

ATTACHMENT C: FURTHER DETAIL OF REVENUE FORECASTING PRACTICES

C.1. Relationships between revenue and economic areas

Revenue forecasts in the Treasury are produced by Revenue Analysis Unit (RAU), which is part of Tax Analysis Division. RAU is a unit of around 10 analysts. Economic forecasts in the Treasury are produced by Domestic Economy Division (DED), which has over 30 analysts.

The greater size of DED partly reflects the larger number of forecast variables that DED are required to produce, and the task of interpreting the numerous available sources of information on the economy (such as ABS data, business liaison and partial indicators). In addition, the briefing requirements are more significant, as DED is required to brief the government on all major economic releases and to prepare presentations for senior Treasury officials and the Treasurer on economic issues.

Relationship between RAU and DED

It is important to maintain good relationships and knowledge transfer between the economic and revenue forecasting areas of the Treasury. DED provides the economic parameter forecasts which feed into RAU's head of revenue mapping models (discussed later in this Attachment), so it is crucial that RAU understands the conceptual scope of the economic parameters and how the parameter forecasts have been derived. RAU receives information on tax collections from the ATO, which provides an alternative perspective on the nominal economy that is generally more up-to-date than the official National Accounts data, and so it is important that DED receives and understands this information.

The 2005 Review highlighted scope to improve the information flows and knowledge transfer between the economic and revenue forecasting areas within Treasury. Several process improvements have been made as a result of this Review, and these are briefly outlined below.

During the major forecasting periods RAU and DED regularly meet to discuss recent developments in the economy and revenue. In particular, as part of the Budget and MYEFO rounds, there is now a formal economic parameter meeting at which DED presents the draft parameters to the main users (RAU, Budget Policy Division, Finance and the ATO), giving RAU an opportunity to critique the economic parameters before they are finalised. Analysts from RAU now also attend the DED second sector meetings, at which detailed sectoral forecasts are discussed, in order to provide RAU with a greater understanding of the factors driving the economic parameter forecasts. The manager of RAU now also attends the Joint Economic Forecasting Group (JEFG) meeting, at which the economic forecasts are discussed and critiqued by participants including the Reserve Bank of Australia, the Department of Finance, the Department of Prime Minister and Cabinet and the Australian Bureau of Statistics.

DED and RAU now also work more closely together to identify and explore areas where the economic parameters and revenue collections appear misaligned. For example, during the global financial crisis, the economic parameter for consumption subject to GST continued to grow strongly, while actual GST collections received by the ATO were very weak. DED and RAU worked together to explore possible reasons for the misalignment, to reach a common view on what the data were signalling about the nominal economy.

Written information is now also exchanged more frequently between the two areas. DED's economic notes on major data releases are now circulated to RAU, and RAU now produces revenue notes on recent ATO tax collections data which are circulated to DED (and within Tax Analysis Division).

Another recommendation of the 2005 Review was to encourage greater transfer of analysts between DED and RAU, in order to share knowledge and skills. Whilst it was decided not to institute a formal transfer program, internal transfers between the two areas are encouraged, and around ten current Treasury employees have worked across both areas during their careers.

Relationship between RAU and the Australian Taxation Office

The Australian Tax Office (ATO) is an important source of information for RAU. The two major sources of data RAU receives from the ATO are:

- taxation statistics — official data on previous year's tax collections, released with a lag of close to two years in order to capture the majority of tax lodgements (the latest Taxation Statistics for 2009-10 was released in March 2012); and
- current tax collections — confidential data on recent tax collections, provided with a lag of as little as a few days. These are taken from sources including income tax returns, Business Activity Statements and excise clearances.

The ATO also assists RAU with technical information around areas such as:

- understanding the scope of the taxable income bases;
- understanding the tax payments system, including issues such as timing of payments, treatment of tax debts and tax collections;
- information on the likely impact of recent tax law court cases on tax collections;
- information on ATO compliance activities; and
- information from ATO liaison with major companies.

RAU consults with the ATO frequently both during and outside the major forecasting periods, in order to gather this information and to exchange views on the likely outlook for tax revenue. A formal revenue conference is also held in each of the two major forecasting rounds between RAU, the ATO and the Australian Customs and Border Protection Service (Customs), in order to critique RAU's preliminary revenue forecasts.

C.2. Revenue forecasting process and governance

Table C.2 provides a stylised timeline for the typical revenue forecasting process during a Budget forecasting round.

