Broad vs Targeted Company Tax Reforms A CGE Analysis of Ten Percentage Point Reductions in Australia

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Executive Summary

We present a dynamic economy-wide analysis of company income tax reform in Australia, extending the work of Dixon and Nassios (2018) in two respects. First, we update the model database to 2021/22, bringing the model into line with the latest Australian Bureau of Statistics (ABS) economic and foreign investment data. Second, we extend the theoretical framework to allow for industry-specific CIT rates, enabling targeted tax policy analysis.

Using the VURMTAXG model—a dynamic, multi-regional CGE model of Australia with detailed fiscal accounts—we evaluate three company tax reform packages. The core scenario introduces staged company tax cuts based on annual firm turnover, reducing the company tax rate from 30% to 20% for all firms with between A$50 million and A$1 billion in annual turnover, from 25% to 20% for firms with below A$50 million in annual turnover, and maintaining the 30% rate for larger firms. The reform is funded by higher personal income taxes. Two comparator scenarios are included to illustrate key economic mechanisms: a uniform 10-point company tax rate cut across all firms (Scenario 1), and an alternative staged cut funded via lump sum taxation (Scenario 2). Scenario 1 carries no industry dimension in its rate reductions, and mirrors previous work by Dixon and Nassios (2018), albeit with an expanded tax cut magnitude. Scenario 2 is useful; it does not overlay an additional tax distortion (the impact of personal income tax increases), allowing us to disentangle personal income tax rate rise effects from the impact of staged company tax cuts.

All scenarios examined raise real GDP, investment, output-per-worker, and pre-tax wages by 2050, while holding total tax revenue constant, but reduce real Gross National Income (GNI). In the core scenario—where the company tax rate is reduced to 20 per cent for all firms with turnover below A$1 billion, funded by higher personal income taxes—real GDP rises by 0.20 per cent, output-per-worker by 0.28 per cent, investment by 0.38 per cent, and pre-tax wages by 0.58 per cent. However, real GNI falls by 0.31 per cent, post-tax wages by 0.54 per cent, and employment by 0.08 per cent, leading to a decline in per capita welfare of approximately A$292 by 2050, measured in real terms.

In Scenario 2, where the same company tax cuts are instead funded via a less distortionary mechanism, the direction of real wage and employment effects reverses—highlighting that the declines observed in the core scenario are driven by the chosen funding mechanism rather than the tax cuts themselves. The welfare loss is also moderated to A$186 per capita. Scenario 1, which extends the lower tax rate across all firms regardless of turnover, delivers the largest GDP gain (1.46 per cent) but also the largest GNI fall (0.41 per cent) and welfare loss (A$511 per capita).

Overall, the results illustrate the key mechanism driving the economic response to company tax cuts: that lower company tax rates can boost investment, GDP, pre-tax wages and output-per-worker, but reduce national income. The reduction in national income is due to the immediate loss of company tax revenue that would otherwise have been collected at the existing rates of company tax. This is a loss to national income insofar as capital stocks are foreign-owned. The subsequent increase in economic activity helps national income recover, but in the simulations described in this paper, national income does not fully recover. This is partly because of the size of the initial loss in national income, and partly because, in the recovery phase, a growing proportion of capital income accrues to foreign shareholders.

Our results are subject to several caveats. First, a key assumption in our analysis is that foreign ownership shares for small firms (with annual turnover under A$1 billion) match current industry-specific averages. We acknowledge that the company tax cut in the core scenario and Scenario 2 are biased towards smaller firms, which are likely to have a lower proportion of foreign ownership.

Overall, applying a company tax cut to a cohort of firms with a smaller foreign ownership share would lead to a smaller initial loss of company tax revenue, and potentially could lead to a full recovery in national income. However, this has not been modelled herein. Also not modelled—but warranting further research—differential company tax rates that depend on firm turnover carry the potential for firm size bias. Analyses of payroll tax thresholds in Australia, which are linked to firm wage bills, suggest that firms whose wage bills are approximately 2 to 2.5 times as large as the level of the tax threshold experience some firm size bias. We note[1] that the top 50 Australian companies by turnover in 2024 had turnover of greater than A$2.5 billion, or are at least 2.5 times as large as the A$1 billion turnover threshold considered in the core scenario. These firms are likely to be unaffected by any threshold, assuming similar behaviour to that identified for payroll tax. The next 50 companies had turnover of between approximately A$1 billion and A$2.5 billion in 2024. Firms within this second tier of companies may have incentives to reduce turnover, impacting productivity, domestic competition, and income distribution.

Second, our analysis assumes perfect competition in all markets, and as such, the VURMTAXG model overlooks two potentially important effects of reducing the company tax rate to 20 per cent for firms with turnover below A$1 billion. First, the policy may increase competition in imperfectly competitive markets, supporting output and productivity gains. Second, while VURMTAXG captures key features of dividend imputation, it omits channels through which lower company taxes might relax internal financing constraints. This may understate investment responses among credit constrained, high-growth firms, but overstate them if higher retention reduces franking credit flows and suppresses household income. The net effect on aggregate investment depends on which channel dominates—an issue warranting further research.

Regarding revenue replacement, relying more heavily on rent taxation—rather than personal income tax, as in our core scenario—as the primary revenue replacement mechanism may help narrow the gap between GDP and national income; however this has not been explored herein.

To conclude, our analysis of the three simulations shows that the current schedule of company tax rates delivers better outcomes for national income and welfare than any scenario involving company

[1] See https://companiesmarketcap.com/aud/australia/largest-companies-by-revenue-in-australia/, accessed 21 July 2025.

tax cuts. The key insight is that the upfront loss in national income from reduced company tax revenue is unlikely to be fully offset by the resulting increase in economic activity. This loss of national income would be subdued when applied to a cohort of companies with lower-than-average foreign ownership shares. There is a risk that national income may not recover under staged cuts. In particular, the A$1b cut-off for the lower company tax rate introduces a potential firm-size bias, which carries economic costs that are not captured in the modelling herein. Finally, our analysis does not explore the interaction of company tax cuts and credit constrained firms. While this may understate investment responses for credit-constrained, high-growth firms—where lower company taxes ease internal financing constraints—it may also overstate investment if higher profit retention reduces franking credit flows, ultimately suppressing household income.

Broad vs Targeted Company Tax Reforms

A CGE Analysis of Ten Percentage Point Reductions in Australia

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Abstract[6]

This study assesses the long-run economic impacts of reducing the corporate income tax rate for small and medium turnover firms in Australia. Using an updated and extended version of the VURMTAXG model—an economy-wide model with detailed fiscal and regional structure—we simulate three reform scenarios. The core policy reduces the company tax rate to 20 per cent for firms with annual turnover below A$1 billion, funded by higher personal income tax rates. Two comparator scenarios help isolate key policy mechanisms: one applies a uniform company tax cut to all firms (Scenario 1), and another funds the core reform with lump-sum taxation (Scenario 2).

All three reforms increase real GDP, investment, output-per-worker, and pre-tax wages by 2050, while keeping total tax revenue unchanged. However, they reduce real Gross National Income (GNI), which is a better indicator of national living standards. In the core scenario, GDP rises by 0.20 per cent, but GNI falls by 0.31 per cent, and per capita welfare declines by A$292 in real terms. Scenario 2 shows that the negative effects on post-tax wages and employment stem from the choice to raise personal income tax, not from the company tax cuts themselves. Scenario 1 delivers stronger GDP growth (1.46 per cent) but also results in the largest GNI loss (0.41 per cent).

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These results underscore a key trade-off: company tax cuts can boost investment, output-per-worker, and GDP, but neither of the modelled scenarios is estimated to generate a boost in real national income. Furthermore, the choice of how to fund the tax cut affects distributional and welfare outcomes. Alternative funding mechanisms not examined herein—such as taxes on economic rents—may help to mitigate the trade-off between GDP growth and national income losses, though this remains untested in our framework. Likewise, while applying company tax cuts to firms with below-average foreign ownership shares could moderate adverse effects on national income, our simulations assume that small firms have the same foreign ownership shares as the industry average, and we do not explore deviations from this assumption.

Our findings are subject to important caveats. In particular, we abstract from firm behavioural responses to tax thresholds and omit channels through which tax cuts may ease financing constraints. These areas warrant further attention in designing efficient, equitable tax reform.

Based on analysis of the three simulations presented herein, we find that the current schedule of corporate income tax rates outperforms any tax cut scenario when national income and welfare are the key metrics. Our key conclusion is that the upfront loss in national income through company tax revenue is not likely to be recovered through the subsequent increase in economic activity. The loss of national income is likely to be subdued when applied to a cohort of companies with lower-than-average foreign ownership shares, but there is still the risk that national income does not fully recover. Even if it does, overall gains may remain small.

JEL classification: C68; E62; H21; H25.

Keywords: Taxation policy; CGE modelling; Dynamics; Corporate income tax.

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1 Introduction

The Centre of Policy Studies (CoPS) was engaged by the Productivity Commission (PC) to assess the long-run economic impacts of alternative company income tax (CIT) reform scenarios in Australia. The primary focus of this analysis is the core scenario, which introduces a staged CIT cut that reduces the statutory tax rate to 20% for firms with annual turnover below A$1 billion, while maintaining the 30% rate for larger firms. This equates to a ten-percentage point reduction for firms with turnover between A$50 million and A$1 billion, and a five-percentage point cut for firms with turnover below A$50 million. In the core scenario, revenue neutrality is achieved through a dollar-for-dollar increase in personal income tax.

To illustrate key economic mechanisms and better understand the functioning of company tax in a dividend imputation system, we also include a uniform cut scenario—a ten-percentage point reduction in the CIT rate for all firms, funded via lump sum taxation. While this scenario was not requested by the PC, it serves as a useful benchmark for interpreting the broader efficiency and distributional implications of CIT reform. For this reason, we begin with a discussion of scenario 1 in section 4.2. A second comparator scenario applies the same staged cut as in the core scenario, but funds the staged cuts in similar vein to scenario 1: via an increase in lump sum taxation rather than personal income tax. We discuss this scenario in section 4.4. Section 4.5 considers the core scenario.

All scenarios are implemented using VURMTAXG, a dynamic, multi-regional CGE model with detailed representation of Australia's fiscal structure and greenhouse accounts. The model's base case is calibrated to 2021–22 economic conditions, using the most recent ABS data on foreign investment, state accounts, financial statistics, and demographic trends. Tax cuts are introduced in 2026, with results reported through to 2050.

Further details on the policy scenarios are provided in Box 1, and the simulation methodology is summarised in Box 2. Technical aspects of model closure, parameterisation, and result interpretation are covered in sections 2.1 to 2.3. A full set of results is available in the accompanying spreadsheet, *CIT_Scenarios.xlsx*.

Scenario and Summary	Extended description
Core *Staged cut, PIT funding*	An overnight, unanticipated ten-percentage point reduction in the current corporate income tax rate for firms with turnover below A$1b but above A$50 million, along with a five-percentage point cut for firms with turnover below A$50 million, is introduced in 2026. Company tax rates for all firms with turnover below A$1b are 20% following the cuts in 2026, while firms with turnover above the threshold continue to pay the current 30% legislated rate. The cuts are fully funded via an increase in personal income tax collections relative to the base case.
1 *Uniform cut, LST funding*	An overnight, unanticipated ten-percentage point reduction in the corporate income tax rate is introduced in 2026. CIT cuts are fully funded via an increase in lump sum taxation on a per-capita basis across Australia's states and territories.
2 *Staged cut, LST funding*	Identical to the core scenario, however the staged CIT cuts are fully funded via an increase in lump sum taxation on a per-capita basis across Australia's states and territories rather than by personal income tax increases.

Box 1: Summary of Scenarios

VURMTAXG is a 91-industry computable general equilibrium model of Australia based on VURM [Adams *et al.* (2015)]. The model is designed for detailed taxation analysis and is described in Nassios *et al.* (2019a). Herein, we use a two-region (NSW and the Rest of Australia [RoA]) aggregation of the core eight-region database. To parameterise VURMTAXG, CoPS relies on data from a variety of sources, including Australian Bureau of Statistics (ABS) Census data, Agricultural Census data, State accounts data, and international trade data. The core VURMTAXG model is based on the ABS 2021/22 Input-Output data release, national and state accounts aggregates, together with Government Financial Statistics data from ABS cat. No 5512.0 and various Government budget papers. VURMTAXG includes all the features underlying VURMTAX, together with a specialised Greenhouse account module whose database is parameterised using Australian national Greenhouse Accounts (ANGA) data for 2021/22.

Each region in VURMTAXG has a single representative household and a state government. The federal government operates in each region. The foreign sector is described by export demand curves for the products of each region, and by supply curves for international imports to each region. Supply and demand for each regionally produced commodity is the outcome of optimising behaviour. Regional industries are assumed to use intermediate inputs, labour, capital and land in a cost-minimising way, while operating in competitive markets. Region-specific representative households purchase utility-maximising bundles of goods, subject to given prices and disposable income. Regions are linked via interregional trade, interregional migration and capital movements, and governments operate within a fiscal federal framework.

