Corporate Tax Reform Modelling Scenarios: Second Stage Report

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1. Introduction and Scope

This report presents modelling of scenarios for corporate tax reform. This modelling was commissioned by the Productivity Commission and has been conducted in two stages.

Modelling Approach

The modelling results for the first stage were reported in Murphy (2025a). Those results were used by the Productivity Commission (2025) in its Interim Report on 'Creating a more dynamic and resilient economy'.

This report presents the modelling results for the second stage. Those results are used by the Productivity Commission in its Final Report that was recently handed to the Australian Government.

The modelling in this second stage report differs from the modelling in the first stage report for two broad reasons. First, some of the policy scenarios specified by the Productivity Commission for its Final Report differ from those for its Interim Report as the Commission investigates more options for corporate tax policy. Second, the passage of time between the Interim and Final reports has been used to work on an improved modelling capability.

The original Computable General Equilibrium Tax Policy (CGETAX) model was used to model corporate tax reform in several studies including Murphy (2016, 2017, 2018a, 2018b). The first stage modelling report (Murphy, 2025a) used CGETAX2025, which fully updates the original CGETAX model for the latest data.

Since then, work has progressed on the improved modelling capability, to be known as CGETAX2026. While CGETAX is arguably the most comprehensive tax policy model that is currently available for Australia, the design of the new model is more comprehensive in three ways. It covers more tax policy options, more behavioural responses to tax policy changes and reports on a wider range of economic effects.

The modelling improvements in the corporate tax area were implemented and tested in time for this second stage modelling report, which uses the first version of CGETAX2026. Some more general extensions to the model are still being refined and tested. After they are finalised, they will be incorporated in the final version of CGETAX2026 to be published early in 2026 (Murphy, 2026). This includes modelling of dynamics and distribution. Such extensions should not materially change the modelling results in section 5; they are aimed at providing additional details on the results of each model scenario.

Economics of Corporate Tax Reform

There is a familiar dilemma when contemplating changes to corporate tax policy.

On the one hand, corporate tax applied on normal returns to investment lifts the hurdle pre-tax rate of return before it is viable for investment projects to proceed. This stymies investment,

suppressing productivity and real wages. In this case, corporate tax is among the most economically damaging of all taxes.

On the other hand, corporate tax applied on economic rents is one of the most efficient taxes. Economic rents refer to returns received over and above the amount needed to keep a factor of production in its current use. Important examples of economic rents in Australia include oligopoly profits, mineral resource rents and land rents.

In response to that dilemma, most of the policy scenarios presented in this report are designed to improve our corporate tax system so that it taxes normal returns to capital less and/or taxes economic rents more. About 20 alternative policy scenarios are presented.

Policy Scenarios

In its Interim Report, the Productivity Commission recommended the introduction of a cash flow tax (CFT) to increase the taxation of economic rents. It recommended that the revenue proceeds from the CFT be used for targeted reductions in corporate tax (CIT) to reduce taxation of normal returns. The interim version of CGETAX2026 used in this report can better model this CIT-CFT swap policy and many variants of it than was possible using CGETAX2025.

This report also models policies that aim to reduce tax on normal returns to investment through enhanced tax deductions for capital investment costs. Here it is important to recognise that in the current Australian tax system the costs of debt-funded investment are already fully deductible because the interest payments on that debt are deductible. Hence, the policy aim is to reduce tax on normal returns to investment in the case where that investment is funded by equity.

This can be done through an Allowance for Corporate Equity (ACE), which is analogous to the interest deduction for debt. Alternatively, Murphy (2025b) proposes that a proportion of investment costs be immediately expensed, while blocking the same proportion of net interest expenses as a deduction so as to confine the tax relief to equity-funded investment. Both the ACE and the proportional adjustment policies are modelled in this report.

Structure of this Report

This report is organised as follows. Section 2 summarises previous conceptual and empirical work on corporate tax policy. Section 3 describes the CGETAX2026 model, focussing particularly on how it models corporate tax. Section 4 explains the baseline scenario generated using the model and provides model-based estimates of the relative economic harm from different taxes. Section 5 summarises the results of the modelling scenarios and assesses their policy implications.

2. Previous Work

This section summarises previous work on corporate tax policy. It begins with the conceptual work on corporate tax policy in a small open economy like Australia and then considers the empirical research.

Factors in taxing corporate income in a small open economy

In an important international study, McKeehan and Zodrow (2017) weigh up the factors that determine how best to tax capital income in a small open economy such as Australia. They define a small open economy as an economy that cannot affect the after-tax return to internationally mobile capital or the prices of tradable goods. They begin with the much-cited analysis by Gordon (1986).

a) Double Disincentive Effect

Murphy (2018a) summarises the findings of the influential Gordon (1986) study, as they apply to Australia, as follows. "As a small open economy, Australia can expect that foreign investors will add our corporate tax burden to the minimum rate of return they require to invest here, rather than absorb it. This discourages foreign investment and leaves local labour to bear the final burden of the local corporate tax, discouraging labour supply."

This leads Gordon to find that, when a small open economy taxes corporate income, it has a double disincentive effect of discouraging both investment and labour supply. This is a worse outcome than taxing labour income, which discourages labour supply alone. Indeed, as McKeehan and Zodrow (2017) note, at first sight this double disincentive effect appears to mean that "in a small open economy … the optimal capital income tax rate is zero".

However, in finding that corporate tax was so economically harmful, Gordon assumed that corporate income only consists of normal returns to capital. However, subsequent authors have observed that corporate income also includes economic rents. McKeehan and Zodrow (2017) point out that, when it comes to economic rents, it is important to distinguish between firm-specific rents, such as the know-how of multinational corporations, and location-specific rents generated by land, mineral resources and local oligopoly power.

McKeehan and Zodrow (2017) note that firm-specific rents are likely to be highly mobile internationally. This leads to the same policy conclusion as for normal returns to capital, that it is inefficient to tax firm-specific rents. Doing so is likely to deprive the small open economy of access to productivity-enhancing know-how.

b) Location-specific Economic rents

In contrast, by definition, location-specific economic rents are immobile, so taxing them does not diminish their local supply. Indeed, while taxing normal returns to capital has the double disincentive effect, taxing economic rents has no disincentive effect. Hence, if we could separate the corporate income tax base into two components, one component for normal returns

to capital and for firm-specific rents, and the other component for location-specific economic rents, at the conceptual level we would tax the second component but not the first component.

At the practical level, we would tax the first component at a lower rate rather than not at all to meet international standards. For example, the OECD is pursuing a minimum global tax rate of 15 per cent on corporate income generally. It may not help stimulate investment in Australia if such standards are not met. This is because if foreign companies are deemed to have paid insufficient tax in Australia on their Australian-sourced income, they may be required to pay top-up tax in their home countries.

c) International Profit Shifting

The next factor influencing thinking on the best way of taxing capital income is international profit shifting (IPS), which McKeehan and Zodrow (2017, p.3) describe as follows.

> The application of a relatively high corporate tax rate to the income of MNCs [Multi National Companies] encourages them to engage in profit shifting, that is, to use various financial manipulations, including transfer pricing, the relocation of the ownership of intangibles, and the use of loan reallocations that facilitate interest stripping, to shift revenues to relatively low tax countries and deductions to relatively high-tax countries. There is considerable empirical evidence of income shifting (Clausing 2011, 2016; Dowd et al. 2016); in particular, that a relatively high statutory corporate tax rate encourages income shifting, since it is the statutory tax rate that determines the value to the firm of shifted revenues and deductions. Thus, a desire to avoid creating incentives for income shifting also puts downward pressure on capital income tax rates.

Besides eroding local tax revenue, IPS involves unproductive tax avoidance activity that is a drain on national income. CGETAX is the only economy-wide tax policy model of Australia to incorporate the costs of IPS.

d) Bias against incorporation

The presence of corporate income tax means that profits are taxed differently depending on whether or not a business is incorporated. This can lead to a tax-driven bias against incorporation. Gravelle and Kotlikoff (1993) show how the effects of this bias against incorporation can be modelled. CGETAX2026 is the first Australian economy-wide model to include this.

e) Franking Credits System

Australia is unusual in providing relief from corporate income tax to the extent that Australian-sourced profits are distributed to Australian shareholders in the form of dividends. This scheme of dividend imputation or franking credits erodes the net gain in government revenue from corporate tax. Further, under the small open economy assumption, this loss of revenue occurs without reducing the double disincentive effect, because the marginal investor is a foreign

investor who cannot use franking credits. Boadway and Bruce (1992) were the first to demonstrate the shortcomings of having a franking credit system in a small open economy.

