AUD \$ million)	Forecast Error (%)	Government justifications for variation in Mid-Year Economic and Fiscal Outlook (December)	Government justifications in Forecasting Performance and Scenario Analysis Budget Paper 1 (May)	Government justifications in Final Budget Outcome (September)
			weaker economic outlook. In particular, the downward revisions to forecasts of wages growth and corporate profitability – and hence nominal GDP – have resulted in significant downward revisions to receipts collected from wages and profits." (p. 34, MYEFO 2013-14)	for this weakness will become available with more tax return data." (p. 15, Statement 5, BP1 2014-15)	and a higher level of refunds relating to previous income years." (p. 5, FBO 2013-14)

Appendix B: Evaluation of the government justifications provided in budget documents for company tax receipts deviations

Assessment of Reasons for Budget Deviations	Is the government's justification according to this criterion adequate, somewhat adequate, or inadequate?	Explain why you rated the justification as adequate, somewhat adequate, or inadequate below:
1. Identify a causal link between a set of facts (A) and deviations from the budget (B). (Minimum Condition) A government should explain why actual performance deviated from the original projections in the budget. For example, actual revenue or expenditure may be different than the budget for reasons related to the economy, to changes in policy, or to technical factors such as errors in predicted participation rates in a program or tax credit. These facts could be used to provide a causal explanation for budget deviations.	Adequate.	Australia's budget documents meet the IBP's minimum condition for explaining the deviations. The explanations provided generally highlight the most significant factors that change underlying parameters and cause deviation and their force of direction. For example, in most years during 2013-14 to 2017-18, commodity prices were identified as one main reason for company tax receipt deviations (see Appendix A). Not all budget documents provide causal explanations. In some years, discussion in the <i>Final Budget Outcome</i> are a further description of revenue patterns rather than an explanation.
2. Explain the mechanism by which a set of facts (A) has caused deviations (B) and, where possible, what (C) caused (A) in the first place. If A (facts) caused B (deviation from budget), how did A cause B? A causal statement is more powerful if it explains the mechanism through which A caused B. For example, assume government identifies an economic shock as having caused revenue to decline below forecast levels. Explaining the mechanism by which this occurred would require providing evidence showing how the	Somewhat adequate.	Budget documents did explain how the deviations happened, particularly in regard to the deviations caused by commodity prices, although could provide more detail. In years of overestimation, this appears to be because lower-than-expected commodity prices lowered profitability in the mining sector, and thus reduced corporate tax collections. Further explanations about the change in commodity prices over the year can also be found in other sections of the budget documents. No further explanation is provided about why commodity prices deviated from initial predictions and the extent to which this caused a deviation in company tax receipts. In 2016-17, further explanations are provided as to why higher-than-expected commodity prices did not lead to an

Assessment of Reasons for Budget Deviations	Is the government's justification according to this criterion adequate, somewhat adequate, or inadequate?	Explain why you rated the justification as adequate, somewhat adequate, or inadequate below:
economic shock resulted in lower economic growth, which led to lower employment and lower incomes, which in turn reduced collections for major tax heads like income tax and VAT. In cases where A was under the government's control, such as when it was caused by a policy change, at least some explanation for this (C) that caused (A) should be provided. For example, if revenue decline (B) was caused by failure to implement an automated revenue system(A), why was the system not implemented? Only one additional reason for (C) needs to be identified.		immediate increase in company tax receipts. Both Box 2 of 'Statement 5: Revenue' in the Budget Paper no. 1 2017-18, and Box C of 'Part 3: Fiscal strategy and outlook' in the MYEFO 2016-17, explained this was due to the delayed effect of the company tax payments system as well as the offsetting of previous years' accumulated loss. ¹³ Large companies pay their tax in monthly instalments based on their turnover with a predetermined rate, while tax returns and the balancing payment are only finalised one year after the end of the financial year. There is room for improvement in explaining the deviations caused by compliance activity and policy decisions. For example, in 2017-18, the budget document did not explain what enforcement activity was undertaken by the ATO, and how it contributed to higher-than-expected company tax receipts. The budget documents did provide a comprehensive list of policy decisions that affect tax revenues in Appendix A of the MYEFO and Budget Paper no. 2. The list indicates impact on total government receipts and not separate heads of revenue including company tax.
3. Show whether the facts (A) fully explain the budget deviations (B), including their components. If a set of facts (A) explains a deviation from the budget (B), is the set of facts sufficient to explain any variation in the deviation when it is disaggregated into its component parts (B ₀ , B ₁ and B ₂)? For instance, assume overall expenditure has declined, but that	Inadequate.	The explanations provided are not comprehensive. Justifications provided by budget documents usually cover only a particular period of the budget year. The MYEFO published in December accounts for deviations occurred in the first half of the budget year; Budget Paper 1 of the next financial year published in May accounts for deviations occurred up until the tenth month of the budget year; and, Final Budget Outcome published in September after the