Investment in each regional industry is assumed to be positively related to expected rates of return on capital in each regional industry, and negatively related to required rates of return on capital, i.e., interest rates and risk premia. VURMTAXG recognises two investor classes: local investors (i.e. domestic households and government) and foreign investors. Capital creators assemble, in a cost-minimizing manner, units of industry-specific capital for each regional industry.

VURMTAXG provides results for economic variables on a year-on-year basis. The results for a particular year are used to update the database for the commencement of the next year. More specifically, the model contains a series of equations that connect capital stocks to past-year capital stocks and net investment. Similarly, debt is linked to past and present borrowing/saving, and the regional population is related to natural growth and international and interstate migration. The model is solved with the GEMPACK economic modelling software [Horridge *et al.* (2018)].

In solving VURMTAXG, we undertake two parallel model runs: a baseline simulation and a policy simulation. The baseline simulation is a business-as-usual forecast for the period of interest; herein, this forecast is aligned to NSW TSY state and national macro aggregates. The policy simulation is identical to the baseline simulation in all respects, other than the addition of shocks describing the policy under investigation. We report results as cumulative deviations (either percentage or absolute) away from base case in the levels of variables in each year of the policy simulation.

Applications of VURMTAXG include analysis of the GST [Giesecke and Tran (2018); Giesecke *et al.* (2021)], company tax [Dixon and Nassios (2018)], land tax [Nassios *et al.* (2019b)], personal income taxation [Nassios and Giesecke (Forthcoming)], property taxation [Nassios and Giesecke (2022)], oil supply shocks [Liu *et al.* (2024)], and foreign student taxation [Liu *et al.* (2025)].

Box 2: Brief description of VURMTAXG.

2 Simulations

2.1 Base case

The base case is formed by imposing on VURMTAXG long-run, i.e., beyond forward estimates, forecasts provided in the Commonwealth Budget 2023/24. From 2021/22 onwards, we thus assume annual real GDP growth of 2.25% (accommodated via the endogenous determination of labour-augmenting technical change), CPI inflation of 2.75% per annum, an exogenous national terms of trade (accommodated via the endogenous determination of global growth), and a national workforce participation rate of 66.25%.

Regarding other population and employment statistics, we rely on Centre for Population 2023/24 Forecasts which inform both our assumed base case national unemployment rate of 4.25%, and our assumed regional population growth rates.

Our numeraire is the national CPI excluding imputed rents from owner-occupied housing in both scenarios.

2.2 Closure

In solving VURMTAXG, we undertake two parallel model runs: a baseline simulation and a policy simulation. The baseline simulation is the forecast described in section 2.1. The policy simulation is identical to the baseline simulation in all respects, other than the addition of shocks describing the scenario under investigation. We report results as percentage (and in some cases, A$m) deviations in the values of variables in each year of the policy simulation, away from their baseline values.[7] All policy simulations conducted herein are undertaken under the following model closure:

1. Regional labour markets characterized by short-run real wage stickiness (where the deflator is defined as the CPI exc. Owner-occupied housing) and endogenous regional unemployment

[7] See Dixon and Rimmer (2002) for a thorough review of the construction of baseline and policy simulations with a detailed CGE model.

rates, transitioning to a long-run environment of regional wage flexibility with exogenous regional unemployment rates consistent with the base case;

2. Rates of inter-regional migration are sticky in the short-run, but adjust gradually in response to movements in inter-regional relativities in expected real consumer wages in order to ensure that such income relativities are gradually returned to baseline values;
3. Regional labour supply is inelastic, but not perfectly so, with elasticities detailed in Table 1 and explained in section 2.3
4. National private consumption spending is the sum across regions of regional private consumption. Within each region, private consumption spending is a given proportion of regional disposable income;
5. Public consumption spending undertaken by federal, state and local governments vary with regional population rates, but are exogenous nationally.
6. Net operating balances of regional governments and the federal government are held at baseline values via endogenous adjustment of lump sum payments to households.

All simulations reported on herein rely on budget balance preservation via item 6 above. In our summary results spreadsheet, we also provide simulation outputs in the long-run for an alternative budget closure: budget balance preservation via endogenous determination of the personal income tax rate.

2.3 Elasticities and modelling assumptions

VURMTAXG is parameterised by elasticities that govern (inter alia) the proclivity of economic agents to substitute between domestic and imported varieties of commodities; the demand by foreigners for Australian exports; the sensitivity of the labour force participation rate to changes in real consumer wages; and the degree to which industries can substitute between primary factor inputs to production, e.g., the labour/capital substitution elasticity. In this section, we discuss some key elasticities, also summarised in Table 1, used to parameterise VURMTAXG. Section 2.3.3.1 discusses our modelling of foreign capital markets, while we summarise our solution method in section 2.3.5.

2.3.1 Labour supply

Following Giesecke *et al.* (2021), VURMTAXG models household preferences for consumption and leisure using a constant elasticity of substitution (CES) utility function, capturing both intensive and extensive margin labour supply responses. Households choose utility-maximizing consumption-leisure bundles, subject to consumer prices, non-labour income, post-tax wages, and time endowments.

Calibration of the labour supply elasticity requires the elasticity of substitution between leisure and consumption and the initial labour-leisure ratio. The elasticity of substitution is set to yield an uncompensated labour supply elasticity of +0.15, aligning with empirical estimates from Bento and Jacobsen (2007), Dandie and Mercante (2007), and Fraser and Waschik (2013).

The initial labour-leisure ratio is calibrated to an income elasticity of labour supply of -0.1, following Boeters and Savard (2013), who emphasize the importance of realistic income elasticities in CGE models. The value of -0.1 is supported by Australian-specific estimates [Dandie and Mercante (2007)].

2.3.2 Export demands

Following Dixon and Rimmer (2002; 2010) and Liu *et al.* (2024, 2025), export demand elasticities in single-country CGE models like VURMTAXG can be viewed as trade-weighted averages of country-specific import substitution elasticities from global models like GTAP [Hertel (1997)]. Based on analysis of GTAP, VURMTAXG adopts an export demand elasticity of -4 across all commodities. This contrasts with some single-country open-economy models that assume higher elasticities. High trade elasticities dampen terms-of-trade and national income effects, which can arise when tax changes affect production in export-oriented sectors. Empirical estimates using United Nations ComTrade data support the usage of relatively low elasticities; for instance, Imbs and Méjean (2010) estimate export elasticities for small open economies between -3.1 to -2.3, consistent with VURMTAXG assumptions.

2.3.3 Investment

VURMTAXG provides year-on-year results for economic variables, with each year's results updating the database for the computation of the following year's solution. The model connects stock and flow variables through time [see Dixon and Rimmer (2002)], including industry-specific investment and capital stocks. In VURMTAXG, capital stocks in period *t*+1 are determined by capital stocks in *t*, depreciation rates, and investment in t. Assuming a one-period gestation, investment in t becomes productive capital in *t*+1.

In the shock-year, capital stocks cannot adjust immediately, but investment can deviate from baseline in response to changes in actual vs. required rates of return. VURMTAX's investment response is calibrated to Australian macroeconomic evidence, using investment elasticities from the RBA's MARTIN model [Ballantyne *et al.* (2020)]. Investors adopt adaptive expectations; if actual post-tax rates of return rise in a given year, investors raise investment expenditures. In Dixon and Nassios (2018), new theory was developed to study company tax rate changes under forward-looking expectations. The long-run effects were similar, and this theory is not utilised herein.

Over time, as investment feeds into capital stocks, short-run rate of return responses gradually attenuate, via the usual marginal product of capital relations that underpin constant returns to scale production functions. This explains a key model dynamic: capital transitions from a fixed-factor in the short-run, to a flexible factor in the long-run. Other stock-flow linkages include debt, evolving with past and present borrowing/saving, and regional population changes, which depend on natural growth and international and interstate migration.

2.3.3.1 Foreign capital markets

VURMTAXG assumes perfect international capital mobility. In the absence of changes to the domestic savings rate, new investment is financed at the margin by foreign capital—either as equity (in industry- and region-specific capital) or as debt to finance the current account. Foreign debt earns a fixed interest rate of four per cent.

We assume actual pre-tax rates of return on equity in industry *i* and region *q* are the same for foreign and local investors. That is, both own the same type of capital and face similar replacement costs. Post-tax returns differ, however: foreign investors pay company tax but not personal income tax, while domestic investors can access franking credits but are subject to personal income tax.

Foreign equity investors are assumed to require an exogenous post-tax rate of return by industry and region. They continue to invest until actual post-tax returns broadly align with this required rate—an approach consistent with Dixon and Nassios (2018).

There are some similarities and key differences relative to other recent modelling of company tax reform. For example, like VURMTAXG, Kouparitsas *et al.* (2016) also assume perfect capital mobility in the IECGE model they apply to study company tax cuts in Australia. There are two key differences between the two models when it comes to modelling foreign investment, however; due to data limitations at the time, Kouparitsas *et al.* (2016) assume uniform foreign ownership shares across all industries. In contrast, VURMTAXG incorporates industry-specific foreign ownership using more detailed ABS data. Further, IECGE imposes a fixed national debt-to-equity ratio. In VURMTAXG, by contrast, the debt-equity composition adjusts endogenously in response to changes in the relative after-tax cost of finance.

These differences interact in a simulation of corporate tax cuts: because a cut to the company tax rate reduces the relative cost of equity finance, we find a small shift away from debt towards equity in the composition of foreign liabilities. This is consistent with the tax treatment of corporate finance—company tax is levied on equity returns but not on interest payments. Since some industries have significantly higher foreign equity financing shares in VURMTAXG than others, this stimulus is uneven across sectors. Furthermore, as a bottom-up multi-regional model, we find that regions dominated by industries with large foreign ownership shares tend to benefit most from the tax cuts.

2.3.4 Primary factor substitution

In VURMTAXG, we use a homogeneous primary factor substitution elasticity across industries equal to 0.4. In a broad survey of pertinent CGE and econometric literature, Walmsley *et al.* (2015) find support for a great range of labour/capital substitution elasticities. However, an econometric analysis of the first-order profit maximising condition for firms by Chirinko *et al.* (2004) find strong evidence in support of a labour/capital substitution elasticity of 0.4. This econometric analysis is based on a panel dataset of 1 860 US firms from 1972 to 1991, with the estimates insensitive to the statistical methodology [both Ordinary Least Squares (OLS) and Instrumental Variables (IV) techniques are applied and yield similar estimates]. Studies for Germany by Kemfert (1998) and Van Der Werf (2008) also support a value of 0.4.

More recently, Tipper (2012) used three different econometric techniques to estimate economy-wide, three-sector and 20-industry level labour-capital substitution elasticities for the New Zealand economy in the short- and long-run, following a similar approach to the study for the US economy by Ballistreri, McDaniel and Wong (2003). The 20-industry level elasticities derived by Tipper (2012) using an AR1 model were generally well below 0.77 in both the short- and long-run. Omitting indeterminate estimates with wide standard errors, the mean (across industries) substitution elasticity in the long run was 0.29.

Recent advances in analysis of the capital–labour substitution elasticity—for example, see Chirinko (2008), Chirinko and Mallick (2017) and Gechert *et al.* (2021)—suggest long-run values of between 0.3 and 0.6 are reasonable, with bias-adjusted central estimates clustering around 0.3 to 0.4. These studies employ a variety of techniques and yet draw similar conclusions. For example, Chirinko and Mallick (2017) combine a low-pass filter with panel data techniques, and Gechert *et al.* (2021) utilise meta-regression techniques that correct for publication bias and methodological inconsistencies.

The values adopted in VURMTAXG (0.4) are consistent with central estimates from these recent econometric studies.

Regarding other studies of corporate tax cuts in Australia, work by The Treasury [see Cao *et al.* (2015) and Kouparitsas *et al.* (2016)] and Murphy (2016; 2017) utilise higher primary factor elasticities than those in VURMTAXG, of between 0.7 and 0.9. These values, while within the range of earlier studies, appear optimistic considering the recent empirical evidence discussed herein. This matters for policy simulation, because higher capital–labour elasticities amplify the estimated welfare gains from reducing capital taxation. Dixon and Nassios (2018) study this in more detail, and show that raising the primary factor substitution elasticity from 0.4 to 0.9 increases the estimated excess burden of company tax by 27 cents per dollar raised.

2.3.5 Implementation and solution method

VURMTAXG is solved using GEMPACK [Horridge *et al.* (2018)], in which a CGE solution is formulated as a set of coupled ordinary differential equations. These equations – together with (i) an initial database, which herein is aligned to Australian national and state accounts, government financial statistics, and Census data; and (ii) a model closure – form an initial value problem solvable via numerical integration. We use the Runge-Kutta method (Dormand and Prince 1980), applying GEMPACK's default convergence criteria and numerical tolerances for this method [see Horridge *et al.* (2018) for details].

