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Submission to Senate Inquiry into the Commitment to the Senate issued by the Business Council of Australia

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¹ This submission was written by, Danielle Wood, Grattan Institute Budget Policy and Institutions Program Director, and Brendan Coates, Grattan Institute Fellow. Much of the analysis is drawn from 2017 Grattan Institute report, *Stagnation nation? Australian investment in a low-growth world*, by Jim Minifie, Grattan Institute Productivity Program Director and Cameron Chisholm, Senior Associate, and Lucy Percival, Associate.

The submission also draws on a 2016 submission by John Daley, Grattan Institute CEO, Brendan Coates, Fellow, and William Young to the Senate Inquiry into the *Treasury Laws Amendment (Enterprise Tax Plan) Bill 2016*.

Summary

We welcome the Senate Inquiry into the Commitment to the Senate issued by the Business Council of Australia. We argue that assessments of the costs and benefits of the company tax cut – including the incentives for further investment, jobs and higher wages – should drive Parliament's consideration, rather than pledges by business leaders. These pledges are essentially meaningless without some assessment of baseline levels of wages or investment in the absence of the cuts.

To assist with a more fulsome consideration, this submission evaluates the Government's plan to cut the company tax rate from 30 per cent to 25 per cent over 10 years.

The best evidence suggests that a company tax cut would boost investment and incomes in the long term. The supply of funds from foreign investors is internationally mobile. Tax rates are one factor that influences investors, and so lower tax rates would be expected to attract more foreign capital, all else being equal.

Company tax rates are not nearly as important for domestic investors. Australia's dividend imputation system means that domestic investors pay tax on profit distributions at their marginal tax rate. Cutting the corporate tax rate will therefore not induce as much additional investment from domestic investors.

The size of the benefit from cutting the company tax rate should not be overstated. The Government maintains that its proposed cut will boost GDP by more than 1 per cent in the long term, at a budgetary cost of \$65 billion over the next 10 years. But analysis from the Commonwealth Treasury and others shows that the net benefits to Australians' incomes will be much smaller. National

income would be no more than 0.6 per cent higher in the long term, once profits flowing out of Australia, and the economic costs of raising other taxes to compensate for the foregone company tax revenue, are taken into account. And because additional corporate investment will phase-in slowly, the benefits will be a long time coming.

Cutting the company tax rate also provides substantial windfall gains to investors on their existing investments in Australia. This is an upfront transfer from taxpayers to investors. Such an unfunded company tax cut would add to already-large budget deficits. As a result, cutting the company tax rate will see national incomes go backwards for six years before the cuts start to make a contribution to national incomes, or even longer under the Government's phased approach.

Alternatives to the company tax cut that apply only to new investments – such as an investment allowance or faster depreciation rates – could provide an equivalent boost to investment, but at lower long-term budgetary cost. These approaches would not provide a 'free kick' to existing shareholders, but could prove more difficult to administer.

Alternatively, the government could take this opportunity to pursue genuine tax reform. The Henry Tax Review recommended higher taxes on economic rents – specifically charging more for the use of nonrenewal resources like coal and iron ore – should be introduced at the same time as any company tax cut. A well designed rent tax would significantly improve the budget position while maintaining the economic benefits of any company tax cut.

1 Australia's investment performance is not as bad as it seems

Nine years after the global financial crisis (GFC), economic growth remains weak in many rich nations. Australia has been an exception to the malaise, but growth has slowed as the mining boom winds down.

Investment in Australia has been exceptionally strong. Since 2005, the capital stock per person has grown by a third. Even excluding mining, capital per person has grown by more than 15 per cent. By contrast, in both the US and UK the capital stock per person grew by just 7 per cent. Strong investment helped to increase output per person in Australia by 10 per cent between 2005 and 2015, compared to 6 per cent in the US and just 4 per cent in the UK. But Australia is now experiencing its biggest ever five-year fall in mining investment, as a share of GDP. And non-mining business investment has fallen from 12 per cent to 9 per cent of GDP, lower than at any point in the 50 years from 1960 to 2010.