Because Australian residents can receive franking credits for their onshore investments but not their offshore investments, the franking credits system also artificially increases home country bias in their portfolios. This reduces the benefits obtained from portfolio diversification. Franking credits and their economic implications, apart from this home country bias effect, are included in the CGETAX2026 model, although an assessment of the franking credits system is outside of the scope of this report. For modelling of its effects see Murphy (2018b).

f) Bias towards Debt

Corporate income tax allows an interest deduction for the cost of debt finance but no deduction for the cost of equity finance. This leads to tax-driven excessive corporate leverage, adding to risk. The IMF (2009) has pointed to this flaw in the design of traditional corporate tax as a contributing factor to the Global Financial Crisis.

The CGETAX models take debt-equity ratios in each industry as given and so do not take into account how they are distorted by the corporate tax system. Fully modelling how the tax system affects debt-equity ratios is complex because it involves embedding risk in a model.

Empirical Studies

Against that background on the conceptual issues influencing how to best tax corporate income in a small open economy, we now briefly review some empirical studies. We begin with studies that, like this study, use an economy-wide model to simulate changes to tax policy.

The characteristics of the models used in those studies are compared with the characteristics of the successive editions of the CGETAX model in Tables 1 to 3. Table 1 compares the general characteristics of the models while Tables 2 and 3 compare the characteristics that are of most importance for modelling corporate tax policies.

Table 1
General Characteristics of Models

	number of industries	measure of economic gains/losses	dynamics	vertical equity
KPMG Econtech (2010) Henry Review	109	welfare	no	no
Murphy (2016, 2018) CGETAX	278	welfare	no	no
Dixon & Nassios (2018)	76	income	yes	no
McKeehan & Zodrow (2017)	2	welfare	no	no
Tran & Wende (2021)	1	welfare	yes	yes
Murphy (2025a), CGETAX2025	278	welfare	no	no
Murphy (2026), CGETAX2026	11	welfare	yes	yes

Table 2
Capital and Rents

	perfect international capital mobility	elasticity of substitution between capital and labour	fixed factor rents	oligopoly rents
KPMG Econtech (2010) Henry Review	yes	0.75	yes	no
Murphy (2016, 2018) CGETAX	yes	0.8	yes	yes
Dixon & Nassios (2018)	no	0.4	yes	no
McKeehan & Zodrow (2017)	yes	1	yes	no
Tran & Wende (2021)	yes	1	yes	no
Murphy (2025a), CGETAX2025	yes	0.8	yes	yes
Murphy (2026), CGETAX2026	yes	0.7	yes	yes

Table 3
Other Corporate Tax Issues

	share of corporate tax base lost to profit shifting	effects of dual rate system	bias against incorporation from corporate tax
KPMG Econtech (2010) Henry Review	nil	no	no
Murphy (2016, 2018) CGETAX	0.15	no	no
Dixon & Nassios (2018)	nil	no	no
McKeehan & Zodrow (2017)	0.13	no	no
Tran & Wende (2021)	nil	no	no
Murphy (2025a), CGETAX2025	0.1	no	no
Murphy (2026), CGETAX2026	0.1	between industries	yes

The first study was undertaken by a modelling team that the author led at KPMG Econtech (2010). That study used a Computable General Equilibrium (CGE) model to analyse the economic effects of company tax and other taxes for the Henry Tax Review. The main general characteristics of that study were that it used consumer welfare to measure economic gains, distinguished many industries and modelled long run outcomes (Table 1). This first study stimulated a range of subsequent studies.

Dixon and Nassios (2018) similarly use a model with many industries. In a step forward from the first study, they use a dynamic model rather than a long run model (Table 1). This means they can trace the path of the economy towards its long run response to changes in corporate tax policy. However, they measure economic gains using real gross national income rather than consumer welfare (Table 1).

Consumer welfare is a broad measure that takes into account how the tax system can make consumers worse off by distorting choices between different consumption goods, between work and leisure and between current and future consumption. Models using consumer welfare

assess whether consumers are better or worse off by focussing on the welfare measure that consumers themselves are seeking to maximise in the model. Dixon and Nassios (2018) are unable to do this because they do not use a unified welfare maximising approach to model some aspects of consumer behaviour, such as the choice between present and future consumption.

Compared to the first study, Tran and Wende (2021) take two steps forward and one step back. The first step forward is that, like Dixon and Nassios (2018), Tran and Wende (2021) use a dynamic model to analyse tax reforms. Further, they are able to do this while maintaining a unified approach to consumer behaviour allowing them to measure economic gains using consumer welfare (Table 1).

In their second step forward, Tran and Wende (2018) replace the representative consumer used in other models with three wage earners with low, middle and high incomes. This allows Tran and Wende (2021) to consider the effects of tax changes on equity by observing how those changes affect the welfare of each of these three types of consumers (Table1).

However, Tran and Wende (2021) include only one industry in their model (Table 1). Tax policy modelling benefits from distinguishing some industry detail, as will be explained in section 3.

CGETAX2026 aims to combine the four key useful characteristics for tax policy from all of these models. It includes sufficient industry detail for tax policy analysis, uses consumer welfare to measure economic gains. When finalised, further extensions will show the path the economy follows to long run outcomes and provide distributional effects by including three types of wage earners (Table 1).

Of particular importance for this report, CGETAX2026 also more comprehensively models the corporate tax system and its effects. It is the only Australian model to incorporate International Profit Shifting, the bias from corporate tax against incorporation and oligopoly power (Tables 2 and 3). It also covers a wider range of alternative corporate tax systems. This is explained in more detail in section 3.

We now consider other types of empirical studies of corporate tax policy that do not rely on economy-wide models.

Freebairn (2022) argues that investment depends on how tax is applied to four funding streams: (i) Australian investment in Australian unincorporated businesses; (ii) Australian investment in Australian incorporated businesses; (iii) foreign investment in Australian incorporated businesses; and (iv) Australian investment in foreign businesses.

On the one hand, this segmented view of the capital market differs from most studies which emphasise the idea of a world capital market. Under that world view, investment depends mainly on the tax treatment of the third funding stream, because the marginal investor is a

foreign investor. The tax treatments of the other funding streams mainly affect saving rates and portfolio allocations.

On the other hand, Freebairn (2022) usefully highlights the significance of unincorporated businesses. Their presence should be taken into account when modelling the effects of changes in corporate tax policy.

Garnaut, Emerson, Finighan and Anthony (2020) propose that Australian company tax is replaced with a cash flow tax (CFT) so that only economic rents are taxed. The proposed CFT uses a real or R base, except in banking where it uses a modified real plus financial or R+F base. The R+F base differs from the R base by including financial flows. We model the introduction of a CFT in section 5.

In contrast to studies that emphasise that Australia is part of a world capital market, Swan (2019) maintains that our company tax rate does not affect the cost of capital or investment in Australia because of the franking credits received by domestic investors. However, his empirical study is dominated by microcaps, and they are likely to be much more insulated from world capital markets than the larger companies that dominate investment. Other studies focus on the ASX300 and find that the availability of franking credits has little effect on the cost of capital. See Murphy (2018b) for further discussion.

An important parameter when modelling corporate tax policy is the share of the Australian company tax base that is lost to international profit shifting (IPS). McKeehan and Zodrow (2017) survey the literature on IPS and 'adopt a fairly conservative assumption' that income shifting represents 13 per cent of the potential corporate income tax base for small open economies like Australia. In a global study, Torslov, Wier and Zucman (2023) estimate that Australia loses 7 per cent of its potential corporate income tax base to profit shifting.

In the best study focussing exclusively on Australia, Tran and Xu (2023) use company unit record data on corporate tax paid by MNCs. They estimate the sensitivity of reporting of accounting profits in Australia to country differentials in corporate tax rates. Taking these and other studies into account, we assume in CGETAX2026 that 10 per cent of the Australian company tax base is lost to profit shifting. This is down from the estimate of 15 per cent in Murphy (2018a).

3. CGETAX2026 Model

In the previous section, we identified the major factors important in designing a corporate tax policy. Here we explain how those factors are treated in the interim version of the CGETAX2026 model that is used in this study. But first we provide some general background on the model.

General Background on Model

CGETAX is a Computable General Equilibrium (CGE) model of the Australian economy with a special focus on tax policies. As seen in Tables 1 to 3, CGETAX has evolved from the original version in Murphy (2016) to the fully updated CGETAX2025 used in the first stage of this modelling work (Murphy, 2025a) and then to the first version of CGETAX2026 used in this second stage report.