¹³ Treasury (2016a), pp. 41-42; Treasury (2017), p. 20.

Assessment of Reasons for Budget Deviations	Is the government's justification according to this criterion adequate, somewhat adequate, or inadequate?	Explain why you rated the justification as adequate, somewhat adequate, or inadequate below:
some types of spending increased while others decreased. The facts presented should be sufficient to explain both facts: overall spending on health might have decreased		budget year accounts for deviations occurred in the final two months of the budget year. However, the <i>Final Budget Outcome 2017-18</i> is an exception as it accounts for the whole-year deviation. This may indicate
because uptake of a large insurance scheme was below target, but spending on health infrastructure was		a changed practice for reporting and justifying budget deviations for the whole year in future.
faster than expected due to the sudden resolution of outstanding legal cases that had barred construction on contested land.		Justifications focus only on deviations caused by company income tax receipts and do not address capital gains tax (CGT) deviations. CGT was identified as one major source of forecast error when the <i>Budget Papers</i> discussed the forecast performance of 2013-14, 2014-15, 2015-16 and 2016-17 but its impact on company tax receipts estimates was not specified.
		The explanations provided also do not specify to what extent these factors contribute to the deviations. Thus, it is hard to ascertain whether the reasons provided fully explain the deviations.
4. Show how explanations are consistent with past experience or why conditions have changed. If A facts caused B deviation, is this result consistent with historical experience? If not, why not? A is a better explanation for B if evidence is provided that A normally (from past	Adequate.	While the 'Sensitivity analysis over the forecast period' section is meant to indicate the risk contained in the economic and revenue forecasts made in the budget, it also helps to illustrate the consistency of government justifications with past experience. It is known that higher commodity prices would led to higher export income and as a result, company profit increases; and vice versa.
experience) causes B. For instance, if a particular change in the economy normally causes revenue to decline by a certain amount, it is a more convincing reason for the revenue decline now. If actual performance is		When company tax receipts did not increase immediately following higher-than-expected commodity prices in 2016-17, the budget documents also explained why this did not happen. Box 2 of 'Statement 5: Revenue' in the Budget Paper no. 1 2017-18, and Box C of 'Part 3: Fiscal strategy and outlook' in the MYEFO 2016-17, explained this was due to the

Assessment of Reasons for Budget Deviations	Is the government's justification according to this criterion adequate, somewhat adequate, or inadequate?	Explain why you rated the justification as adequate, somewhat adequate, or inadequate below:
not consistent with past experience, then some additional explanation for this fact is needed. Where conditions have changed, governments should also confirm that they will change their approach to forecasting in the future, or explain why not.		delayed effect of the company tax payments system as well as the offsetting of previous years' accumulated loss. 14
5.Explain the most important deviations. If X, Y, and Z are all major deviations from the budget, are explanations provided for all three? A government should explain all major budget deviations, rather than explaining only some or instead explaining minor deviations. Major deviations can be defined in terms of budget size, but also in terms of priority groups (e.g., the poor), or in terms of the nonfinancial impact of the deviations. The government will have to make and explain its judgement about what is a major deviation, or what are the most important deviations.	Adequate.	Acknowledging that company tax receipts often are the largest contributor to the forecast error of total tax receipts, Australia's budget documents did provide justifications for its deviations. The explanations also highlight the most significant factors that change underlying parameters and cause deviations, although the mechanism that causes deviation can be clearer.

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¹⁴ Treasury (2016a), pp. 41-42; Treasury (2017), p. 20.

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