Yet most of the gap between today's non-mining investment rate and that of the early 1990s is due to benign long-term structural changes in the economy:

- **The non-mining sector has slowly become less capital intense.** A greater proportion of non-mining business is in industries that do not use much capital, and the average sector has become less capital intense, mainly because prices of capital goods have fallen. That has reduced non-mining investment by about 1.5 per cent of GDP.
- **Capital-light sectors have grown.**² The shift to capital-light services and construction has cut non-mining business investment by about 1 per cent of GDP since the early 1990s.
- **The non-mining economy declined as a share of GDP as the mining sector grew.** Output in mining grew as a share of nominal market output from 2004 to 2012, from about 5 per cent to about 10 per cent. It has declined somewhat as prices have fallen, but remains above its average level prior to the boom.³

Together, these benign factors reduced non-mining business investment by almost 2 per cent of GDP. They account for about

² The fastest growing market-sector non-mining industries were financial and insurance services (up 4.7 percentage points to 13.7 per cent of non-mining market sector output); professional, scientific and technical services (+4.4 percentage points); and construction (+3.5 percentage points). These industries

all have capital-output ratios well under half the non-mining market sector average.

³ Minifie, *et al.* (2017), p.24.

two-thirds of the decline in investment since the early 1990s (Figure 1).

But this is no excuse for complacency. About a third of the fall in non-mining investment is a result of the economy growing slowly, which discourages businesses from investing.⁴ Slow output growth has cut non-mining business investment by a further 0.9 per cent of GDP, compared to its level in the years around 1990. Slow recent output growth accounts for about a third of the gap in non-mining business investment as a share of GDP in 2016 compared to its average level in the years around 1990.

More importantly, the prospects for faster economic growth are dim. Economic growth has tended to be slower across the developed world since before the Great Financial Crisis. The potential growth rate⁵ of the economy has declined in recent years, mainly because productivity growth has slowed and the working-age population is growing more slowly.⁶ And actual growth has been a bit slower than potential in recent years

Therefore policymakers are right to review their options to increase the potential growth rate of the economy, and to increase actual growth.

⁴ Firms invest in part to accommodate expected output growth, so low output growth reduces investment.

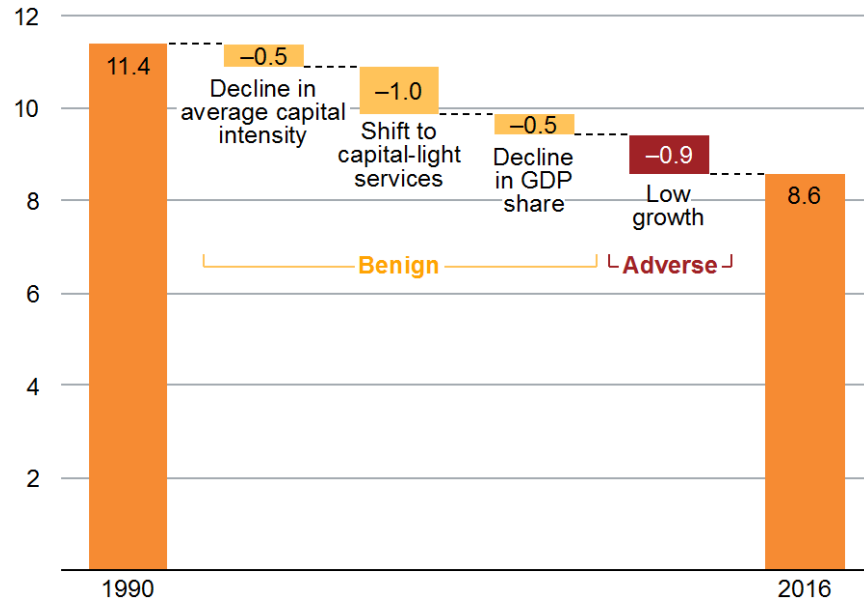
⁵ Potential output growth is a function of changes in the working age population, changes in labour participation rate ceilings, and productivity growth (which in

turn is a function of investment and other factors like changes in technology and policy settings).