This general background on CGETAX2026 focusses mainly on the choice of industry detail, the distinction between incorporated and unincorporated producers, modelling of equity, incorporation of dynamics and the degree of tax detail.

The original CGETAX model emphasised industry detail, distinguishing 278 industries. In contrast, CGETAX2026 has far fewer industries to make room to introduce three other dimensions to the model that will be more useful for analysing the effects of tax policy. Those other dimensions are different types of worker/consumers for analysing distributional impacts, dynamics for tracing the path of the economy to long run outcomes and incorporated and unincorporated producers to better analyse the effects of differences in tax policy towards them. These model changes are now discussed in turn.

Industry Detail

We begin by explaining the approach taken to reducing the number of industries in CGETAX2026. There are two main reasons that the original CGETAX distinguished so many industries.

The first reason was that having many industries is useful in separating out industries according to whether or not their sales are taxable under the GST. This helps capture the distortion to consumer choice from the presence of both taxable and GST-free products. Similarly, this allows CGETAX to capture the efficiency gains from broadening the base of the GST by making more products taxable.

The new CGETAX2026 model is able to capture this same efficiency gain in a way that doesn't require a large number of industries. Instead of following the original CGETAX model by assuming that each industry produces a homogeneous product, it follows the Dixit and Stiglitz (1977) approach of assuming that each industry sells a continuum of differentiated products to consumers. The efficiency gains from broadening the base of the GST are then modelled by increasing the share of an industry's differentiated products that are taxable. This leads to

similar estimates of efficiency gains than from under the previous approach that relied on distinguishing so many industries, as will be shown in section 4.

The second reason for distinguishing so many industries in the original CGETAX model is to isolate products that are the subject of high specific taxes. These specific taxes include taxes on tobacco, fuel, alcoholic beverages and gambling.

The main reason for the existence of these high specific taxes is that use of these products generates negative externalities. Indeed, an appropriate tax policy would be to calibrate the amount of tax applied to each product to its negative external cost. However, measuring the size of these negative externalities requires a microeconomic analysis rather than an economy-wide model such as CGETAX. That is, CGETAX and models like it are the wrong tool for this tax policy task.

Instead, in CGETAX2026 these products are gathered together in a single externalities industry. A negative externality is then introduced[1] that matches the high level of tax on this industry, thereby *assuming* that the level of the externality tax is appropriate. If we instead implausibly assumed that the high specific taxes had no justification whatsoever, their presence would significantly change the model's analysis of other taxes. Equally, we need to bear in mind that this approach means that the model is not suitable for assessing whether the levels of these externality taxes are appropriate, because it is *assumed* that they are. However, the model user is free to vary this assumption about the size of the negative externality.

The case of externalities illustrates the general principle that the industries separated identified in the CGETAX2026 model have been chosen to meet the needs of tax policy analysis. The seven industries chosen are shown in Table 4, where sub-industries such as incorporated and incorporated producers and are also shown.

Table 4
Industries in CGETAX2026

Industry	Sub-industries
mining	corporate only
wholesale and retail trade	corporate vs noncorporate
finance	corporate only
government-driven	corporate vs noncorporate
housing services	owner-occupied vs rented
externalities	corporate only
other industry	corporate vs noncorporate

[1] This external cost is represented by a component of government spending. Indeed, the use of these specific products does add to government spending in areas such as health. However, the assumed nature of the external cost does not particularly matter for most purposes.

Four out of these seven industries are of special interest to tax policy because they generate substantial economic rents. As previously noted, rents are generally regarded as an efficient tax base.

The mining industry receives mineral resource rents. The finance industry and the wholesale & retail trade industry both generate substantial oligopoly rents. Finally, the housing services industry generates land rents.

There is also another reason for distinguishing the finance and the housing services industries in a tax model besides the presence of economic rents. They are the only input-taxed products under the Goods and Services Tax (GST).

The fifth industry is the government-driven industry, which includes public administration, defence, education services and health services. It is distinguished because it lacks the market characteristics of the other industries.

The sixth industry is the externalities industry. We have already explained the tax policy reason for distinguishing this industry.

The remaining industry is the other industry, which is the largest industry. It accounted for 45 per cent of gross value added in 2022-23.

Incorporated and Unincorporated Producers

One of the three new dimensions introduced in CGETAX2026 is its distinction between incorporated and unincorporated producers. Specifically, in three industries, a single representative producer is replaced with an incorporated producer and an unincorporated producer. These two types of producers are represented in Table 4 as separate sub industries.

This approach follows the Differentiated Product Model (DPM) of Gravelle and Kotlikoff (1992). In the DPM, the two types of producers operate in competing sub- industries producing differentiated products, but only incorporated producers pay company tax. In CGETAX2026 this modelling approach is extended to recognise that most unincorporated producers also enjoy the small business exemption from payroll tax. The DPM is used in CGETAX2026 to capture the negative effects of these tax distortions.

These two types of producers are present in the wholesale & retail trade industry, the government-driven industry and, most notably, the other industry (Table 4). The mining, finance and externalities industries are assumed to be entirely corporate, which is a good approximation to reality.

Owner-occupied and Rented Housing Services

The remaining industry is the housing services industry, which is unincorporated. However, it is divided into sub industries on the basis of tenure type – owner-occupied and rented (Table 4). These two tenure types are subject to different tax treatments, resulting in tax distortions that can be captured by distinguishing them as sub-industries.

In the model, both tenure types are assumed to be exempt from personal income tax as an approximation to reality. In the case of owner-occupied housing, imputed rents are actually exempt from personal tax. In the case of rental housing, the picture is more complicated. Actual rental income is taxable and capital gains are taxed at a discounted rate. However, in aggregate, collections from these taxes are approximately offset by the income deduction for interest expenses.

Arguably the more important difference in tax treatment between the tenure types is that only rental housing is subject to state land tax. This difference in tax treatment is taken into account in the different editions of the CGETAX model.

Distribution and three types of workers

In the second of the three new dimensions introduced in CGETAX2026, the single representative consumer in CGETAX is replaced with three wage earners with low, mid and high capacities to earn labour income, as in Tran and Wende (2021). We also take into account that wealth is distributed more unequally than labour income. The reason for introducing this new dimension is to provide a basic analysis of the effects of tax policy changes on vertical equity.

For the distribution of wages, we use the ABS (2024, Table 8) publication on Employee Earnings. We divide employees into three approximately equal groups according to their earnings. The ABS data shows that the high earnings group has approximately three times the average earnings of the low group.

For the distribution of wealth, we draw on the ABS (2022, Table 2.2) publication on Household Income and Wealth. Using equivalised net worth, it indicates that the top one-third of households are about 12 times more wealthy than the bottom third. However, this statistic reflects the combined effects of two different factors. The first factor is the underlying inequality between households when they are appropriately compared at similar points of the life cycle. It is this underlying inequality that is of most importance for policy.

The second factor is the typical pattern of wealth variation over the course of a household's life cycle. However, our modelling approach does not follow households through their lifetimes. For that reason, it is only appropriate to include the more important form of inequality, underlying inequality, in our model parameter. Hence, we discount the raw inequality statistic by assuming that the top one-third of wage earners are 7 times rather than 12 times more wealthy than the bottom one-third.

Compared to Tran and Wende (2021), we add more depth to the analysis of equity by allowing for the progressive nature of the personal income tax system. This results in the three representative wage earners paying different average rates of tax on their labour incomes, compared to the uniform rates assumed in Tran and Wende (2021).

It is acknowledged that the equity effects of tax policies are analysed in more detail using microsimulation models. However, some microsimulation models do not allow for efficiency effects and hence can misleadingly assume that using tax policy to redistribute income is a zero-sum game. In contrast, CGETAX2026 provides results for both efficiency and equity in a fully integrated framework.

Dynamics

In the third of the three new dimensions introduced in CGETAX2026, dynamics are being added to trace the path of the economy to long run outcomes. Introducing dynamics involves distinguishing between three versions of the new model.

Like CGETAX2025, the first version of CGETAX2026 refers to the long run or steady state and these results are reported in this report. Further extensions to CGETAX2026 that are still being tested and finalised introduce dynamics using the Tobin-q theory of investment. This means that adjustment costs drive the slow year-by-year response of capital stocks to changes in tax policy. In this second version of the model, dynamics are recursive through time because investors have static expectations. In a third version of CGETAX2026 that is still at the planning stage, model-consistent (rational) expectations will be introduced so that investors are forward-looking. All three versions of the model converge to the same long run outcomes.