3 Deriving excess burdens in VURMTAXG

The term excess burden was coined by Harberger (1962) to describe the impact (in totality) of US corporate tax on US national income. Because VURMTAXG is dynamic, it can calculate year-on-year excess burden measures using a similar principle. More specifically, the efficiency loss caused by a tax policy package in time-period *t* at the national (Australia-wide) level ($\mathrm{EB}^{t}_{\mathrm{Nat}}$) is evaluated according to:

$$EB^t = -100\left[\frac{\Delta GNI^t + \sum_q \Delta VLEIS_q^t}{\sum_g \Delta LST_g^t}\right], \tag{3.1}$$

where ΔGNI^t is the deviation in real gross national income (GNI) in year *t* expressed as the difference between the policy simulation and baseline simulation values for GNI in year *t*; $\Delta VLEIS_q^t$ is the deviation in the value of leisure in region *q* at time *t*, valued at the base case real wage in year *t*; and ΔLST_g^t is the deviation in revenue-neutral lump sum transfer by government *g* in year *t*.

Equation (3.1) is a measure of the change in real national income, adjusted for changes in the value of leisure, caused by a change to state or federal tax policy that results in a change in the government's capacity to make a budget-neutral transfer to Australian households of $\sum_g \Delta LST_g^t$. By using the value of aggregate lump sum payments to households in the denominator (rather than, say, revenue raised from the particular tax in question), we take account of general equilibrium effects, including induced changes in: revenue raised from other tax bases, the price of government spending, and government benefit payments[8].

Utilising the budget balance closure reported in item 6 in section 2.2, we report excess burdens for both tax policy simulations performed herein using equation (3.1); see sections 4.2 and 4.3.

4 The impact of company tax cuts in Australia: Broad vs targeted ten-percentage point tax cuts

4.1 Overview

We report the results of our simulations of two scenarios in this section. Firstly, we simulate a single "overnight" cut in the rate of company tax of ten-percentage point for all firms irrespective of their turnover, to illustrate the main economic mechanisms underlying Australia's company tax system.

[8] We value these deviations at base period (2022) prices, while all real variables derived for evaluating the excess burden are deflated by a Divisia price index of real private, public and domestically-financed investment prices.

This is the *uniform cut* scenario. Our results are presented in section 4.3. In scenario 2, we explore the impact of cuts in the company tax rate of ten-percentage points for firms with annual turnover below A$1b and above A$50 million, and a cut of five-percentage points for firms with annual turnover below A$50 million. This is the *staged cut* scenario. The results from simulation 2 are provided in section 4.4.

Before describing results from the simulations, we first describe the theoretical framework using a simple "back of the envelope model" in section 4.2.

4.2 Theoretical impact on the Australian capital market

4.2.1 Main mechanisms underlying a company tax cut

In this theoretical illustration, we abstract from some of the detail in Scenario 1 to describe a single, unanticipated cut in the company tax rate of 10 percentage points from a uniform legislated rate of 30 per cent to 20 per cent. The basic framework is illustrated in Figure 1**.** Suppose initially that demand is given by D, and supply by S_0, such that each unit of capital stock generates pre-tax rental income of R_o. Capital income is taxed at a rate, in per cent, equal 100*(1-R_1/R_0), e.g., 30%. That is, post tax rental income is equal to R_1. Total capital income, equal to K_oR_o, accrues to three beneficiaries: foreign and domestic owners of capital, supposing domestic owners receive **C** and foreign owners receive **D**, and the domestic government, which receives tax revenue **A + B**. Under Australia's system of dividend imputation, a large proportion of **A** is offset against the personal income tax liabilities of domestic capital owners.

In the short run, supply of capital is fixed, as new capital takes time to install. If there was an overnight, unanticipated cut in the company tax rate to zero, instead of accruing to government, in the short run **A** and **B** would accrue to the domestic and foreign owners of capital respectively. On the current account, the income account deficit would increase by **B**, as this amount accrues to foreign capital owners instead of the domestic government. The stock of net foreign liabilities would also increase by **B**, leading to an increase in interest payments in future years.

In response to the hypothetical elimination of company tax, the capital supply curve would shift rightward over a period of several years as the result of a positive investment response to higher post-tax rates of return. Assuming Australia is a price-taker on world capital markets, this process would continue, with the capital stock growing and the marginal product of capital falling, until in the long run the (pre- and post-tax) rental price of capital reached R_1 with the supply curve now at S_1.

Aggregate capital income is now K_1R_1. In this stylised figure, capital creation is funded at the margin by foreign investors, for two reasons. Firstly, under full dividend imputation the company tax rate for domestic capital is effectively zero, so a change in the tax rate provides no investment incentive to domestic investors. Secondly, to the extent that imputed credits are not fully claimed, there is a change in the tax rate, but the domestic response to this change is limited by availability of domestic savings to fund new capital.

Of aggregate capital income K_1R_1, **C** accrues to domestic owners of capital, and **D**+**F** accrues to foreign owners of capital. **A**+**B**+**E** now accrues to other factors of production, chiefly labour. Domestic owners of capital are clear losers from a cut to the company tax rate as they relinquish the part of **A** that they originally claimed because of dividend imputation, a result also identified by Tran and Wende (2017).

To summarise, under a non-zero rate of company tax, such as 100*(1-R_1/R_0) per cent depicted in Figure 1, the capital income that accrues to domestic agents (government and local owners of capital) is equivalent to **A**+**B**+**C**, while **D** accrues to non-residents. The immediate impact of eliminating company tax is to transfer **B** to non-residents.

The long run impact of eliminating company tax is that domestic residents (through their ownership of factors of production other than capital) gradually regain **B**, and gain **E**. That is, **A**+**B** is transferred from government to labour, and **E** is gained, also by labour. Domestic capital owners retain **C**, while foreign capital owners retain **D** and gain **F**.

A simple long run view that the average excess burden of company tax is equal to **E**/(**A**+**B**) ignores the fact that **B** is a valuable source of tax revenue that is temporarily lost in the transition to a zero-tax rate. In our dynamic analysis, the up-front loss of **B** is explicitly taken into account, as is the long run gain of **E**. Furthermore, the effect of adding **B** to net foreign liabilities and the subsequent impact of interest payments on the current account is included.

4.2.2 Back-of-the-envelope calculation of main macroeconomic results

A back-of-the-envelope (BOTE) calculation provides some insight into the appropriate magnitude for macroeconomic results. Equations (4.1) – (4.5) provide an abstraction of some of the key model equations from VURMTAX:

$$k - y = -\sigma(q - p), \quad \textbf{(4.1)}$$

$$y = S_L l + S_K k, \quad \textbf{(4.2)}$$

$$p = S_L w + S_K q, \quad \textbf{(4.3)}$$

$$ror^* = 2(q - p^*), \quad \textbf{(4.4)}$$

$$ror_o = ror^* - \frac{100}{1 - T_o} dT_o, \quad \textbf{(4.5)}$$

where *o* is an element of the set of capital owners in VURMTAXG and can take two elements: *local* and *foreign.* In equations (4.1) – (4.5), we also define:

- *k* to be the percentage change in aggregate capital stocks;
- *y* to be the percentage change in output;
- *q* to be the percentage change in gross rental income earned on capital;
- *p* to be the percentage change in the price of output;
- *l* to be the percentage change in aggregate labour employed;
- *w* to be the percentage change in the wage;

- ror^* to be the percentage change in the pre-tax rate of return to capital, where the ratio of gross to net pre-tax return is assumed to be 2;
- p^* to be the cost of capital creation;
- ror_o to be the percentage change in the post-tax rate of return on capital owned by owner *o*;
- T_o to be the rate of tax on capital income paid by owner *o*, e.g., $T_o = 0.3\ \forall o$ indicates a legislated rate of 30% that is uniform across all owners;
- S_L to be the share of labour used in production (same for foreign- and domestic-owned production);
- S_K to be the share of capital used in production (same for foreign- and domestic-owned production); and,
- σ to be the primary factor substitution elasticity in the CES production function.

For the flexible labour market, equations (4.1) – (4.5) yield endogenously determine six variables: *k*, *y*, *q*, *w*, ror^* and ror_{local}. The remaining exogenous variables are: *p*, *l*, p^*, $ror_{foreign}$, and dT_{local} and $dT_{foreign}$.

This stylised model represents a typical small-country under a long-run closure: the prices of output (*p*) and capital creation (p^*), and the post-tax rate of return on foreign-owned capital, are unaffected by Australian policy settings. As is typical in a long-run comparative static framework, aggregate labour is exogenous.

With some manipulation of equations (4.1) – (4.5), we arrive at:

$$k = -\frac{\sigma}{S_L} \cdot \frac{100}{2(1-T_{foreign})} \cdot dT_{foreign}. \qquad \textbf{(4.6)}$$

For a cut of ten-percentage points to the legislated rate of tax on foreign-owned capital in this stylised model, i.e., assuming full imputation of domestically owned capital income, the actual tax rate (net of deductions) falls by 6.8 percentage points, that is, $dT_{foreign}$= -0.068. This is the shock applied in Scenario 1. With σ = 0.4 and S_L = 0.6, the BOTE derivation suggests an increase in aggregate capital stocks of around 3.2 per cent.

Solving for the other variables is straightforward. For example, equation (4.2) of the stylised model shows that output increases by 1.3 per cent. Because of the greater availability of deductions for domestic investors (chiefly through dividend imputation), the effective fall in the tax rate (dT_{local}) is less than the fall in the tax rate on foreign-owned capital. Given that the rate of return on foreign-owned capital is fixed, the post-tax rate of return must fall for domestic-owned capital.

This stylised model illustrates the long-run effects of a lower required rate of return on capital, assuming no labour supply response. However, it offers no explanation for the funding of the additional capital, nor does it account for the dynamic adjustment path of the economy following the tax cut. Note that the result is also invariant to the share of foreign ownership in the initial solution capital stock; indeed, there is no coefficient denoting the foreign ownership share in the BOTE framework in equations (4.1) – (4.5).

The BOTE framework does trace out the impact of change to the tax rate on an economy that is a price-taker on world markets, providing approximate magnitudes for the long-run effects on capital stocks, output and wages, which are consistent with the VURMTAXG model, which we shall demonstrate in section 4.3.

Before moving to the results from the VURMTAXG model, we introduce one final BOTE equation to calculate gross national income (GNI). In its levels form, we define GNI, *Y**, as the sum of labour income, domestically-owned capital income, and tax revenue collected on foreign-owned capital income, i.e.,:

$$Y^* = WL + S_d QK + S_f T_f QK, \tag{4.7}$$

where S_d and S_f denote the shares of capital owned by domestic (local) and foreign investors, respectively, and all other expressions are as previously defined.

In percentage change format, with some substitutions from earlier equations, equation (4.7) becomes:

$$y^* = \frac{WL}{Y^*}w + \frac{QK}{Y^*}(q+k) + \frac{S_f QK}{Y^*}100dT_f - \frac{S_f QK(1-T_f)}{Y^*}(q+k), \quad \textbf{(4.8)}$$

where $WL/Y^* = S_L Y/Y^*$ and $QK/Y^* = S_K Y/Y^*$. Based on the earlier coefficient values and assuming S_f=*0.25*, $Y/Y^* = 1.08$. Given these expressions, equation (4.8) can be simplified to yield:

$$y^* = \frac{Y}{Y^*}\left(y + S_f S_K 100dT_f - S_f S_K(1-T_f)(q+k)\right). \quad \textbf{(4.9)}$$

Using the values assumed or obtained earlier, we find that y^* = 0.78. That is, the loss in taxation revenue from non-resident investors accounts for around half of the increase in output, meaning that only half of the benefit accrues to the domestic population. This BOTE result suggests that there is a gain in national income, albeit small. This result contrasts markedly with the VURMTAXG outputs we shall discuss in section 4.3: VURMTAXG simulations of a cut to company tax drive national income below baseline, i.e., $y^* < 0$ in the long-run. This contrast arises here because, unlike VURMTAXG, the BOTE model fails to take into account (among other things) three important factors that subtract further from national income.

The first important factor omitted in the BOTE model is the dynamic adjustment to the long-run. As illustrated in Figure 1, the immediate effect of the company tax rate cut is to transfer area **B** (tax revenue collected from non-resident investors), from the umbrella of GNI to non-resident investors. The long-run impact of this transfer is not captured in the BOTE model. Over a period of several years, over which wages gradually adjust as additional foreign-owned capital is installed, net foreign liabilities will increase as a result of this transfer. This structural shift will have a permanent and negative impact on GNI.