⁶ Minifie, *et al.* (2017), p.25

Figure 1: Four factors explain the decline in non-mining investment

Non-mining business investment as a percentage of GDP, 1990 and 2016



Notes: Start and end points smoothed: 1990 is the 1986-to-1994 average and 2016 is the 2013-to-2016 average. Analysis uses non-mining market sector output, capital intensity and depreciation to explain non-mining private business investment. (The market sector excludes public administration and safety, education and training, health care and social assistance, and ownership of dwellings.) Private investment outside the market sector is small and has hardly changed over the period, but public investment in the market sector declined from about 4 per cent to about 2.5 per cent of GDP. Some of the decline in market sector capital intensity may be due to lower public sector investment.
Source: Minifie et al. (2017), Figure 3.2.

2 A company tax cut would boost investment

2.1 The theory

In theory, cutting the company tax rate boosts economic activity in the long term. All taxes distort choices, and thereby drag on economic activity. Taxes on capital often have especially large economic costs because they discourage investment which can be internationally mobile. By some estimates, roughly half of the economic costs of Australian company tax ultimately fall on workers, as lower company profitability leads to lower investment, and therefore lower wages and higher unemployment.⁷

But while the theoretical argument for company tax cuts is straightforward, the real story is more complicated.

2.2 Incorporating dividend imputation into the theory

Australia's unusual dividend imputation system means that when profits are paid out, they are only taxed at the domestic investors' personal income tax rates. A company tax cut does not help them much since their effective company tax rate is already close to zero.

This system is known as a franking credits regime, and few other developed countries have it.⁸ Most countries tax corporate profits, and then investors also pay personal income tax on the dividends (albeit sometimes at a lower rate).⁹ As a result, although Australia has a relatively high headline corporate tax rate compared to our peers, in practice the comparable tax rate is lower – at least for local investors.

Therefore a lower company tax rate only benefits domestic investors via company earnings that are not paid as dividends, but retained by companies. Between 2005 and 2015, a third of the profits of listed Australian companies were retained.¹⁰ Grattan Institute's 2017 report, *Stagnation nation?*, estimated that cutting the company tax rate to 25 per cent would increase the average rate of return to domestic investors by just over 2 per cent.

Foreign investors, on the other hand, do not benefit from franking credits. They pay tax on corporate profits twice: first at the company tax rate, then as income tax on the dividends at home (potentially at a discounted rate). Therefore a cut to the company tax rate provides bigger benefits to them.¹¹ Cutting the tax rate from 30 per cent to 25 per cent would increase the after-tax rate

⁷ Freebairn (2015).

⁸ Australia is one of only five countries in the OECD (along with Canada, Chile, Mexico and New Zealand) that continue to operate a full imputation tax system where all corporate tax is credited to domestic shareholders. Ainsworth (2016); Treasury (2015b), Table 5.1.

⁹ Dixon and Nassios (2016).

¹⁰ Minifie, *et al.* (2017), p.30.

¹¹ The effective tax rate for foreign investors also varies depending on whether investment is equity or debt funded. About 40 per cent of Australian corporate

investment is debt funded. Interest on debt used to fund corporate investment is a deductible expense for the company investor and taxed at a low withholding tax rate for the non-resident funder (Freebairn (2018)). Further, tax arbitrage, where non-resident shareholders sell domestic shares to residents where dividends have been declared but not yet paid, may also reduce the effective tax rate on foreign investment funded by equity below the company tax rate: Swan (2018); Martin (2018)).

of return on Australian equity by about 7 per cent for foreign investors.¹² The rate of return would increase both for individuals who own shares in Australian companies and for multinational firms paying Australian company tax.¹³

2.3 Investment will increase if the company tax rate is cut

Foreign investors, and domestic investors to a lesser degree, could be expected to invest more if the company tax rate is cut. The Australian Government Treasury commissioned Independent Economics and KPMG to model the long-term impact of cutting the company tax rate from 30 per cent to 25 per cent. Treasury also did its own modelling. According to these models, a 5 percentage point cut in the company tax rate will increase the size of the capital stock by 1.6-to-2.9 per cent in the long run due to increased foreign investment (Figure 2). With business investment currently around 13 per cent of GDP, the increase would amount to 0.2 to 0.4 percentage points of GDP.¹⁴

¹² Minifie, *et al.* (2017), p.30.