Introducing dynamics contributes to tax policy analysis in three ways. First, the adjustment time paths from the second version of the model can help improve understanding and acceptance of the long run results from the first version of the model. Second, we can investigate whether introducing dynamics alters the policy conclusions that are reached when only long run effects are considered. Third, the inclusion of dynamics, especially forward-looking behaviour, can help answer transitional issues when tax policy is changed, such as whether the tax treatment of existing activities should be grandfathered and whether new tax treatments should be phased in or implemented in full at the outset.

Like the approach to modelling distribution, our approach to modelling dynamics is still being refined and tested. Murphy (2026) will provide the full details once this refinement and testing process is complete.

Tax Policies

CGETAX2026 can be used to analyse the economic effects of a wide range of changes to the mix and design of the taxes, as shown in Table 5. See Murphy (2025b) for modelling of three wide-ranging tax reform packages using CGETAX2025.

Table 5
Summary of Tax Policy Levers in CGETAX2026

Tax	Tax Rate Policy	Tax Base Policy
Income Taxes:		
Company tax	base & standard rates, tax depreciation rates	see Table 7
Personal tax: labour income	marginal rate	threshold
Personal tax: asset income	marginal rate	franking credits, housing exemption
Super tax: contributions	rate	contributions rate
Super tax: earnings	rate	franking credits
Product Taxes:		
GST	rate	coverage by product
Transfer duty (residential)	rate	
Externality taxes	rate index, cost index	
Import duty	rate index	
Other product taxes	rate index	
Other product subsidies	rate index	
Production Taxes:		
Payroll tax	rate	coverage
State land tax	housing land rate, industry land rate	owner-occupied housing exemption, rural exemption
Municipal rates	housing land rate, industry land rate	
Mining royalties	rate	
Major bank levy	rate	
Other production taxes	rate index	
Other production subsidies	rate index	

Table 5 distinguishes between income taxes, product taxes and production taxes in CGETAX2026. The model requires data on the amount of revenue collected from each tax and who it is collected from.

As explained further in section 4, the model is calibrated using the latest ABS input-output (IO) tables, which refer to 2022-23. The IO tables can be used to infer all the data needed for product taxes.

The published IO tables provide more limited information on production taxes. They show the total production taxes paid by each industry, but not how this is broken down between the individual production taxes shown in Table 5. However, the ABS helpfully regularly provides the author with this breakdown, distinguishing payroll tax, land tax, other production taxes and other production subsidies. The author uses other information to split out municipal government rates from other production taxes.

The IO tables are silent on income taxes. The main data source used in CGETAX for these is the annual ATO Taxation Statistics. Other sources used include the Federal Budget, the ABS national accounts and the ABS Taxation Revenue publication.

In the IO tables, mining royalties are not treated as a tax or identified separately. In CGETAX, the amounts of mining royalties are obtained from Commonwealth Grant Commission publications and are then split out from each mining industry's gross operating surplus.

CGETAX models the behavioural effects of each of these taxes in considerable detail. See Murphy (2016) for an overview in the case of the original CGETAX model. Here we concentrate on the behavioural effects of corporate tax, as represented in CGETAX2026.

Model Treatment of Corporate Tax

In section 2 we described the main conceptual issues in modelling corporate tax policy. Here we summarise how those conceptual issues are addressed in CGETAX2026.

Double disincentive effect

In modelling the double disincentive effect of corporate tax on investment and labour supply, CGETAX assumes that the marginal investor is foreign. This is also assumed in most other models (Table 2).

It is further assumed in CGETAX2026 that the elasticity of substitution between capital and labour is 0.7. This falls at the midpoint of the values used in other studies, which range from 0.4 to 1.0 (Table 2).

This elasticity of 0.7 is also consistent with the high quality study by Young (2013, Table 9, GMM column) in which the elasticity is estimated at between 0.6 and 0.7. In Young's Table 9, estimates are made at the industry level, similar to our tax policy model, rather than at the aggregate level. The estimates are also based on a systems approach that takes into account that this elasticity affects production, employment and investment decisions, as it does in our model, not just one decision.

Finally, it is assumed that the compensated elasticity of the labour supply with respect to the after-tax wage is 0.4. Gruber and Saez (2002) find an "elasticity of taxable income" of 0.4. Chetty et al. (2011) estimate a higher compensated elasticity of 0.55, made up of 0.3 at the intensive margin and 0.25 at the extensive margin. Erosa, Fuster and Kambourov (2016) estimate a value of 0.44.

Taxing location-specific economic rents

The model allows for three types of location-specific economic rents. The types are oligopoly rents, mineral rents and land rents.

Estimating the amount of the rents essentially involves separating profits into the normal returns needed for investment to occur and surplus returns associated with the economic rents. In the first stage report, we performed this separation using normal returns to capital, which are independent of the mix of equity and debt financing that is used. That approach is consistent with the Modigliani-Miller theorem.

However, in feedback from the first stage report, it was pointed out that this approach is not applicable to the banking sector. That is because, to carry on the business of financial intermediation, the banking sector needs to invest not only in capital but also in financial reserves. To take this into account, rates of return in banking are invariably calculated as a return on equity rather than as a return on capital.

In response, the modelling approach in CGETAX2026 was changed from CGETAX2025. We now better distinguish between debt and equity financing and focus on estimating a normal return to equity.

Under the new approach, to estimate the value of the three types of economic rents the first step is to estimate the amount of business land rents. The value of business land is inferred by dividing an estimate of the amount of municipal rates collected from business land of $7.3 billion by a representative tax rate for NSW of 0.75 per cent, giving $978 billion. Of this value, $313 billion is attributed to unincorporated business leaving $665 billion for incorporated businesses.

The information needed to separate out the incomes of unincorporated businesses comes from two ABS sources. Those sources are the mixed income by industry data published in the IO Tables and the split of employment between employees and non-employees published as part of the ABS Labour Force Survey.

Applying an average rental yield of 4.5 per cent to the corporate land value of $665 billion gives an estimate for corporate business land rents of $31 billion.

The ABS reports that the gross operating surplus of incorporated businesses in 2022-23 was $698 billion. Netting off the land rents component of $31 billion gives $667 billion. The next step is to divide this remaining profit of incorporated businesses between normal returns to capital and economic rents besides land rents.

After a first round of calculations, the non-housing industries in the model were divided between those with higher and lower real post-tax rates of return on equity. The higher rates of return are in mining, wholesale and retail trade, and finance. The lower rates of return are

in the government-driven, externalities and other industries. Of the remaining profit of $667 billion, the higher return group received $412 billion and the lower return group $255 billion.

The next step was to calculate the return on equity of the lower return group. According to ABS estimates, for this group, the capital stock valued at replacement cost is $1,921 billion, with economic depreciation of $130 billion. Subtracting this economic depreciation from the gross profit of $255 billion gives a net profit of $125 billion.

According to the ATO tax statistics for 2022-23, the lower return group paid $45 billion in company tax, leaving an after-tax profit of $80 billion. This represents a real post-tax rate of return on the capital of $1,921 billion of 4.2 per cent. After allowing for the use of debt financing, the estimated real post-tax rate of return on equity is 4.5 per cent. We adopt this as our estimate of the normal real post-tax rate of return on equity.

When this estimate is applied to the higher return group, we find that it has $225 billion in pre-tax profits that are not explained by normal returns to equity. In the case of mining, we attribute this to mineral resource rents and in the case of wholesale and retail trade and finance we attribute it to oligopoly rents.

This data analysis for 2022-23 implies that 53 per cent of company tax was collected from economic rents and 47 per cent from normal returns to capital. However, there are two potentially important qualifications to this estimate.

First, mining resource rents were atypically high in 2022-23 because of a peak in commodity prices. As explained in section 4, our baseline scenario assumes more typical commodity prices. This reduces the share of company tax that is collected from economic rents from 53 to 50 per cent (Table 6). This lower estimate is a better guide for policy purposes.

Table 6
Baseline Corporate Tax Revenue by Type of Income ($ billion)

	$bn	%
normal returns to capital	66	50%
oligopoly rents: financial services	17	13%
oligopoly rents: wholesale & retail trade	12	9%
mineral rents	22	17%
land rents	13	10%
total	130	100%

At this point we note that this estimate for the share of company tax coming from rents of 50 per cent is down from the corresponding estimate of 54 per cent in the first stage report. This is primarily because of the shift to a return on equity approach that was explained above. Under this better analysis of the profitability of banking, our estimate of tax collected from oligopoly rents in financial services has fallen from $25 billion (Murphy, 2025a, Table 2) to $17 billion (Table 6). Of course, that still leaves a high level of oligopoly rents in financial services.