The second omission from the BOTE model is the effect of an increase in the share of foreign investment. The BOTE exposition treated S_f as a fixed coefficient, yet capital growth that occurs as a result of a company tax cut will be funded by non-resident investors. Equation (4.9) treats S_f as a fixed coefficient, but it is clear that an increase in S_f will have a negative effect on domestic income (for a negative value of dT_f, i.e. a tax rate cut).

The third omission from the BOTE model is the terms of trade effect. This is ignored in the BOTE model because we assume that Australia is a price-taker on world markets, i.e., we assume that an expansion in Australia's output can be absorbed without any impact on the price level. However, VURMTAXG reflects the more realistic assumption that Australia has some market power in both export markets and import-competing markets; see our discussion of export demand elasticities in VURMTAXG in 2.3.2. In VURMTAXG, an expansion in Australia's output leads to real devaluation, causing two departures from the BOTE result for real GNI. The first of these is that the impact on the rate of return, and hence the capital stock, output level and income, is muted by the devaluation. The second is that, in terms of purchasing power, real domestic income is reduced relative to real output, because domestic consumers purchase imports which have become more expensive in local currency terms.

When these three factors are taken into account, as they are in VURMTAXG, the weak positive result for GNI derived from the BOTE model is reversed; as we shall show, the VURMTAXG simulations find that there will be a small negative impact on GNI as a result of a cut to the company tax rate.

4.3 Simulation results: Scenario 1 – Uniform cuts

In this section, we study scenario 1, which is most similar in structure to the BOTE CIT rate cut studied in section 4.2.2. VURMTAXG is applied to simulate an overnight reduction of ten-percentage points in the rate of company tax, irrespective of firm size, i.e., there is a one-off, unanticipated cut in the legislated rate of company tax from 30 per cent to 20 per cent in a 2026. After allowing for deductions, dividend imputation, and taxation treaty discounts (see our parameter settings in Table 2) this translates to a cut to the tax rate of 4.0 percentage points for domestic investors and 6.8 percentage points for foreign investors. The rate cuts are revenue neutral, with lump sum taxes rising to maintain budget neutrality.

As shown in Figure 2, several of the long-run results of this simulation are of similar order to those predicted by the BOTE model in section 4.2.2. Twenty-four years after the tax cut, capital stocks are 3.25 per cent larger than they otherwise would have been, with real output (+1.46 per cent relative to baseline) and the real consumer wage (+1.15 per cent relative to baseline) also elevated. Differences between the VURMTAXG results and the BOTE results are due to many factors, including those mentioned in section 4.2.2 (e.g., the terms of trade effect and foreign ownership share), compositional differences derived from VURMTAX's 91 industries, labour supply effects, and the impact of fixed factors of production in many industries.

The immediate effect of a cut to company tax is to increase post-tax rates of return on capital for both local and foreign investors (although more so for non-resident investors), which stimulates investment expenditure. As shown in Figure 2, aggregate investment jumps about 1.0 per cent above the base case in the year that the tax cut is implemented.

At this stage, investors are earning a post-tax rate of return higher than the base case rate of return. The high rate of return signals to investors to continue to invest at a rate that pushes the capital growth rate above the base case growth rate.[9] For domestic investors, the post-tax rate of return is adversely affected by higher wages, an effect that is not fully offset by the company tax cuts.

Stronger investment has a short-term positive impact on employment, which peaks at around 0.3 per cent above base line. Over time, stronger employment translates to real wage growth, and

[9] A curious result illustrated in Figure 2 is the difference between the long-run increases in capital stocks and investment. Given that the capital stock stabilises at a new, higher level than the baseline, the investment to capital ratio might be expected to return to its base case level, i.e., the deviation from base case in aggregate investment should be the same as the deviation in capital stocks. However, Figure 2 shows that investment is only 1.9 per cent higher than the base case, a much smaller deviation from base than the capital stock. This difference is attributed to compositional effects. Long-run results for the investment to capital ratio in each industry show very little change. However, aggregate capital is calculated based on industry capital income weights, while aggregate investment is calculated based on industry investment expenditure weights. Several of the industries for which there is a large positive impact on both capital stocks and investment (including Mining) account for a high share of the economy's capital income relative to their share in the economies investment expenditure. Conversely, dwelling services, for which there is a negative impact on both capital stocks and investment, accounts for a low share of capital income relative to its share of investment expenditure. These compositional differences drive the differences in the results for the aggregate measures of capital and investment.

unemployment rates are consistent with the base case by 2050, in accordance with the usual Dixon and Rimmer (2002) dynamic sticky wage adjustment theory. The smaller positive impact on employment in the long run is the result of a higher participation rate, which is positively linked to the labour income and varies inversely with non-labour incomes, as described in section 2.3.1.

The increase in GDP is driven initially by employment, but as employment rates return to their base case level, in later periods the increase in GDP is attributed to the larger capital stock. Although GDP increases, as foreshadowed by the BOTE result and discussion, real gross national income (GNI) falls in the long run. This is illustrated in Figure 3, and the long-run response is also reported in Table 3. The long-run fall in real GNI is commensurate with a long-run reduction in welfare, valued at A$511 per capita in 2050; see Table 3.

There are two phases in the evolution of the long-run GNI result. Firstly, in the year of the company tax cut, there is a sharp fall in GNI. This is explained by the fall in tax revenue derived from the foreign owners of capital, or the loss of area **B** in Figure 1. In the second phase, there are two competing effects on GNI. Ceteris paribus, the increase in GDP has a positive impact on GNI, but the positive impact on GNI is attenuated by the negative impact of the continuing loss of taxation revenue from non-resident investors. As net foreign liabilities build, the cost of debt servicing starts to detract from GNI relative to GDP. Further, the increase in GDP, which was attributable to labour (a domestically owned factor) in the early years, is attributable to new, foreign-owned capital in later years and adds little directly to GNI.

The long-run impact on real GNI is a fall of around 0.4 per cent relative to the base case. Net foreign liabilities stabilise as a percentage of GNI at 10 per cent higher than the base case, as illustrated in Figure 4**.**

Figure 5 plots results for the expenditure composition of GDP and the terms of trade. It shows that in the long-run, exports and investment account for a larger share of GDP, while domestic absorption, dragged down by the fall in private consumption, accounts for a smaller share. The results for exports and investment are as we expect: investment is larger to service a larger capital stock, while exports are larger, because the trade balance moves towards surplus. With the trade balance moving towards surplus, the terms of trade declines relative to the long-run base case, by 1.29 per cent. This reduces domestic purchasing power relative to domestic incomes.

Having understood the GDP expenditure-side impacts of a cut to company tax, we now have a framework in which to understand industry impacts. Short-run industry impacts are influenced by the increase in investment, while long-run industry impacts are influenced by the large increase in exports, and the decline in private consumption. This is confirmed by the industry results illustrated in Figure 6.

In the short-run, the main impact of the company tax cut is to increase activity in construction and manufacturing, to support the increase in investment. The impact on other industries is small. In the long-run, when capital stocks have had time to adjust, and the economy has adjusted to produce more exports (largely mining) and less for domestic consumption, the industry impacts are more pronounced. Figure 6 shows that the industries to expand the most relative to the base case are mining, manufacturing, and construction. However, lower domestic consumption activity means that sectors such as health and education decline relative to the base case.

4.4 Simulation results: Scenario 2 – Staged cuts

In this scenario, we use national firm turnover counts by industry for June 2024 sourced from the ABS[10] to determine the impact of an overnight cut to the company tax rate in Australia of (i) five-

[10] Private communication, based on ABS 8165.0 for June 2024. The ABS data procured broke firm counts by industry, Australia-wide, into 14 buckets. With T being annual turnover, the data reported industry-specific firm counts at for ANZSIC-1 industries in the following way: $<50K$, $50K<T<200K$, $200K<T<2m$, $2m<T<5m$, $5m<T<10m$, $10m<T<50m$, $50m<T<100m$, $100m<T<250m$, $250m<T<500m$, $500m<T<1b$, $1b<T<2b$, $2b<T<3b$, $3b<T<5b$, $>5b$. For most industries and buckets, we assumed firms in each turnover bucket had annual turnover equal to the mid-point of the range, i.e., for $50m<T<100m$ firms we assumed turnover annually was 75m. As a sense check on this assumption, we took total sales from ABS 8155.0 by industry, and stripped from these the value implied using our turnover assumptions for firms with turnover below A$1b. The remainder was the inferred turnover of firms >A$1b in size. As we had counts for these by industry, we compared average turnovers for small (<A$50m), medium (A$50m<T<A$1b) and large (>A$1b) firms in each industry. For most

percentage points for firms with turnover below A$50 million per annum (from 25% to 20%); and, (ii) ten-percentage points for firms with turnover below A$1b and above A$50 million per annum (from 30% to 20%). No tax cut is applied for firms with annual turnover of greater than A$1b. Following the cuts, all firms below A$1b in annual turnover pay a CIT rate of 20 cents per dollar, while firms with turnover above the A$1b threshold pay 30 cents per dollar. As in scenario 1, all cuts are fully funded via a rise in lump sum taxation. In this sense, scenario 2 sits between the core scenario (staged cuts, PIT rise funding) and scenario 1 (uniform cuts, lump sum funding).

The staged CIT cuts alters the industry distribution of the company tax cuts delivered in 2026; see Figure 7 for a comparison. From Figure 8, we can see that very few industries contain many firms with turnovers above A$1b: Mining contains the largest proportion measured on counts, at 1.15%. To translate Figure 8 into the shocks in Figure 7, we used Figure 8 together with ABS industry-wide total income statistics (see ABS 8155.0) to estimate the share of aggregate industry income covered by firms with turnover below A$1b, breaking this into those with turnover below A$50 million, and those with turnover above this level, but below the upper threshold of A$1b. We assume the magnitude of the shocks to the corporate income tax rate remain identical over time, at five-percentage points for very small firms (turnover below A$50 million), and ten-percentage points for medium firms (turnover above A$50 million, and below A$1b). We do not account for second-order effects, as the firm turnover distributions respond to the corporate tax cut.

industries, our assumption did not breach the sense check that average turnover for large firms, should exceed that of medium and small firms, and that average turnovers for each should lie within the firm-size ranges. For some, it did. In these cases (Manufacturing, Construction, Accommodation and Food, Transport, Agriculture, Professional services, Administration, Rent and hiring, Finance, and Other services) we found lower assumed annual average turnovers within each bucket were necessary, indicating a bias in the firm-turnover distribution within each bucket, particularly to low-turnover firms. For one industry (Finance), due to a lack of granularity in ABS 8155.0, we assumed 70% of industry-wide turnover was generated by large (>A$1b in average annual turnover) firms.

4.4.1 Comparison to scenario 1

We compare our key long-run macroeconomic responses in scenario 2 with those in scenario 1 in Table 3; see columns [2] and [1], respectively. A full set of results in 2050, including national taxation responses, are included in the spreadsheets that accompany this report.

As shown in Table 3 herein, the macroeconomic story remains like the one described in detail in section 4.2 and scenario 1: real GDP, employment, wages and capital stocks are elevated relative to the base case, while national income and household consumption fall. The magnitudes are smaller, because the industry-specific tax cuts delivered are smaller. With regard to welfare deviations per capita, the smaller magnitude of the tax cuts delivered damps the per capita welfare fall, from A$511 to A$186 per capita.

Comparing Figure 9 and the grey bars in Figure 6 (long-run industry response to a broad ten-percentage point company tax cut), we see that the tempering of the cut delivered to the mining sector (from ten-percentage points to 1.47 percentage points) has a material impact on its output expansion. While mining sector output still rises by 1.9 percent relative to the base case, this is down from 9.6 percent in scenario 1. Output still rises due in part to real devaluation: with gross national expenditure falling relative to gross domestic product, the trade balance must improve, and the mechanism via which this occurs is an improvement in the real exchange rate. This is also clear in the terms of trade fall.

4.5 Simulation results: Core scenario

The core scenario alters the funding mechanism for the staged CIT cuts delivered in scenario 2, but is otherwise identical to scenario 2. In the core scenario, we raise all personal income tax rates relative to the base case by an equivalent basis point amount in order to offset the revenue shortfall caused by the staged CIT cuts at the federal level. By 2050, the average personal income tax rate is 0.9 percentage points higher than under the base case as a result.

Long-run results (simulation year 2050, with staged cuts implemented in 2026) are reported in Table 3, while time paths for expenditure-side macro aggregates are included in Figure 10. Long-run industry responses are provided in Figure 9, alongside those for scenario 2. The difference between the two, as discussed, is driven entirely by the funding decision.