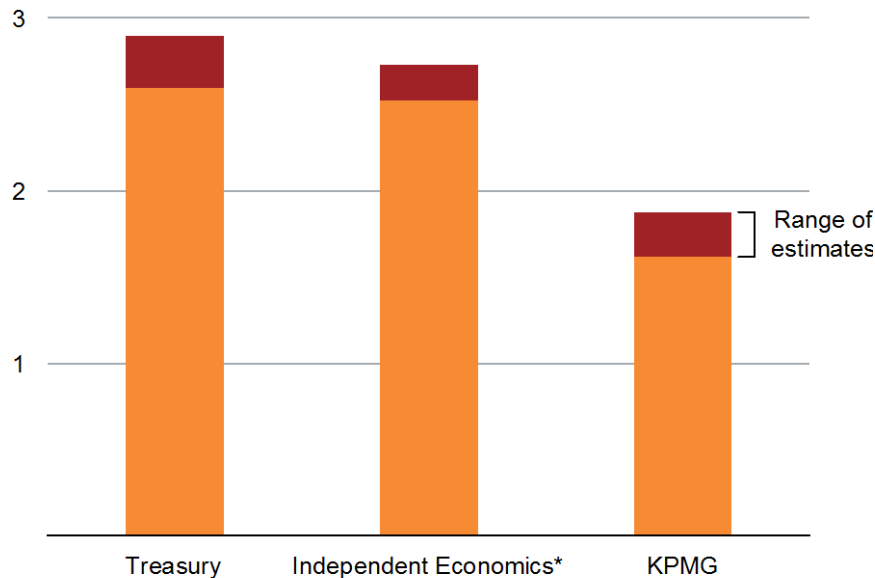
¹³ After Australian taxes, foreign investors currently receive 70 cents of every dollar of distributed pre-tax profits. If the company tax rate was cut to 25 per cent, this amount would increase by 7 per cent, to 75 cents. US-owned multinational firms may not increase their rate of return by as much because they must pay the higher US corporate tax rate when they repatriate profits to the US, receiving a tax credit for Australian company tax already paid. But the repatriation of profits by US-owned multinationals accounts for as little as 5 per

cent of the total Australian company tax, in part because US-owned multinationals tend not to repatriate profits.

¹⁴ This assumes that all of the increased investment is business investment. In the short run, investment may rise by more, as firms adjust their capital stock to the new, higher ratio to output. There is evidence, however, that it takes four or more years for investment to respond to a tax cut, and rise towards a new long-run level; see Cockerell and Pennings (2007).

Figure 2: A company tax cut would lead to a modest investment increase

Estimated long-term impact on investment and the capital stock of a 5 percentage point reduction in the company tax rate, percentage change



Notes: * *Independent Economics* reports the estimated impact on business investment only. If there is no impact on non-business investment, then *Independent Economics*' estimated impact on total investment is likely to be closer to that of KPMG.
Source: Minifie *et al.* (2017), Figure 4.4.

¹⁵ FDI is a form of foreign investment where the investor has a controlling interest, such as foreign-owned multinational firms operating in Australia.

¹⁶ Feld and Heckemeyer (2011), p.263. In comparison, the IMF estimates that FDI increases by 4.4 per cent in advanced economies for a 1 percentage point corporate tax reduction; see IMF (2016), p.48.

The modelling results have some support from empirical literature

Many empirical studies have analysed the response of investment to changes in the corporate tax rate across economies. Most relevant to Australia are those that analyse the response of foreign investment. A number of papers have estimated the response of foreign direct investment (FDI) to corporate tax cuts.¹⁵

A synthesis of 45 studies found that the median estimated impact of a 1 percentage point cut in the corporate tax rate was a 2.3 per cent increase in FDI.¹⁶ If this estimate applied to Australia, then cutting the company tax rate by 5 percentage points would increase FDI by about 0.4 percentage points of GDP, consistent with Treasury's model.¹⁷