Second, our estimate of the normal real post-tax return on equity of 4.5 per cent combines data from a range of sources in a number of steps and so has a margin of error. One simple but reassuring cross-check is to compare it with the current earnings yield for the ASX200 of 4.9 per cent. However, it is conceivable that the true normal real post-tax rate of return on equity could be as much as 1 percentage point higher than we estimate.

To investigate the sensitivity of our analysis to this uncertainty, we re-simulated our baseline scenario after increasing the normal real post-tax rate of return on equity by one percentage point, from 4.5 per cent to 5.5 per cent. This reduced the share of company tax collected from economic rents by only 2.5 per cent points, or from 50 per cent to 47 per cent. This shows that our estimate for this share has a quite low margin of error. This is because the returns made by the higher return group are rather high and remain well above normal under any plausible estimate for the normal rate of return.

These estimates highlight the challenges in designing corporate tax policy. About one-half of revenue is collected from normal returns to capital, meaning corporate tax does considerable economic harm through the double disincentive effect. The other half is collected from economic rents, which in principle does no economic harm. Unfortunately, some commentators confuse discussions about corporate tax reform by implicitly assuming that company tax revenue comes just from one or the other of these two sources.

International profit shifting (IPS)

In the model, firms engage in profit shifting activities as part of constrained profit maximisation and these tax avoidance activities have a deadweight cost. Under the reduced estimates for IPS, it does less economic harm in the modelling. For further discussion of IPS, see the discussion in section 2

Franking credits system

The model allows for dividend imputation. In practice some franking credits are not utilised because: (i) they are not distributed when companies retain earnings; and (ii) some franking credits are distributed to foreign investors who cannot utilise them. This is explicitly modelled in CGETAX2026. In the baseline scenario, only 37 per cent of franking credits are utilised, which is broadly consistent with historical data published by the ATO.

Tax bias against incorporation

Other Australian economy-wide models, including earlier versions of CGETAX, did not take into account the bias against incorporation caused by the presence of corporate income tax. As explained above, CGETAX2026 does this for the first time.

Choice of Corporate Tax Regimes

Compared to CGETAX2025 and other Australian economy-wide models, CGETAX2026 widens the range of company tax regimes that can be modelled.

The model's starting point is the standard corporate tax regime represented in the first row of Table 7. The six alternative regimes that can be modelled are represented in the remaining rows of Table 7. The deductions that are available under each regime are represented in the columns.

Table 7
Deductions Under Alternative Corporate Tax Regimes in CGETAX

Deduction Regime	Depreciation	Capital Allowance	Equity Allowance	Investment	Net Interest Expense	Net Lending
Standard	✓				✓	
CBIT	✓					
IE				✓	✓	
Rent taxes:						
R base				✓		
R+F base				✓	✓	✓
ACC	✓	✓				
ACE	✓		✓		✓	

The standard corporate tax provides two capital-related deductions. Those deductions are for depreciation and net interest expenses, as shown in the first row of Table 7.

The comprehensive business tax, CBIT, varies the standard corporate tax by not allowing a deduction for net interest expenses. As a result, debt and equity financing are treated symmetrically, so a CBIT is neutral between debt and equity financing.

With no deduction for net interest expenses, the only deduction for investment under a CBIT is for depreciation at historic cost. However, the deferred nature of this deduction falls short of the true cost of investment because of the time value of money. Hence a CBIT discourages investment. Further, the CBIT does not show banks making a profit. This is because this profit depends on their interest margin from financial intermediation but interest payments are not included in the CBIT base.

Immediate expensing (IE) varies the standard corporate tax in a different way. In place of a depreciation deduction, there is immediate expensing of investment expenditure. By itself, immediate expensing means that the cost of investment is fully deductible. However, the deduction for net interest expenses is retained under IE so debt-financed investment is subsidised.

The remaining four taxes are commonly referred to as taxes on economic rents. This is because each of them aims to make the cost of investment fully deductible (but not subsidised), only

leaving economic rents in the tax base. The first two rent taxes are based on cash flow and were compared by Meade (1978).

Like IE, the cash flow tax on a real, or R, base allows immediate expensing of investment expenditure. This means that the cost of capital is fully deductible. However, unlike the IE, the R base avoids a subsidy on debt-financed investment by not allowing a deduction for net interest expenses. The R base cash flow tax was originally known as a 'Brown tax' after Cary Brown.

The R base qualifies as a tax on economic rents. However, it has two main issues. First, the immediate expensing of investment expenditure means that businesses that are investing heavily may be eligible for negative tax payments. This may not be acceptable to government. Second, with interest payments excluded from the tax base, banks do not show a profit, the same problem as under a CBIT.

The real plus financial (R+F) base partly addresses the first issue with the R base and fully addresses the second issue. The R+F base extends the R base by including debt-related transactions. Specifically, net interest expenses are deductible, but this is offset in present value terms by making net borrowing taxable.

Because net borrowing is taxable under a R+F base, investment by itself can only generate a negative tax payment when it is funded by equity rather than by debt. Thus, negative tax payments can occur but will be smaller than under an R base.

The R+F base addresses the second issue by including net interest income in the tax base. Thus, it shows that banks make a profit, which can be taxed.

Compared to the R base, the downside of the R+F base is that it is more complex. This is because it requires that net borrowing is tracked for inclusion in the tax base.

The Allowance for Corporate Capital or ACC was proposed by Boadway and Bruce (1984). It aims to address the first issue with cash flow taxes that businesses which are investing heavily may be eligible for negative tax payments. Like the R base (and the CBIT), the ACC does not allow a deduction for net interest expenses. The ACC differs from the R base in the way it provides a full deduction for the cost of capital.

While the R base allows immediate expensing for investment expenditures, with the issue of negative tax payments, the ACC avoids this by retaining the existing system of annual deductions for depreciation based on historic cost. This results in a wait before firms can fully write off their investments. So that it can qualify as a rent tax, the ACC compensates for the financing cost of this wait through an additional annual deduction known as an ACC allowance.

To achieve a pure rent tax, the ACC allowance needs to be calculated as the firm's nominal cost of finance applied to its depreciated capital stock. Unfortunately, the nominal cost of finance is likely to vary from firm to firm, whereas the taxation authority may have to stipulate

a uniform allowance rate. Further, because interest payments are not in the tax base, the ACC is subject to the second issue that banks do not show a profit.

The Allowance for Corporate Equity, ACE, was proposed by the Institute of Fiscal Studies (1991) as a variation of the ACC under which banks show a profit. While the ACC allowance is available for all investment, the ACE allowance is only available for investment that is funded by equity. For investment that is funded by debt, net interest expenses are deductible, as under the Australian corporate tax system.

The ACE addresses both of the issues with the R base. The inclusion of interest payments in the tax base of the ACE means that banks show a profit. To avoid negative tax payments, investment expenditures are depreciated rather than immediately expensed.

At the same time, like the ACC, the ACE has the limitation that the appropriate allowance rate is likely to be firm specific whereas tax authorities are likely to apply a uniform rate. In contrast, the two cash flow taxes, the R base and the R+F base, do not have this problem. Under a cash flow tax there is no waiting for claiming a tax deduction for investment and hence no need to allow for financing costs.

Because it is much more efficient to tax economic rents than normal returns to capital, it is reasonable to expect that the modelling will show better economic outcomes under any of the four rent taxes than under either the existing regime, the CBIT or the IE. To choose between the four rent taxes, modelling is important but needs to be combined with judgements about the issues associated with each option, some of which were discussed above.

Besides allowing for this wide variety of tax regimes, the CGETAX2026 model of corporate tax also allows for the introduction of a second type of corporate tax alongside the main corporate tax, as mentioned earlier. Thus, there is the main corporate tax, TKC, and a secondary corporate tax, TKSP, which can be a cash flow tax as proposed by the Productivity Commission.

With two corporate taxes in place, it is necessary to decide how to sequence the payment of tax between them. There are three options.

Option 1: the secondary tax is paid first, and the amount of secondary tax is an income deduction for the main tax. This option is followed under the existing Petroleum Resource Rent Tax (PRRT).

Option 2: the main tax is paid first, and the amount of main tax is an income deduction for the secondary tax.

Option 3: the two taxes are not sequenced but instead are applied independently so that neither tax is a deductible expense.