Personal income taxes carry their own tax burdens, as discussed by Nassios and Giesecke (forthcoming). Their marginal excess burden is similar to the GST in magnitude, and equal to 24 cents per dollar; see Nassios and Giesecke (forthcoming). Funding staged CIT rate cuts via personal income tax increases under the core scenario therefore carries its own burden, which damps the macroeconomic responses under the core scenario relative to those reported for scenario 2. This is clear if we compare Columns [2] and [3] in Table 3, which summarise the key macroeconomic and welfare impact in scenario 2 and the core scenario, respectively. The most material difference in macro responses is in the real wage response: under the core scenario, post-tax real wages do not rise in response to staged CIT cuts, whereas they do in scenario 2. The cause of this is the funding mechanism. With real wages slightly below the base case forecast in 2050, so too are participation rates, and employment.

As the tax burden in the core scenario is larger than that under scenario 2, we also see welfare per capita fall by more under the core scenario than under scenario 2: from A$186 per capita, to A$292 per capita. To provide context to this figure, Nassios and Giesecke (forthcoming) studied insurance duty and stamp duty replacement with a combination of a GST rate rise and personal income tax rise and found that such a tax mix swap would increase welfare by A$935 per household.

In future work, alternative means of funding staged CIT cuts could be explored. Specifically, funding via an increased reliance on rent taxation, which carries a negative excess burden, e.g., see Nassios *et al.* (2019b) who study the economic efficiency of landowner taxation, may assist in offsetting the welfare fall caused by the stage CIT cuts. While long lead times between the announcement of the cuts and implementation may provide some short-run benefits, specifically by bringing forward some of the anticipated investment boost without realising the transfer to existing foreign investors, this is expected to be temporary, i.e., the long-run response is largely independent of whether investor expectations are adaptive or forward-looking.

5 The excess burden of uniform versus targeted company tax cuts

In this section, we report the excess burden of both scenario 1 and 2 using VURMTAXG and equation (3.1).[11] We adopt the standard model closure outlined in section 2.2, and use the formalism described in section 3 to estimate the excess burden of uniform and targeted ten-percentage point reductions in Australia's company tax rate. This is reported in section 5.1. In section 5.2, we raise four key factors that impact the excess burden of company tax in Australia. Section 5.3 outlines possible future extensions to the analysis herein.

5.1 The excess burden of uniform versus targeted company tax cuts

Figure 11 plots the excess burden over time for both scenario 1 (grey line) and scenario 2 (black line). The long-run excess burdens in each case are very similar: -30 cents per dollar for scenario 1, versus -28 cents per dollar in scenario 2. The biasing of the tax cuts towards industries with lower export sales, and away from mining, generates a smaller terms of trade decline, and thus a small, short-run allocative efficiency improvement relative to scenario 1. Over time, as investors respond to the tax cuts and the economy restructures, the impact is attenuated. We expand on the importance of the terms of trade response as a driver of economic efficiency in section 5.2.

Importantly, our estimate for scenario 2 ignores any potential impacts of firm size biases introduced because of a company tax threshold. This economic mechanism was documented by Dixon *et al.* (2004), albeit in relation to Australia's payroll tax. For perfectly competitive firms, the effects are small when payroll tax thresholds are introduced. However, under monopolistic competition, Dixon *et al.* (2004) illustrate that the allocative efficiency effects of tax thresholds can be significant,

[11] Because the core scenario does not utilise lump sum revenue replacement, equation (3.1) cannot be applied to calculate its excess burden and it is not discussed in this section.

highlighting a potential avenue to extend the analysis herein to allow for this mechanism, and generalise Dixon *et al.* (2004) to taxes beyond payroll. These effects would drive the excess burdens reported for scenario 2 further negative, amplifying the downturn in real GNI reported for the core scenario.

5.2 Key parameters and anticipated impacts

In Dixon and Nassios (2018) several factors that impact both the magnitude and sign of the excess burden are documented. We summarise three key factors below, and relate these back to the BOTE model in section 4.2. In future work, sensitivity analyses of our key results under varying combinations of these parameters can be explored, although this is beyond the scope of the current study.

1. **Export demand (trade) elasticities**. In VURMTAXG, we assume the trade elasticity is uniform across commodities and equal to -4; see Table 1 and our rationale for trade elasticities of this magnitude in section 2.3.2. Other recent studies of corporate tax cuts in Australia, e.g., see Cao *et al.* (2015), assume higher magnitude trade elasticities, e.g., Cao *et al.* (2015) assume this parameter to be equal to be -6 or -12, depending on the traded good or service. As this parameter rises in magnitude (or Australia's capacity to impact world prices for key export commodities falls), the terms of trade response to company tax cuts also falls, i.e., it becomes less negative and tends to zero, damping the impact of company tax cuts on Australia's national income. Larger magnitude export demand elasticities manifest in the BOTE herein via a change in the ratio of Y to Y^*. Regarding excess burdens, larger magnitude export demand elasticities would translate the current plots of the negative excess burdens in Figure 11 upwards, i.e., they would be less negative. Dixon and Nassios (2018) studied the impact of shifts from elasticities of -4 to between -6 and -12, and found that the excess burden increases by 16 cents per dollar of revenue raised. If a similar response arose herein, this rise would be insufficient to offset the welfare loss reported; ceteris paribus, the excess burden would rise

from -28 cents to -12 cents per dollar. Under the core scenario, this would materialize as a fall in the size of the wedge between the real GDP and real GNI responses.

2. **The labour-capital substitution elasticity**. In VURMTAXG this is set to 0.4; see Table 1 and our rationale for substitution elasticities of this magnitude in section 2.3.4. Other recent studies of corporate tax cuts in Australia, e.g., see Cao *et al.* (2015), adopt higher substitution elasticity assumptions, e.g., Cao *et al.* (2015) assume this parameter to be equal to 0.9. Higher magnitude labour-capital substitution elasticities translate excess burden plots in Figure 11 upwards once more, because the capital/labour ratio is permitted to rise further in response to a company tax cut. This is also clear in the BOTE: the labour/capital substitution elasticity appears directly in BOTE, see σ in equation (4.1). As σ rises, the capital to GDP ratio also rises. This boost national income in the long-run because the additional capital can be taxed at the (lower) corporate tax rate but comes at a cost of a lower real wage response, which in turn damps the long-run labour supply response. As discussed in section 2.3.4, Dixon and Nassios (2018) studied the effect of lifting the labour-capital substitution elasticity from 0.4 to 0.9, and found that it raised the excess burden by 27 cents per dollar. If replicated herein, this would largely neutralize the long-run welfare fall reported herein, i.e., welfare with the tax cut in place would be very similar to welfare with the tax system as-is.

3. **Foreign ownership shares by industry**. VURMTAXG carries theory that allows for inhomogeneous foreign capital ownership shares across Australian states/territories and industries. In previous work by Dixon and Nassios (2018), this theoretical structure was used to reflect the findings by Connolly and Orsmond (2011), allowing for higher foreign ownership shares in key export- and capital-intensive sectors, e.g., mining and LNG. Other sectors were assigned foreign ownership shares broadly of 20 percent, except for the company-tax-exempt dwelling and public service sectors which were assumed to be overwhelmingly domestically-owned. Herein, we utilize ABS 5204.0 (Capital Stock by Industry) and 5352.0 (Foreign Direct Investment by Industry, and Portfolio Investment) data to revisit the foreign ownership by

industry shares in Dixon and Nassios (2018). The shares adopted herein are compared to those assumed in Dixon and Nassios (2018) in Figure 12. Two main patterns emerge: (1) Nationally, foreign ownership of capital in Dixon and Nassios (2018) lay below the national average herein, biasing the excess burden reported herein down compared to Dixon and Nassios (2018); and, (2) Significant cross-industry variability is evident from ABS statistics, compared to the assumed shares in Dixon and Nassios (2018). This alters the industry responses herein compared to Dixon and Nassios (2018).

4. **Firm-size dependent foreign ownership shares**. The industry-specific foreign ownership shares discussed herein are assumed to be representative of all firms operating within a given industry throughout our analysis. That is to say, small mining firms are assumed to have foreign ownership shares that are equivalent to large mining firms, which are both equal to the industry average in Figure 12. As we have outlined throughout this report, the higher is the foreign ownership share, the more a company tax cut detracts from gross national income relative to GDP.

   If the foreign ownership share used to study corporate tax cuts is too high, the gap between GDP and GNI is possibly overstated. Our simulations of the Core scenario (see column [3], Table 3) find that this gap is around 0.5 percentage points. Supposing the estimate of the foreign ownership share was too high in our simulation (which could be the case if the foreign ownership share is lower in firms in the turnover band receiving the staged tax cuts), this gap would be reduced commensurately. Our analysis of the core scenario suggests that if the foreign ownership share in these mid-size firms is half of the economy-wide average, the gap between GDP and GNI would be reduced to 0.25 percentage points.[12] This very large revision

[12] Similarly, if the foreign ownership share was (i) 20% of the economy-wide average, our back-of-the-envelope (BOTE) analysis indicates that the gap between GDP and GNI would be reduced to 0.1 percentage points; and, (ii) 10% of the economy-wide average, our BOTE analysis indicates that the gap between GDP and GNI would be reduced to 0.05 percentage points. This analysis relies on the analytical framework in Appendix A, where we also provide a worked example in the context of scenario 1.

would have the impact of bringing the GNI result for the core scenario closer to zero; however, because the modelled result is -0.3 percent by 2050, the overall outcome would remain below the base case.

5.3 Other considerations and future work

In this section, we note some key features of the model framework adopted herein and outline how this may be extended in future work.

5.3.1 Retained earnings

While VURMTAXG captures key features of Australia's dividend imputation system — notably the dampening of franking-credit pass-through when profits are retained — it omits any explicit channel through which lower company tax rates might ease internal financing constraints for certain firms. Although Miller and Modigliani (1961) demonstrate dividend policy irrelevance under perfect markets, real-world frictions change the picture. In particular, if tax cuts target businesses with high retained-earnings ratios (or, equivalently, low dividend-payout ratios) that face cash-flow bottlenecks, our analysis fails to capture the additional investment these firms could undertake once those constraints are relaxed—a potentially material effect for capital-intensive or high-growth firms with limited access to external finance. In this sense, the model may understate the investment boost from corporate income tax cuts.

On the other hand, a lower corporate tax rate reduces firms' incentive to pay dividends because each dollar distributed yields fewer franking credits for investors. At a given statutory tax rate, this shrinks the stream of credits available to domestic shareholders, effectively raising their after-tax cost of equity. Thus, even as firms relax internal credit constraints by diverting funds away from dividend payouts, higher retention ratios may suppress household income—and hence consumption and household investment— meaning that the model may overstate the investment boost from corporate tax cuts.

The net effect on aggregate investment and economic dynamism depends on which channel dominates. Easing financing constraints could spur growth among constrained firms, but higher retention ratios could also concentrate investment in incumbents at the expense of new entrants, innovation, and productive capital reallocation. Disentangling these opposing forces offers a promising avenue for future research.

5.3.2 Monopolistic competition

Recent empirical evidence highlights the impact of market concentration across key sectors of modern economies on income distribution and productivity. In the U.S., for example, the top four firms control more than 88% of sales in numerous industries, including medical equipment, financial intermediation, courier services, and aircraft manufacturing [Dixon and Rimmer (2024)]. Grullon *et al.* (2019) show that this rising concentration is associated with increasing profit margins, but not with scale-related productivity gains. Despite these trends, virtually all CGE models—including those based on VURM, like VURMTAX—continue to rely on assumptions of perfect competition or large-group monopolistic competition (LGMC), where firms are price-takers, free entry eliminates profits, and strategic interaction is absent.

An exciting extension to the developments outlined herein would be to include new theory within VURMTAXG to incorporate small-group monopolistic competition (SGMC) in selected sectors. SGMC specification in VURMTAXG will allow for variable markups that respond to pro-competition policy, and for sticky firm entry, enabling analysis of pro-competition policies on excess profits. These extensions are essential to capturing the implications of market power for inflation, wage shares, and the benefits of trade and investment liberalization in concentrated industries.

5.3.3 Alternative revenue replacement mechanisms

Effectively, the Core scenario analysed herein is a tax mix swap, where we increase personal income tax loads sourced from workers and domestic investors, and use the proceeds to fund corporate income tax cuts. As shown in Table 3 (compare the Core scenario responses in column [3] to those reported in column [2], where we lump-sum finance the corporate tax cuts), the impact of personal income tax funding is to translate, in a uniform fashion, the national income and GDP responses from corporate tax cuts themselves, down. This translation is the excess burden of the personal income tax: because this burden is positive (unlike the excess burden of the corporate income tax, which is negative), it impacts national income and GDP in similar ways.

In future work, other options for funding the corporate tax cuts should be explored. At the state level, a popular replacement source of revenue in previous studies has been broad-based land taxes, such as the NSW and ACT local council rates systems [Adams *et al.* (2020); Nassios and Giesecke (2022)]. This is because, like corporate income taxes, they carry negative excess burdens. Raising the rate of broad-based land taxes therefore raises national income slightly, and has little impact on GDP. This feature of land taxes makes them attractive as an alternative revenue source.