Table C.2: Revenue Forecasting Timeline for a Budget Round

TIMELINE	PURPOSE	GOVERNANCE
1. Prepare updated revenue forecasts for ERC	<ul style="list-style-type: none"> Prepare updated revenue forecasts to guide discussion at the Expenditure Review Committee Updates are generated by applying a ‘rule of thumb’ to the MYEFO revenue forecasts, based on economic and taxation data and policy decisions since this time. 	<ul style="list-style-type: none"> Tax Analysis Division executive and analysts.
Expenditure Review Committee		
2. Model preparation	<ul style="list-style-type: none"> Assess model structure and performance prior to receiving Budget round inputs. Prepare models to receive new data inputs. 	<ul style="list-style-type: none"> Revenue Analysis Unit executive and analysts.
Receive draft Budget parameters		
3. Parameter Meeting	<ul style="list-style-type: none"> Domestic Economy Division presents the draft Budget parameters to the main users, including RAU, who critique the parameters. 	<ul style="list-style-type: none"> Domestic Economy Division, Budget Policy Division, Finance, ATO, Revenue Analysis Unit executive and analysts.
Receive final Budget parameters. Generate preliminary revenue forecasts.		
4. Forecast assessment meetings	<ul style="list-style-type: none"> Discuss and critique the preliminary revenue forecasts. 	<ul style="list-style-type: none"> Revenue Analysis Unit executive and analysts.
5. Revenue Conferences	<ul style="list-style-type: none"> Discuss and critique the preliminary revenue forecasts. 	<ul style="list-style-type: none"> ATO, Customs, Revenue Analysis Unit executive and analysts.
Baseline revenue forecasts		
6. Manager’s meeting	<ul style="list-style-type: none"> Discuss and critique the baseline revenue forecasts. 	<ul style="list-style-type: none"> Tax Analysis Division executive.
7. Incorporate new measures and parameter variations	<ul style="list-style-type: none"> Incorporate the impact of any late stage Government policy measures on the revenue forecasts. Incorporate the impact of any late release data on the revenue forecasts, for example the Consumer Price Index. 	<ul style="list-style-type: none"> Domestic Economy Division, Tax Analysis Division executive and analysts.
Final revenue forecasts		
8. Post-Budget assessment	<ul style="list-style-type: none"> Discuss issues which arose during the Budget process and actions which need to be taken. 	<ul style="list-style-type: none"> Revenue Analysis Unit executive and analysts.

C.3. Head of revenue mapping models

The table below shows the main head of revenue mapping models used by RAU. It details: the head of revenue; the conceptual taxable income base (that is the income base upon which the tax is actually levied); the associated economic parameter(s) provided by DED to RAU and which feed into the revenue forecasts; whether there are significant timing issues involved in translating the accrual revenue forecasts into cash receipts forecasts; and the broad forecasting methodology used in the mapping model.

Table C.3: Head of revenue Mapping Models

Head of revenue	Conceptual taxable income base	Associated economic parameter(s)	Significant timing issues?*	Broad forecasting methodology
Income Tax Withholding	The income derived from work by wage and salary earners	Compensation of employees (wages)	No	Econometric model where income tax withholding is forecast using the parameter and a progressivity factor.
Other Individuals	Personal income items (that is interest, dividends, capital gains) excluding salary and wages	Gross mixed income; other business income; and property income parameters	Yes	Map the relevant parameter growth rate directly to tax return item growth rate for each individual item, and then aggregate.
Fringe Benefits Tax	The taxable value of non-cash benefits provided to employees	Compensation of employees (wages)	No	Map parameter growth rate directly to revenue growth rate.
Super funds	Super fund contributions and super fund earnings on investments.	Compensation of employees (wages); and Nominal GDP growth	Yes	For super fund contributions, map the parameter growth rate (wages) directly to tax return item growth rate. For super fund earnings, map the parameter growth rate (nominal GDP) directly to asset price growth rate. Assumptions are made about realisation rates of capital gains and losses.
Companies	Taxable profit of the corporate sector	Gross Operating Surplus	Yes	For most items, map parameter growth rates directly to tax return item growth rates. For some items such as foreign income, apply recent historical trends.
PRRT	Taxable profit on petroleum production	Exchange rate; commodity prices.	Yes	Map parameter growth rate directly to revenue growth rate.

Head of revenue	Conceptual taxable income base	Associated economic parameter(s)	Significant timing issues?*	Broad forecasting methodology
GST	Taxable consumption and dwelling investment and associated ownership transfer costs (for example real estate agent fees)	Dwelling investment; consumption subject to GST; and ownership transfer costs	No	Map an aggregated parameter growth rate directly to revenue growth rate.
Alcohol Excise and Customs	Commercial alcohol production and importation	The volume of private consumption of alcohol	No	Map parameter growth rate directly to revenue growth rate.
Tobacco Excise and Customs	Tobacco production and importation	The volume of private consumption of cigarettes	No	Map parameter growth rate directly to revenue growth rate.
Fuel Excise	Fuel production and importation	The volume of private consumption of automotive fuel; real GDP (for diesel)	No	Map the relevant parameter growth rate directly to revenue growth rate for each individual item, and then aggregate.
Luxury Car Tax	The value of luxury cars	The value of total motor vehicle sales (cars & station wagons)	No	Map parameter growth rate directly to revenue growth rate.
Capital Gains Tax	Realised changes in the value of assets (which are subject to CGT)	Nominal GDP growth	No	Map parameter growth rate directly to asset price growth rate. Assumptions are made about realisation rates of capital gains and losses.

* If there are 'significant timing issues' it is necessary to significantly adjust the accrual tax revenue forecasts, to generate tax receipts forecasts on a cash basis.