Sequencing affects the extent to which the base in each tier is taxed. Specifically, the effective tax rate on a tax base is reduced if the amount of tax paid on that base is allowed as an income deduction when another tax is applied. The CGETAX2026 model is set up to automatically adjust effective tax rates when sequencing of corporate taxes is used.

User Cost of Capital

Under this modelling approach, the user cost of capital that drives investment decisions can be thought of as being calculated in a series of steps as follows.

1. Required return: depreciation plus weighted average real cost of debt and equity finance
2. Plus corporate tax on required return
3. Less deductions, where offered under a particular tax regime, on
    a) nominal interest expense
    b) net lending
    c) tax depreciation
    d) ACE/ACC allowance
    e) immediate expensing of investment
    f) immediate expensing of investment funded by equity

For the record, in the long run, this is represented in the model in the same sequence as follows, where 'm' is the price markup incorporating any oligopoly rents.

$$\frac{P}{m}.\frac{\partial f}{\partial K} = PI.\{\delta + (1-d).(RE-\pi) + d.(RD-\pi)\} +$$
$$\frac{PI}{1-tkra-tkca}.\Big\{(tkra+tkca).\big(\delta+(1-d).(RE-\pi)+d.(RD-\pi)\big)$$
$$-[tkra.(DUMRF+DUMIE)+tkca.WTINTD].d.RD$$
$$-[tkra.DUMRF+tkca.WTRF].d.(\delta-\pi)$$
$$-tkca.(1-WTINVD).[\delta T+z.(WTACC+(1-d).WTACE)].\frac{\delta+RE-\pi}{\delta T+RE}$$
$$-[tkra+tkca.WTINVD-d.(tkra.DUMRF+tkca.WTRF)].(\delta+RE-\pi)\Big\}$$

4. Baseline Scenario and Efficiency of Taxes

In the first stage of this work for the Productivity Commission, the database for CGETAX was completely updated from 2012-13 to 2022-23, the year of the latest input-output tables. The input-output tables provide a detailed snapshot of the economy. After the updating process, the parameters of the CGETAX2025 model were calibrated to the updated database.

In this second stage of the work, a new version of the model was created, CGETAX2026, as described in the earlier sections of this report. Again, it was calibrated to the latest input-output tables, which still refer to 2022-23. CGETAX2026 was originally established in Excel, like CGETAX2025. However, CGETAX2026 has now also been established in the econometrics software package EViews. This facilitates adding the extra dimensions to the model described earlier, particularly the dynamics.

In using the interim version of CGETAX2026, we established a new baseline scenario and updated our estimates for the economic harm from each tax from those published for CGETAX2025 in the first stage report. Those two steps are now described in turn.

Updated Baseline Scenario

The baseline scenario aims to simulate a long run equilibrium for the economy using representative model inputs and referring to 2025-26. This involves three steps. First, key model inputs are updated from 2022-23 to 2025-26. Second, some model inputs are normalised to the extent that 2025-26 is not a representative year. Third, the model is simulated to generate the baseline scenario.

For present purposes, the two main examples of this normalisation process are world commodity prices and the average rate of personal income tax.

World commodity prices were unusually elevated in our base year of 2022-23 and so have been adjusted down for the baseline scenario. Table 8 shows the implications for the terms-of-trade. The baseline scenario terms-of-trade is below the current level but above the long-run level assumed in the latest Intergenerational Report (Australian Government, 2023).

Table 8
Terms of Trade

ABS 2022-23 (50-year peak)	100.0
ABS 2025Q3	89.2
2023 IGR Long Run	79.7
Baseline Scenario	85.3

There is a structural budget deficit in 2025-26, which is not consistent with long run equilibrium. This budget gap is closed in the baseline scenario by adjusting up the average rate of personal income tax. After these adjustments, the model was simulated to generate the baseline scenario.

This led to the foreign ownership outcomes shown in Table 9. The estimated share of the corporate business sector that is foreign owned is 27.4 per cent in 2022-23. This is up from an estimate of 23.4 per cent in the first stage report (Murphy, 2025a, Table 4). However, that earlier estimate calculated foreign investment as a share of the total business sector rather than as a share of the corporate component of the business sector. The latest estimate is more meaningful because foreign ownership is concentrated in the corporate sector and is minor in the unincorporated sector.

Thus, distinguishing between the incorporated and unincorporated sectors in CGETAX2026 allows us to more accurately estimate foreign ownership in the corporate sector. This leads to better modelling of the economic effects of changes to corporate tax policy.

Table 9
Foreign Ownership of Business Corporate Capital ($ billion)

Ownership of Business Corporate Capital	2022-23	Baseline
ABS June 2022 Foreign Liabilities Equity	1,691	
Associated debt under normal gearing	298	
Total value of Foreign Capital	1,989	1,831
ABS June 2022 Business Produced Capital	3,204	3,614
Business Land	665	840
Capitalised Mineral Rents	2,572	1,876
Capitalised Oligopoly Rents	824	1,046
Total value of Business Assets	7,266	7,376
Foreign-owned share	27.4%	24.8%

Efficiency of Taxes

The excess burden of a tax measures the economic harm from a tax's disincentive effects. This is over and above the income effect of a tax in transferring purchasing power from the private sector to government.

Detailed model-based estimates of the excess burdens of the major Australia taxes were first reported in the Henry Review (Australian Government, 2009) and were influential in that Review's recommendations. The modelling was undertaken by a team at KPMG Econtech (2010) that was led by the author of this paper. We worked closely with the Australian Treasury. Those estimates of Marginal Excess Burdens (MEBs) continue to be widely cited, including by the Parliamentary Budget Office (2024).

Since that time, the modelling of excess burdens of Australian taxes has developed further. In the case of company tax, we can see some of the developments from the comparisons in Tables 1 to 3, which compare the modelling assumptions in the KPMG Econtech (2010) report with the assumptions made in subsequent studies. Table 10 shows how these developments in modelling have changed estimates of key excess burdens.

Table 10
Evolution of Estimates of Marginal Excess Burdens

	Municipal rates	GST	Personal Income Tax	Company Income Tax
Henry Review (2010)	2%	8%	24%	40%
Murphy (2018) CGETAX	0%	24%	42%	132%
Tran & Wende (2021)	n/a	23%	43%	69%
Murphy (2025a), CGETAX2025	-4%	30%	48%	80%
Murphy (2026), CGETAX2026	-8%	24%	42%	63%

In the Henry Review, KPMG Econtech (2010) found that, out of the four taxes shown in Table 10, the most efficient tax is a broad-based tax on land, followed by the GST, followed by personal income tax, followed by company income tax. The four subsequent studies shown in Table 10 agree with that ranking. The ranking mainly reflects the assumption that land is in fixed supply, while the GST discourages labour supply, personal income tax discourages labour supply more because of its progressive rate scale (which aims to reduce inequality) and also discourages saving, and company tax discourages investment and labour supply (Gordon, 1986).

While the rankings are the same, the estimates of MEBs for the GST, personal income tax and company tax are higher in Murphy (2018) than in the Henry Review. This is because Murphy (2018) uses the CGETAX model, which improves on the earlier modelling in four main ways. CGETAX better interprets a survey of economists on the sensitivity of the labour supply to real wages, recognises the existence of oligopolies in some industries, distinguishes between rented and owner-occupied housing and takes into account international profit shifting.[2]

On the other hand, Murphy (2025) used an estimate for the extent of profit shifting which more recent research shows was probably too high, as discussed earlier. The use of a better and lower estimate for profit shifting in CGETAX2025 and CGETAX2026 helps account for their lower estimates for the MEB for company tax compared to Murphy (2018).

Interestingly, the latest estimates for MEBs from CGETAX2026 are rather similar to the estimates by Tran and Wende (2021), despite the substantial differences in the modelling approaches shown in Tables 1 to 3. However, the greater tax and industry detail in CGETAX allows MEBs to be simulated for a wider range of taxes using CGETAX2026 (Table 11).

Most importantly, all of the studies reported in Table 10 show the same pattern of MEBs for the three major taxes. Per extra dollar of revenue raised, the GST does the least economic harm, followed by personal income tax, followed by company income tax with the most economic harm. This pattern of MEBs implies that we can increase consumer welfare by

[2] KPMG Econtech (2010) assumed that the *compensated* elasticity of the labour supply with respect to the after-tax real wage was 0.2 using the survey of labour market economists analysed by Fuchs, Krueger and Poterba (1998). However, 0.2 was the survey estimate for the *uncompensated* elasticity, whereas the survey estimate for the *compensated* elasticity was actually 0.35.

shifting the tax mix away from a more harmful tax like company tax towards a less harmful tax.