Unlike state and local government counterparts, the federal government does not levy a national land tax at present. In future work, exploring alternative revenue replacement sources that, like land tax and corporate income tax, carry negative excess burdens, could offset the falls in national income reported in the Core scenario herein. Some potential tax instruments to consider would be cash flow taxation, including destination-based cash flow taxes, allowances for corporate equity, and allowances for corporate capital. Each of these tax instruments aims to exclude normal returns from the tax base, thus taxing economic rents. For a discussion of how some of these alternatives may function in the Australian context, see Garnaut *et al.* (2020).

6 Concluding remarks

This study presents updated and extended economy-wide modelling of company income tax reform in Australia, using the VURMTAXG model. Relative to Dixon and Nassios (2018), the modelling herein benefits from a comprehensive update to key model inputs. The base year has been advanced from 2016/17 to 2021/22, and foreign capital ownership shares by industry have been revised using the latest ABS data (Figure 12). These updates increase the estimated foreign ownership of Australian capital and contribute to more pronounced falls in national income following CIT cuts than were reported in Dixon and Nassios (2018).

We apply the updated model to study two scenarios: (i) scenario 1, where we simulate a uniform ten-percentage point cut in the statutory CIT rate; and, (ii) scenario 2, a combination of two targeted cuts: one of the same magnitude restricted to firms with annual turnover below A$1 billion and above A$50 million, and a second of five-percentage points for firms with turnover below A$50 million. Scenario 2 leaves all firms with turnover below the A$1b threshold with a legislated corporate income tax rate of 20 percent, and firms above this paying the current legislated 30 percent rate. These scenarios were introduced in 2026 and assessed along a dynamic transition path to 2050.

Consistent with earlier findings by Dixon and Nassios (2018), the analysis confirms that a cut to the statutory company tax rate boosts investment, output, employment, and real wages. In the uniform case (Scenario 1), real GDP rises by 1.46 per cent and the capital stock by 3.25 per cent in cumulative terms by 2050, with similar qualitative outcomes observed in the turnover-targeted scenario (Scenario 2), albeit at smaller magnitudes. A small efficiency gain relative to scenario 1 is observed in scenario 2, evidenced from a slightly smaller in magnitude excess burden (Figure 11). This materialises due to the industry bias in the cut away from the export-oriented mining industry, which damps the terms of trade decline in scenario 2 relative to scenario 1.

This confirms the key insight of Dixon and Nassios (2018): reductions in the company tax rate can increase investment, real GDP, output-per-worker, and pre-tax wages, while leaving overall tax revenue unchanged. However, they can also reduce national income and welfare. These effects are shaped by the structure of foreign capital ownership, both across and within industries, and the interaction of tax policy with trade and labour markets. As such, our findings are sensitive both to the baseline foreign ownership level (again, both across and within industries), and to the tax instrument used to fund company tax reductions. For example, while real national income falls by 0.31 per cent in the core scenario, this effect would moderate if foreign investment levels were significantly lower (i) in general, i.e., across all industries and for all size firms; or, (ii) for companies with less than $1 billion in turnover than the industry-wide averages assumed in VURMTAXG. Similarly, the impacts on after-tax wages, employment, and GNI depend on whether the company tax cuts are funded through higher personal income taxes, or increased taxation of economic rents.

Our modelling abstracts from behavioural distortions that may arise due to the use of turnover thresholds in scenario 2. While these distortions have been documented in the context of payroll tax [Dixon *et al.* (2004)], future work could incorporate similar effects for company income tax using monopolistic competition structures. This would allow for an assessment of whether turnover-based eligibility criteria introduce additional inefficiencies by distorting firm size distributions. Also excluded from the present analysis is any increase in market competition that might result from lowering the company tax rate for firms with turnover below A$1 billion—a potentially relevant effect in imperfectly competitive Australian industries. Finally, while sensitivity analyses around key elasticities are beyond the scope of this paper, it is likely to reveal similar qualitative trends to those identified in Dixon and Nassios (2018).

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Appendix A: National Income versus GDP under alternative foreign ownership assumptions

Equations (4.1) to (4.5) in the main text determine the long-run percentage changes in output (*y*), capital (*k*), gross rental income (*q*), wages (*w*), and rates of return (ror^*, ror_o) in response to a policy shock, such as a corporate tax cut. *p*, *l*, p^*, $ror_{foreign}$, and dT_{local} and $dT_{foreign}$.[13] In this appendix, we use

[13] Herein, we use ror_f in place of $ror_{foreign}$, dT_l in place of dT_{local}, and dT_f in place of $dT_{foreign}$ for brevity.

these results to explore how such a policy affects national income relative to gross domestic product (GDP), and how this difference depends on the foreign ownership share of the capital stock.

Under Australia's dividend imputation system, domestic shareholders benefit from franking credits, effectively reducing the tax burden on distributed profits. Foreign shareholders, in contrast, receive no such credits and bear the full statutory company tax rate on profits, less other allowable deductions such as depreciation and interest expenses. This creates heterogeneity in post-tax returns across owner types.

Using equations (4.1) – (4.5), we can derive an expression that highlights the key role of foreign ownership in mediating national income gains from tax-induced capital deepening. Assume we are operating in a long-run environment, where capital inflows adjust to neutralise any short-run changes in post-tax rates of return, i.e., $ror_f = 0$. From (4.5), the foreign investor' rate of return is thus:

$$ror_f = ror^* - \frac{100}{1-T_f} dT_f, \quad \textbf{(A.3)}$$

which yields:

$$ror^* = \frac{100}{1-T_f} dT_f. \quad \textbf{(A.2)}$$

Substituting (4.4) into (A.2) gives us:

$$\frac{100}{1-T_f} dT_f = 2(q - p^*). \quad \textbf{(A.3)}$$

With both the domestic price level and replacement cost of capital unaffected by the policy change in the long-run, we have that $p=0=p^*$. This implies:

$$q = \frac{1}{2} \frac{100}{1-T_f} dT_f. \quad \textbf{(A.4)}$$

That is, the pre-tax capital rental falls for both foreign and domestic owners. Note that because the domestic tax rate falls by less than the foreign tax rate, i.e. $dT_d > dT_f$ (noting that both values are negative), then the post-tax rate of return for domestic investors falls.

If we also assume no long-run impact on labour supply in (4.1), *y* can be set equal to the capital share multiplied by the percentage change in long-run capital stocks from (4.2), or:

$$y = S_k k. \qquad \textbf{(A.5)}$$

Substituting (A.3) and (A.5) into (4.1) we arrive at:

$$k = -\frac{\sigma}{S_l}\frac{1}{2}\frac{100}{1-T_f}dT_f, \qquad \textbf{(A.6)}$$

which together with (A.5) yields an expression for the GDP response:

$$y = -\sigma\frac{S_k}{S_l}\frac{1}{2}\frac{100}{1-T_f}dT_f. \qquad \textbf{(A.7)}$$

From (A.7), we see that cuts in the foreign company tax rate yield unequivocal long-run gains in GDP, the magnitude of which is sensitive to the size of the cut dT_f, as well as the initial levels of the corporate tax rate T_f, the labour and capital income shares in GDP (assuming two production factors), and the labour/capital substitution elasticity, σ.

Putting (A.4) and (A.6) together yields an expression for the change in aggregate capital rentals:

$$q + k = \frac{1}{2}\frac{100}{1-T_f}\left(1 - \frac{\sigma}{S_l}\right)dT_f. \qquad \textbf{(A.8)}$$

This will become important shortly.

We can study national income responses with the aid of equation (4.9) herein. Rearranging slightly, (4.9) can be written as:

$$y^* = \frac{Y}{Y^*}\left[y - \left(1 - T_f\right)S_f S_k(q + k) + 100 S_f S_k\left(dT_f\right)\right]. \qquad \textbf{(A.9)}$$

Substituting in (A.7) and (A.8) yields, after some algebra,

$$y^* = \frac{S_k Y}{Y^*}\left[\frac{-\sigma}{S_l}\frac{1}{2}\frac{1}{1-T_f} - S_f\left(\frac{1}{2}\left(1-\frac{\sigma}{S_l}\right)-1\right)\right]100dT_f. \qquad \textbf{(A.10)}$$

We are interested in understanding, with the aid of (A.10), how S_f impacts the percentage deviation in national income when company tax rates are reduced. The second of the two terms in (A.10) drive the sensitivity of the national income response to a corporate tax cut. To simplify matters, assume $\left(1-\frac{\sigma}{S_L}\right) \approx 0$. With this in place, for each 1 percentage point rise in S_f, the sensitivity of y^* to a cut in corporate income taxes will rise by $\frac{S_k Y}{Y^*}$. A plausible initial setting for this expression is 0.5.

With regard to specific, numerical examples, assume S_f=0.2 and $100dT_F = -10$; in this case, equation (A.10) implies that the impact of foreign ownership specifically will be to reduce domestic income by 1%.

If S_f=0.1 instead, i.e., half the assumed level of foreign ownership, the impact of foreign ownership is to reduce domestic income by 0.5%.

If S_f was instead 10 percent of the initial level, i.e, S_f=0.02, then the impact of foreign ownership specifically will be to reduce domestic income by 0.1%.

Finally, in scenario 1 we studied a broad 10 percentage cut in the company tax rate, which implied a gap between national income and GDP of approximately 1.8 percent. From (A.5) and (A.10), we can write an expression for this deviation in terms of the parameters herein:

$$y - y^* = S_k\left[\frac{1}{2}\frac{\sigma}{S_l}\frac{1}{1-T_f}\left(\frac{Y}{Y^*}-1\right) + S_f\frac{Y}{Y^*}\left(\frac{1}{2}\left(1-\frac{\sigma}{S_l}\right)-1\right)\right]100dT_f. \qquad \textbf{(A.11)}$$

As before, assuming $\left(1-\frac{\sigma}{S_L}\right) \approx 0$ allows us to cancel one of the two components of the second expression in (A.11). For simplicity, we also assume the first term to be small, which is reasonable if the level of national income and GDP are similar. Setting the LHS in (A.11) to 1.8 and $100dT_F = -10$ then allows us to apply a sense check on the parameter settings within VURMTAXG, yielding:

$$S_k\left[S_f\frac{Y}{Y^*}\right] = 0.18. \qquad \textbf{(A.12)}$$

Assuming as before that $\frac{S_k Y}{Y^*}$=0.5, our back-of-the-envelope representation of our long-run economy is found to be consistent with a foreign ownership share S_f=0.36. This share is broadly consistent with ABS foreign ownership statistics for 2023. Specifically, our analysis of ABS data showed that: (1) Foreign direct equity and reinvested earnings were valued at A$1 trillion in 2023; (2) Portfolio investment in aggregate was about 85% as large as direct investment in 2023; (3) Reconciling these figures with a reported capital stock of A$5 trillion in 2023 yields a foreign ownership share very similar to the implied figure above.

Tables

Table 1: Key VURMTAXG elasticities

Elasticity	Value
Uncompensated labour supply elasticity	0.15
Income elasticity of labour supply	-0.10
Export demand elasticity	-4.00
Investment elasticity w.r.t. rates of return	0.30
Primary factor substitution elasticity	0.40

Table 2: VURMTAXG parameter calibration for company tax policy modelling

Variable name	Description	Value in VURMTAX by capital owner	
		Local	*Foreign*
FSHARE	Share of gross operating surplus that are assumed to be franked equity payments.	0.45	0.43
FCLAIM	Share of franked dividends paid that are claimed as a PIT liability offset.	0.9	0
DEDTTY	Discount factor for investors due to double tax treaty countries.	n/a	0.86
DEDINT	Corporate tax base reduction due to interest deductibility	0.803	0.803
TGOSLEG	Legislated tax rate for company tax	0.3	0.3
DEDPIT	Personal income tax base reduction due allowable deductions and thresholds.	0.173	n/a

Table 3: Key long-run (2050) results, uniform versus staged cuts[14]

	Uniform cut	**Staged cuts**	
	Scenario 1 *Lump sum funding* **Column [1]**	**Scenario 2** *Lump sum funding* **Column [2]**	**Core scenario** *PIT funding* **Column [3]**
Real GNI	-0.41	-0.15	-0.31
Real GDP	1.46	0.37	0.20
Real GDP (A$m in 2050)	*64,850*	*16,594*	*9,046*
Employment	0.27	0.10	-0.08
Output-per-worker	1.18	0.27	0.28
Capital stocks (rental-weighted)	3.25	0.79	0.58
Real wage (post-tax)	1.15	0.44	-0.54
Real wage (pre-tax)	1.15	0.44	0.58
Real investment (aggregate)	1.87	0.60	0.38
Real non-residential investment	2.61	0.83	0.60
Real non-residential investment (A$m, 2050)	*22,137*	*7,001*	*5,117*
Real private consumption	-0.82	-0.31	-0.51
Exports	5.41	1.38	1.17
Imports	0.16	-0.07	-0.24
Terms of trade	-1.29	-0.34	-0.29
Net foreign liabilities (% of GDP)	9.88%	3.01%	3.05%
APC	0	0	0
Real welfare response (A$m, 2050)	-19,557	-7,126	-11,193
Real welfare per capita (A$ per person, 2050)	-511	-186	-292

[14] Unless otherwise stated, results reported are cumulative percentage deviations from the base case in 2050.