Table 11 also tests alternative ways of reducing the economic harm from company tax, besides reducing the tax rates. The modelling results presented in Table 11 take into account that it is highly inefficient to tax normal returns to investment but highly efficient to tax economic rents.

One policy option is to introduce a cash flow tax (CFT) to specifically tax economic rents. The design proposed by the Productivity Commission is highly efficient with a MEB of -9% (Table 11).

Another policy option is to modify the existing corporate tax to reduce tax on normal returns to equity while maintaining the rate of tax on rents. There are two examples of this approach in Table 11.

The partial ACE provides a deduction for equity-funded investment through a 2.5% allowance rate applied to the value of invested equity. This is analogous to the interest deduction for debt-funded investment. The existing company tax system raises more revenue than it would with such an allowance, but this additional revenue comes at a considerable economic cost, with an MEB of 125 per cent (Table 11).

The proportional adjustment system proposed by Murphy (2025b) has a similar effect. A proportion of investment costs are immediately expensed, while blocking the same proportion of net interest expenses as a deduction so as to confine the tax relief to equity-funded investment. The existing company tax system raises more revenue than it would with such a discounting system, but again this additional revenue comes at a considerable economic cost, with an MEB of 114 (Table 11).

As an aside, we note that the results in Table 11 also show that the low estimate of the MEB from broadening the base of the GST that was obtained in the first stage of the modelling is unchanged in this second stage. This confirms that the new assumption in CGETAX2026 that each industry produces differentiated projects has allowed us to successfully greatly economise on the number of industries in the model.

In the next section we present about 20 scenarios mostly based around those corporate tax reform options. That is, we model the introduction of a CFT, a partial ACE and a proportional adjustment policy, among others.

Table 11

Marginal Excess Burdens in the Modelling

Tax change	Stage 1	Stage 2
Personal income tax:		
tax surcharge	48%	42%
income levy	34%	26%
Corporate tax:		
raise rate	80%	63%
absence of discounting		114%
absence of ACE	70%	96%
absence of partial ACE		125%
cash flow tax	-8%	-9%
GST:		
raise rate	30%	24%
broaden base to GST-free items	13%	13%
Payroll tax:		
raise rate	42%	35%
broaden base	24%	19%
Property taxes:		
municipal rates	-4%	-8%
residential conveyancing duty	74%	67%
Major bank levy	100%	91%

5. Modelling Results

We now use the interim version of CGETAX2026 to simulate a wide range of scenarios for corporate tax reform. The scenarios are divided into four groups.

The first group introduces a CFT with a tax rate of 5%. This CFT is on an R base except in the finance sector where it is on an R+F base. The CFT funds alternative company income tax (CIT) cuts in a budget-neutral package.

The second group is comparable with the first group in all except one respect. The second group of packages are not budget neutral if the only financing is from the CFT. To cover this budget shortfall, a distributionally neutral increase in personal income tax (PIT) is used to achieve a budget-neutral outcome.

The third group has no CFT. The packages in this group provide alternative forms of new income deductions for investment. The cost to the government budget from these deductions is funded by distributionally neutral increases in personal income tax.

The fourth group models a range of other policies. Again, these other policies are funded by distributionally neutral increases in personal income tax.

All results refer to the long term.

5% CFT in a budget-neutral package

The Productivity Commission's core proposal is presented as the first scenario in Table 12, scenario 18. The 5% CFT is unfranked and the amount of CFT tax paid is an income deduction for CIT.

Table 12

5% CFT, Budget-neutral Packages

Scenario	Baseline	18	16	18A	20	14
CFT franking		unfranked	unfranked	unfranked	unfranked	franked
tax applied first		CFT	**CIT**	**CIT**	CFT	**CIT**
CIT base rate	25%	20%	20%	**24%**	20%	20%
CIT standard rate	30%	28%	**30%**	28%	**30%**	**30%**
threshold	$50m	$1,000m	$1,000m	$1,000m	**$5,000m**	$1,000m
Note		Core	CIT first + 30% top rate	CIT first + 24% base rate	30% top rate + higher threshold	15% CFT on mining and finance only
PIT funding, $bn		-0.1	-0.2	-0.3	-1.9	-0.1
investment		2.2%	2.0%	1.7%	1.4%	1.9%
GDP		0.7%	0.6%	0.5%	0.4%	0.5%
welfare gain ($bn)		4.2	4.2	3.6	3.0	5.0
% of CIT from rents	50%	53%	54%	54%	53%	56%

The tax revenue from the CFT is used to fund reductions in CIT rates, the amounts of which depend on a company's annual turnover.

- For companies with a turnover of under $50 million, the base rate of tax they pay falls from 25% to 20%.
- For companies with a turnover of between $50 million and $1,000 million, they currently pay a rate of 30% but they become eligible for the new base rate of 20%. This is because the eligibility ceiling for the base rate is raised from $50 million to $1,000 million.
- Companies with a turnover over $1,000 million receive a reduction in their standard rate of tax from 30% to 28%.

This policy package involves a switch from CIT to CFT. The CIT falls on both normal returns to capital and economic rents while the CFT falls only on economic rents. Hence the effect of this tax switch is to reduce taxation of normal returns to capital and increase taxation of economic rents. In particular, the share of CIT revenue that is sourced from economic rents rises from 50% to 53% (Table 12).

This reduced reliance on taxing normal returns to capital stimulates investment, with a permanent gain of 2.2% (Table 12). The investment gain would be larger in the early years during the capital stock adjustment process. A higher capital stock supports a permanent gain in real GDP of 0.7% (Table 12).

The remaining four scenarios in Table 12 are variants of the core proposal that are also budget neutral. The variations in policy settings from the core proposal are highlighted in bold in the top panel of Table 12 as well as in the row of notes.

Compared to the core proposal, these variations alter the base rate, the standard rate and the sales threshold ceiling for the base rate. Another variation is that, instead of the CFT tax being an income deduction for CIT tax, the opposite is the case.

The final scenario in Table 12 includes two other variations. The CFT applies only to mining and finance and is franked. Both of these variations mean that the CFT tax rate needs to be higher rate to achieve a budget neutral outcome.

All of the scenarios in Table 12 have broadly similar economic effects. They arise from the same source of a modest switch from taxing normal returns to capital to taxing economic rents.

5% CFT in a package with budget costs funded by personal income tax

The next group of scenarios involve deeper cuts to company income tax. On the one hand, this increases the reduction in taxation of normal returns to capital. On the other hand, it also creates a need for funding from another source besides a 5% CFT. As already mentioned, this is assumed to be provided by a distributionally neutral increase in personal income tax. This is somewhat similar to modelling an increase in the Medicare Levy. These scenarios are presented in Table 13.

Table 13

5% CFT, Packages with Budget Cost

Scenario	Baseline	1	2	11	18B	18C	19
CFT franking tax applied first		**franked CIT**	**franked CIT**	**franked CIT**	**franked CIT**	unfranked CFT	**franked CIT**
CIT base rate	25%	20%	20%	**22%**	20%	20%	20%
CIT standard rate	30%	**30%**	**30%**	**29%**	28%	**20%**	28%
threshold	$50m	$1,000m	**$5,000m**	$1,000m	**$10,000m**	**N/A**	$1,000m
Note		CFT first + 30% top rate + franking	(1) with higher threshold	(1) with narrower rate range	core + highlighted changes	core + top rate removed	core + CIT first + franking
PIT funding, $bn		2.0	4.0	2.0	6.5	7.9	3.8
investment		2.0%	2.8%	1.8%	3.6%	5.0%	2.7%
GDP		0.5%	0.7%	0.5%	1.0%	1.4%	0.7%
welfare gain ($bn)		3.7	4.2	3.3	4.6	5.5	4.2
% of CIT from rents	50%	54%	55%	55%	55%	54%	55%

As in Table 12, in Table 13 the variations in policy settings from the core proposal are highlighted in bold in the top panel as well as in the row of notes.

The main way in which the scenarios in Table 13 differ from the scenarios in Table 12 is that they add an additional switch in the tax mix. As already explained, in Table 12 the switch is from CIT to CFT, which results in substantial gains relative to the size of this shift in the tax mix. This is because the CFT is a highly efficient tax.

The scenarios in Table 13 also do this same switch. In addition, they add a switch from CIT to personal income tax (PIT). This switch generates more modest gains that the first switch because as a funding source the PIT is a less efficient tax than the CFT. It is for that reason that the gains in consumer welfare seen in Table 13 are only a little higher than in Table 12, even though the size of the total shift in the tax mix is significantly larger.