Figures

Figure 1: The market for capital.

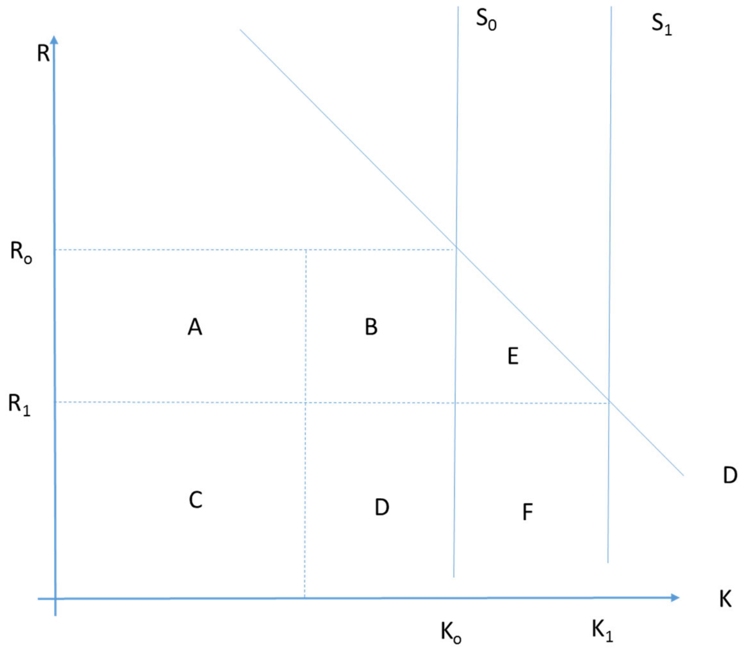

Figure 2: Impact of key macroeconomic variables of a ten-percentage point company tax rate cut (scenario 1).

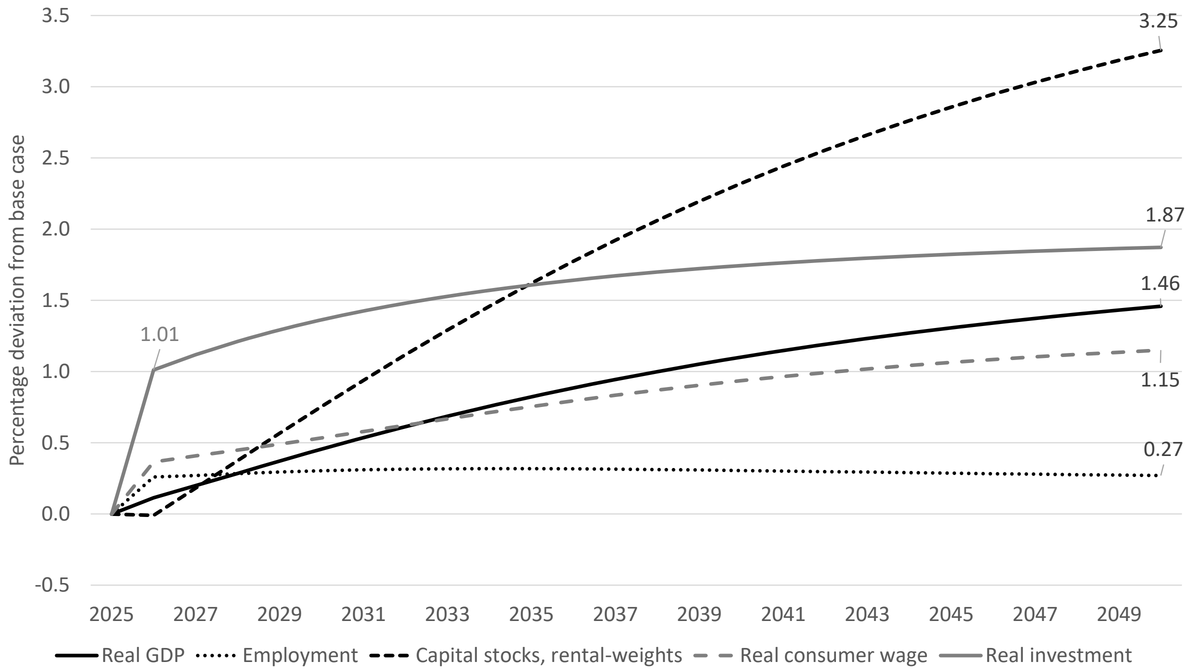

Figure 3: Real GDP and real national income response to a ten-percentage point company tax rate cut (scenario 1).

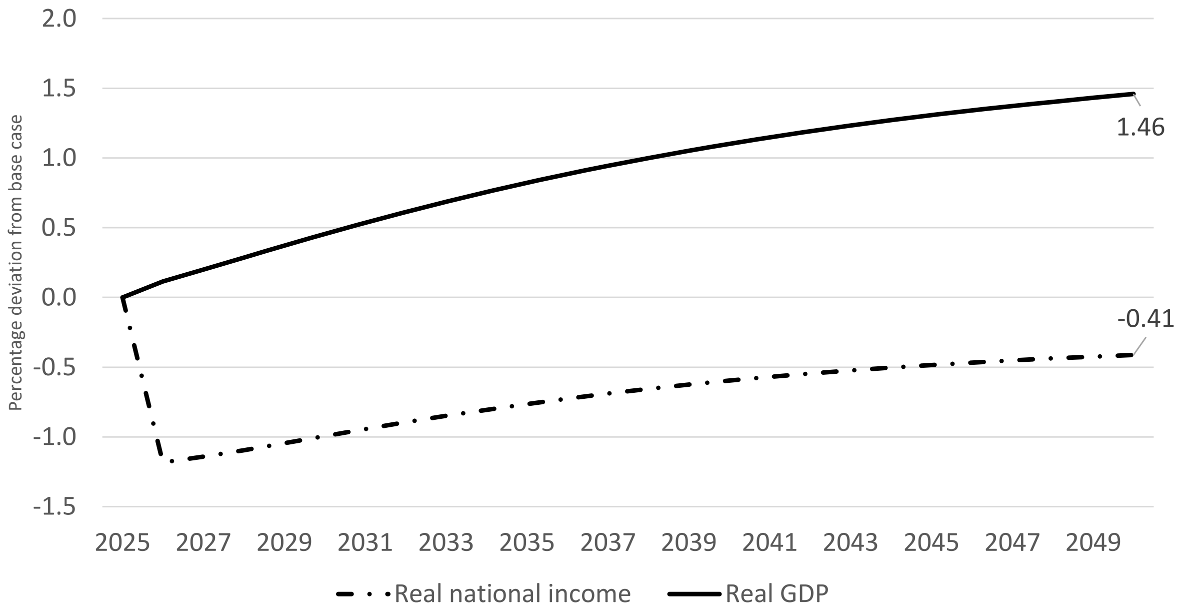

Figure 4: Ratio of net foreign liabilities (NFL) to GNI in response to a ten-percentage point company tax rate cut (scenario 1).

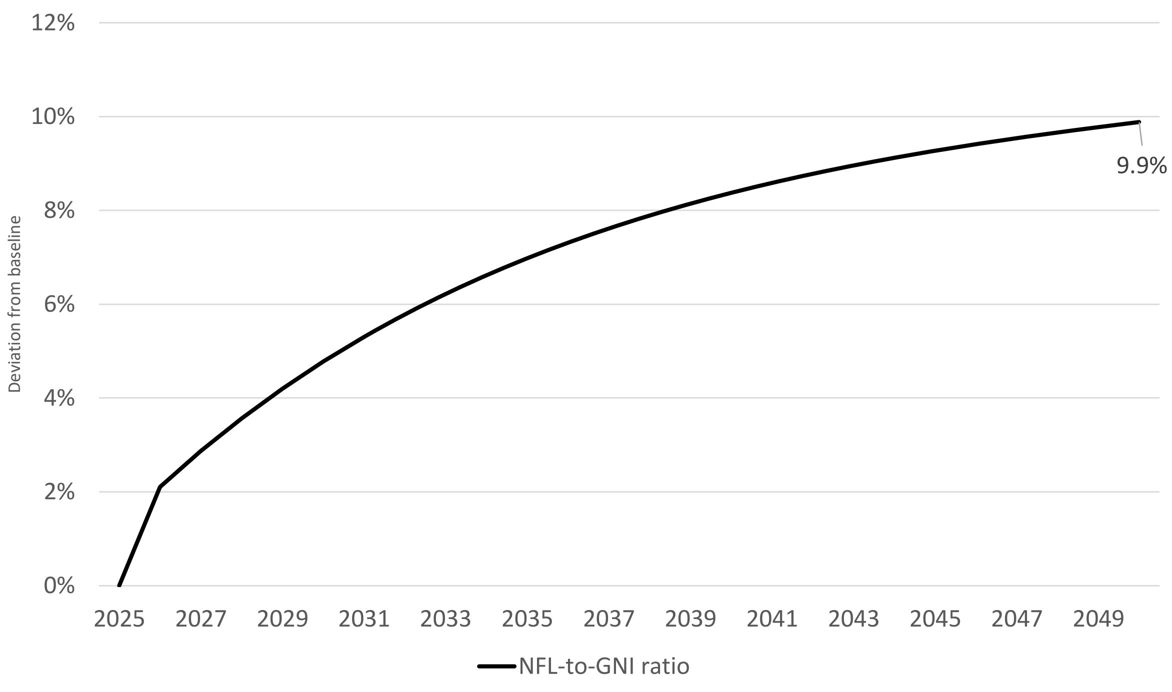

Figure 5: Changes in the expenditure side of GDP and the terms of trade in response to a ten-percentage point company tax rate cut (scenario 1).

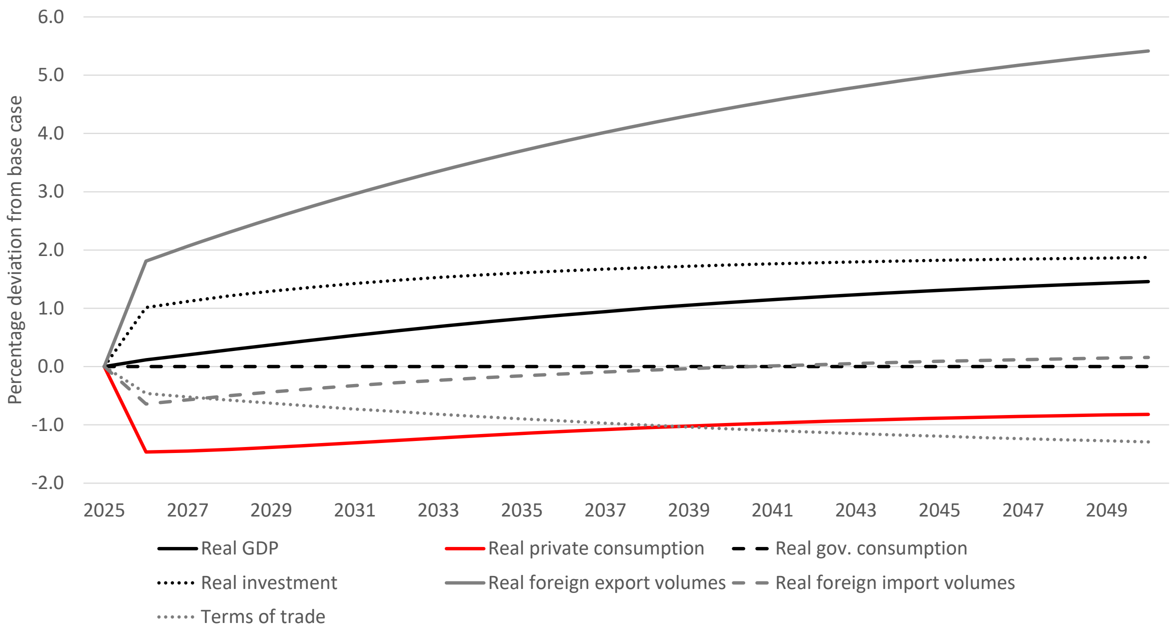

Figure 6: Impact on industry output (Australia-wide), in both the short-run (shock-year, 2026) and long-run (2050), scenario 1 (uniform cuts).

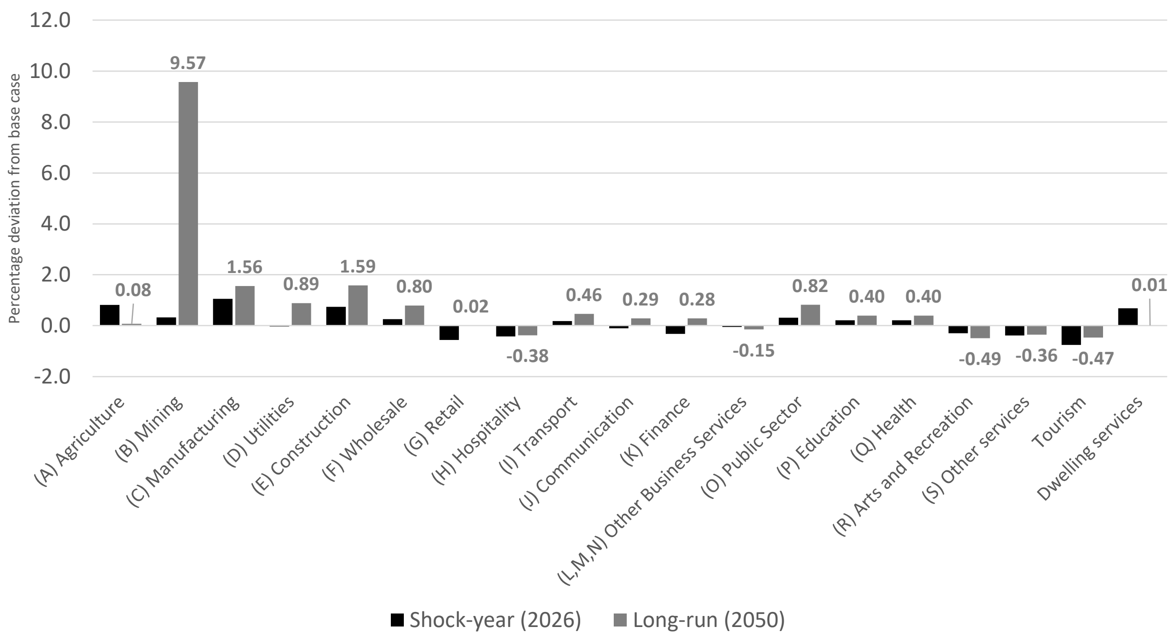

Figure 7: Comparison of industry-specific tax rate shocks in the core scenario and scenario 2 (staged cuts) versus scenario 1 (uniform cut).

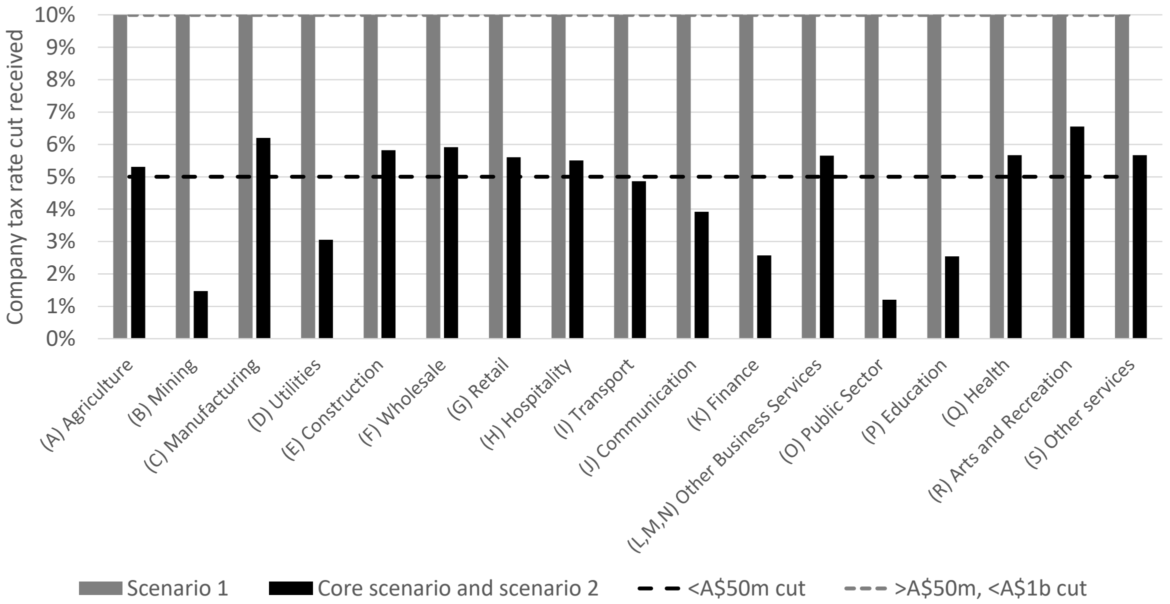

Figure 8: Firm counts by turnover June 2024. Source: ABS, private communication.

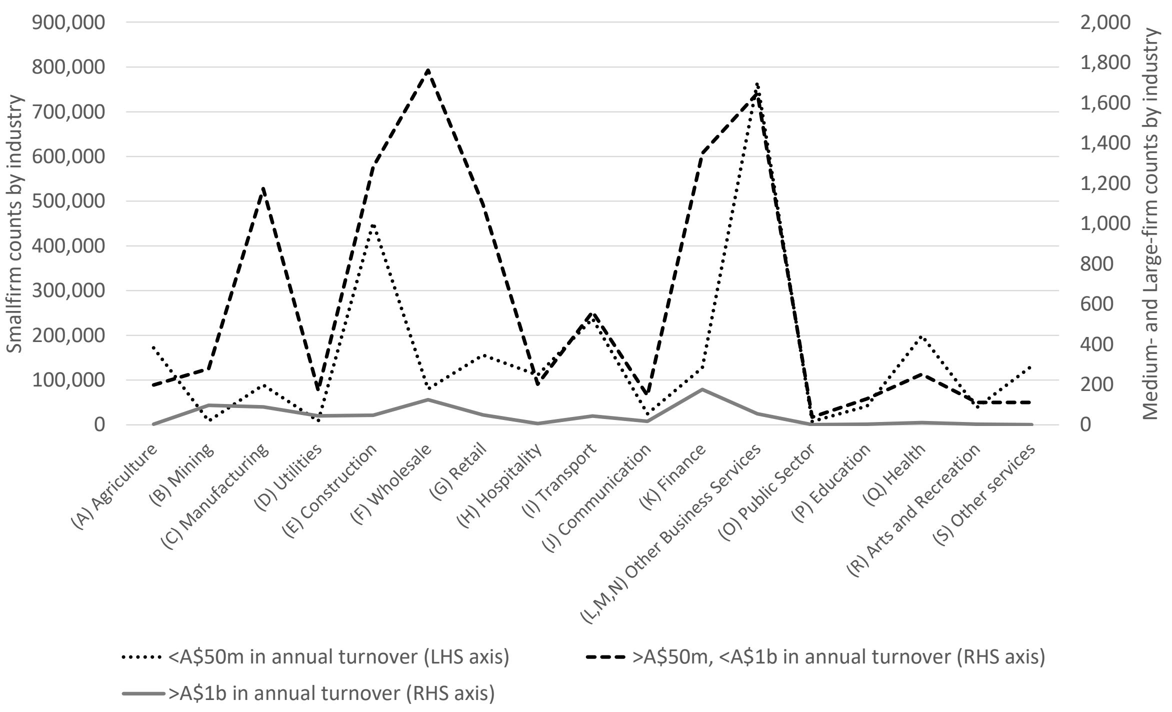

Figure 9: Long-run (year 2050) industry output response, scenario 2 and the core scenario (staged cuts).

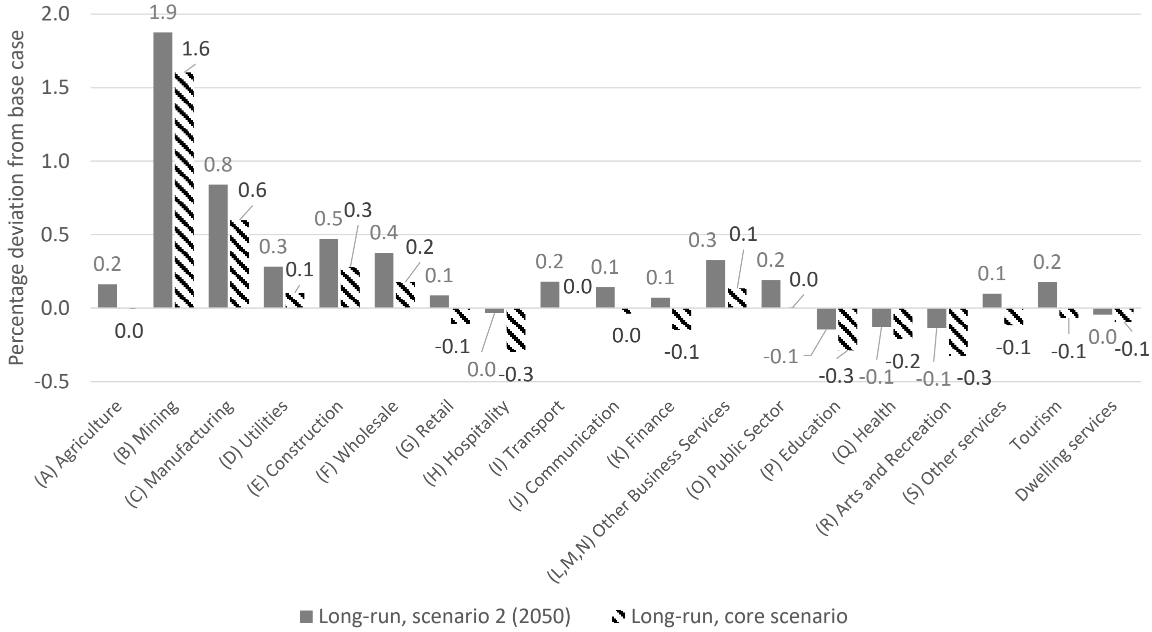

Figure 10: Changes in the expenditure side of GDP and the terms of trade in response to a personal income tax financed staged cuts (core scenario).

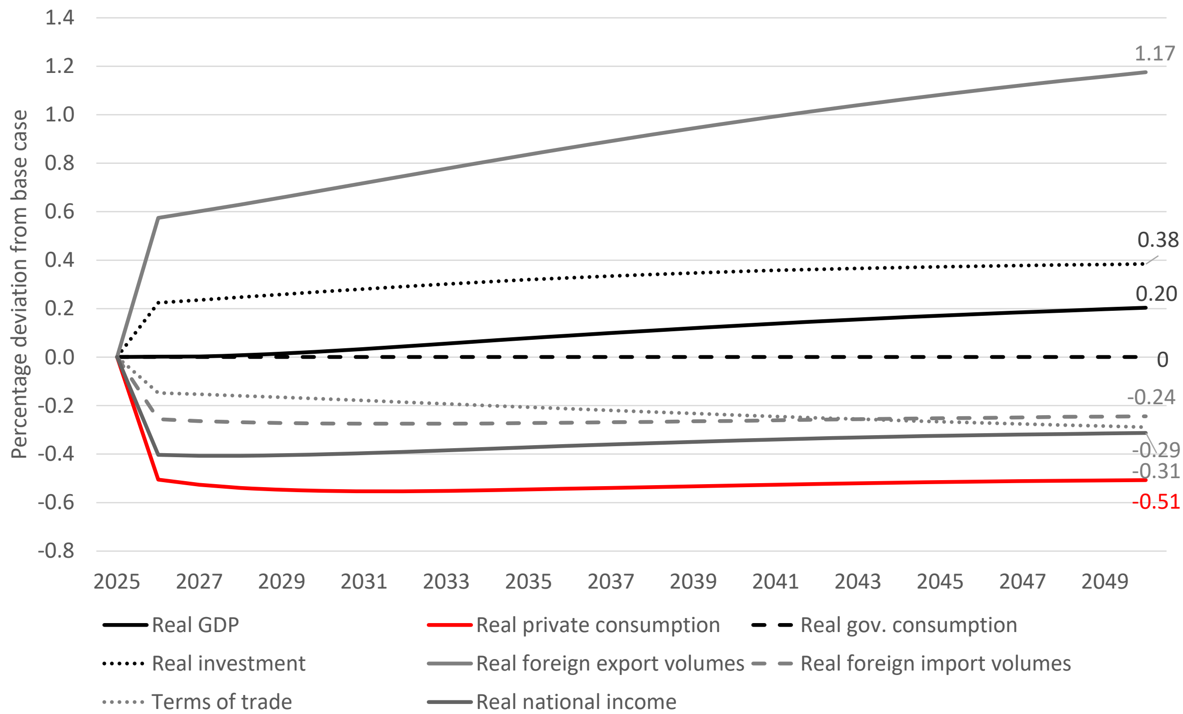

Figure 11: Excess burden: scenario 1 vs scenario 2.

Figure 12: Foreign ownership of capital by industry: Current study vs Dixon and Nassios (2018).