No CFT, investment deductions funded by personal income tax

The third group of scenarios has no CFT. Further, instead of changing CIT tax rates, the packages in Table 14 provide alternative forms of new income deductions for investment. The cost to the budget of the new deductions is funded by distributionally neutral increases in personal income tax.

The first two of these scenarios were introduced at the end of the previous section and so are not explained in any detail here. They reduce taxation of normal returns to equity-funded investment in different ways.

The partial ACE provides a deduction for equity-funded investment through a 2.5% allowance rate applied to the value of invested equity. By reducing taxation of normal returns to investment, this scenario lifts the share of company tax revenue that is collected from economic rents from 50 to 60 per cent (Table 14). This is around twice the lift seen in the scenarios in the first two groups, so the economic gains are also about twice as large.

Table 14

No CFT, Investment deductions

Scenario	Baseline	4	10	5	12	6	13
full expensing %		**33%**			**20%**	**100%**	**100%**
interest deduction discount		**33%**					
ACE allowance rate			**2.5%**	**4.35%**			
Company tax rates	25%/30%						**20%**
Note		one-third adjustment policy	2.5% ACE	4.4% ACE	partial immediate expensing	full expensing with interest deductibility	(6) + rate cut to 20%
PIT funding, $bn		7.0	6.9	13.0	3.8	24.2	33.0
investment		4.9%	5.0%	9.0%	2.9%	16.6%	17.0%
GDP		1.3%	1.3%	2.3%	0.8%	4.0%	4.4%
welfare gain ($bn)		7.1	7.9	13.1	4.6	18.1	19.8
% of CIT from rents	50%	60%	60%	71%	55%	108%	155%

The only-third proportional adjustment policy has very similar effects to the 2.5% ACE (Table 14). Both reduce the taxation of normal returns to equity-funded investment by very similar amounts.

This very similar results for the partial ACE and one-third adjustment policies refer to the long run. In the short run the effects of the two policies may differ depending on policy decisions about the transition to these new regimes. The short run effects are likely to be similar if the ACE applies to all invested equity, rather than only new investment,- and the one-third adjustment applies not only to expensing of new investment and net interest deductions but also to depreciation deductions.

In other cases, such as the case where the ACE only applies to new invested equity (a marginal ACE), it will be both less costly to the budget but also less positive for business cash flow, which may mean that a marginal ACE boosts investment by less in the short run.

While the CFT scenarios achieve their gains by introducing a tax which is very efficient, the investment deduction scenarios achieve their gains by targeting a reduction in company tax to the highly inefficient component of the company tax base.

The remaining scenarios in Table 14 also generate gains. However, for different reasons, the policies are not as well designed and hence the welfare gains are lower relative to the size of the revenue shifts.

No CFT, other policies

The remaining scenarios of a general CIT rate of 25% for all companies, a higher threshold for the base rate entities in the current system, and competition impacts are reported in Table 15.

Table 15

No CFT, Other Policies

Scenario	Baseline	8	7	15
CIT base rate	25%	25%	25%	25%
CIT standard rate	30%	**25%**	30%	30%
threshold	$50m	$50m	**$1,000m**	$50m
Note		25% CIT rate	higher threshold	perfect competition
PIT funding, $bn		6.1	1.3	4.2
investment		2.3%	0.5%	4.9%
GDP		0.7%	0.1%	2.8%
welfare gain ($bn)		1.9	0.5	80.2
% of CIT from rents	50%	50%	50%	35%

Perhaps the most notable of these is the perfect competition scenario. It involves no changes to the tax system. Rather it models a situation where competition policy succeeds in eliminating oligopoly rents. This generates welfare gains that are many times larger than in any of the other scenarios.

The implication of this is that it is beneficial to tax economic rents more highly if and only if this does not lead to a reduced effort to increase competition.

References

Australian Bureau of Statistics (2022), *Household Income and Wealth Australia 2019-20*, April.

Australian Bureau of Statistics (2024), *Employee Earnings August 2024*, December.

Australian Government (2009), *Australia's future tax system*, Canberra ('Henry Review').

Australian Government (2023), 'Intergenerational Report 2023'.

Boadway, R. and Bruce, N. (1992), 'Problems with integrating personal and corporate income tax in an open economy', *Journal of Public Economics*, 48, 39-66.

Chetty, R. Guren, A. Manoli, D. and Weber, A. (2011), 'Are Micro and Macro Labor Supply Elasticities Consistent? A Review of Evidence on the Intensive and Extensive Margins', *American Economic Review: Papers & Proceedings*, 101:3, 471–475.

Dixit, A. and Stiglitz, J. (1977), 'Monopolistic Competition and Optimum Product Diversity', *The American Economic Review*, 67:3, 297- 308.

Dixon, J. and Nassios, J. (2018), 'A Dynamic Economy-wide Analysis of Company Tax Cuts in Australia', CoPS Working Paper No. G-287, Victoria University, December.

Erosa, A. Fuster, L. and Kambourov, G. (2016), 'Towards a Micro-Founded Theory of Aggregate Labour Supply', *The Review of Economic Studies*, 83:3, 1001-1039.

Freebairn, J. (2022), 'Company Income Tax and Business Investment', *Australian Economic Review*, 55:3, 346-360.

Fuchs, V. Krueger, A and Poterba, J. (1998), 'Economists Views about Parameters, Values, and Policies: Survey Results in Labor and Public Economics', *Journal of Economic Literature*, 36, 1387-1425.

Garnaut, R. Emerson, C. Finighan, R. and Anthony, S. (2020), 'Replacing Corporate Income Tax with a Cash Flow Tax', *Australian Economic Review*, 53:4, 463-481.

Gordon, R. (1986), 'Taxation of investment and savings in a world economy', 76(5) *The American Economic Review,* 1086-1102.

Gravelle, J. and Kotlikoff, L. (1993), 'Corporate Tax Incidence and Inefficiency When Corporate and Noncorporate Goods Are Close Substitutes', *Economic Inquiry*, Oct, 501-16.

Gruber, J. and Saez, E. (2002), 'The elasticity of taxable income: evidence and implications', 84:1, *Journal of Public Economics.*

International Monetary Fund (2009), 'Debt Bias and Other Distortions: Crisis-Related Issues in Tax Policy', IMF Fiscal Affairs Department, June.

KPMG Econtech (2010), 'CGE Analysis of the Current Australian Tax System', commissioned by the Australian Treasury.

Meade, J. (1978), *The structure and reform of direct taxation*, George Allen and Unwin, London.

McKeehan M. and Zodrow G. (2017), 'Balancing act: weighing the factors affecting the taxation of capital income in a small open economy', *International Tax and Public Finance*, 24, 1–35.

Murphy C. (2016), 'Efficiency of the tax system: a marginal excess burden analysis', ANU Tax and Transfer Policy Institute Working Paper, 4/2016.

Murphy, C. (2017), 'GST and how to tax Australian banking', *Australian GST Journal*, 17, 84-105.

Murphy, C. (2018a), 'Modelling Australian corporate tax reforms', *Australian Tax Forum*, 33:1, 5-49.

Murphy, C. (2018b), 'Australia's high company tax rate and dividend imputation: a poor recipe for a small open economy', ANU Tax and Transfer Policy Institute Working Paper, 9/2018.

Murphy, C. (2025a), 'Corporate Tax Reform Modelling Scenarios: First Stage Report', commissioned by the Productivity Commission.

Murphy, C. (2025b), 'Modelling Reform Packages for Property, Corporate and Household Packages', ANU Tax and Transfer Policy Institute Working Paper, 10/2025.

Murphy, C. (2026), 'A Dynamic Model of the Efficiency and Equity of Australian Tax Policy (CGETAX2026)', forthcoming.

Parliamentary Budget Office (2024), 'Australia's Tax Mix', Canberra.

Productivity Commission (2025), *Creating a more dynamic and resilient economy*, Interim report, Canberra, July.

Swan, P. (2019), 'Investment, the Corporate Tax Rate, and the Pricing of Franking Credits', *Economic Record*, 95:311, 480-496.

Torslov, T. Wier, L. and Zucman, G. (2023), 'The Missing Profits of Nations', *Review of Economic Studies*, 90, 1499-1534.

Tran, A. and Xu, W. (2023), 'A study of profit shifting using the Hines and Rice approach', *Australian Tax Forum*, 38:1, 1-49.

Tran, C. and Wende, S. (2021), 'On the marginal burden of taxation in an overlapping generations model', *Journal of Macroeconomics*, 70, 1-31.