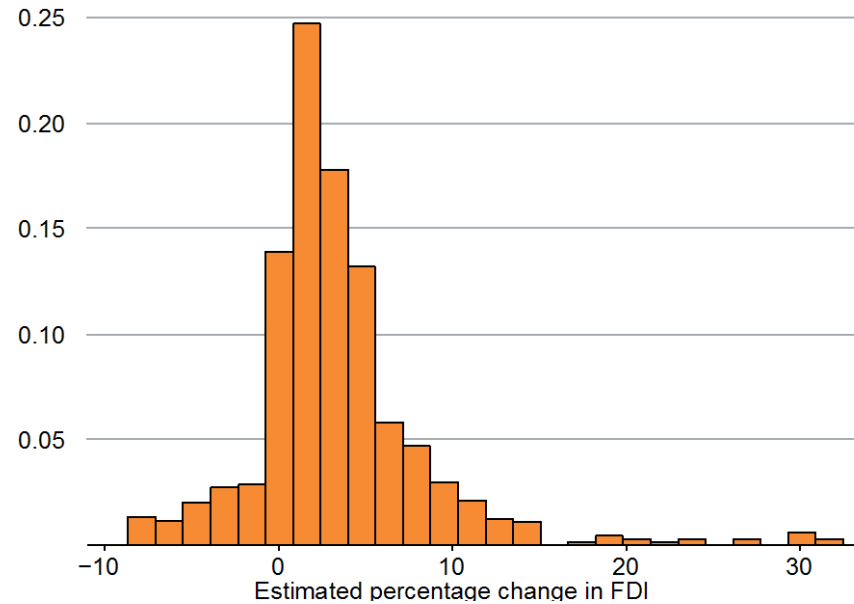
However, the empirical literature suggests there is significant uncertainty about how FDI might respond. Most studies estimate that FDI will increase, but there is a broad range of estimates, and

¹⁷ Minifie, *et al.* (2017). FDI is one part of investment. The overall effect may differ: foreign equity portfolio investment would probably increase, while foreign debt and domestic investment would increase less and could even fall. In addition, investment may respond more strongly initially than it does in the long run; see KPMG Economics (2016), pp.4-5.

one in seven studies suggests it will stay the same or fall, as shown in Figure 3.¹⁸

Figure 3: There are a wide range of empirical estimates on how FDI responds to a corporate tax cut

Distribution of estimated increase in FDI inflows in response to a 1 percentage point corporate tax rate cut, proportion of studies



Note: Based on 704 estimates across 45 studies.

Source: Chart taken directly from Feld and Heckemeyer (2011), p.241.

¹⁸ Feld and Heckemeyer (2011), p.240. This is before taking into account publication bias: studies that report a negative or insignificant impact are less likely to be published.

Tax rates are only one factor in firms' decisions to invest

Foreign investors take a number of factors into account in determining where to invest, including the corporate tax rate.¹⁹ Corporate investment decisions don't just turn on tax rates – they also consider Australia's stable government, educated workforce and developed economy. Despite a company tax rate of 30 per cent, more money was invested in mining projects in Australia than in any other country in the world for each of the eight years of the mining boom.²⁰

Countries around the world compete to attract global capital; many have cut their corporate tax rates in recent years, while Australia's rate has not changed since 2001.²¹ As this tax competition continues, all else equal Australia will become a somewhat less attractive place for foreigners to invest. However,

as the modelling outlined in the next chapter suggests, the overall economic effect may not be large.

¹⁹ Other factors include the size and profitability of the market, capabilities of the local workforce, the ease of doing business, and the quality of the legal environment

²⁰ Minifie, *et al.* (2013)

²¹ Minifie, *et al.* (2017), Box 2.

3 Impact of a company tax cut on national income and wages

A 5 percentage point company tax cut would increase investment in Australia, albeit modestly. But investment is merely a means to an end. Whether a company tax cut is in the national interest depends on whether it improves the living standards of Australians. A company tax cut would have to be funded, in part, by increases in other taxes or cuts to government spending.

Increased investment resulting from a tax cut will increase Australia's economic output. Yet it is a mistake to assume that all the increase in economic activity will make Australians better off. Tax cuts also increase payments to foreign investors. To determine whether a company tax cut is in Australia's national interest, the best measure is the impact on Gross National Income (GNI), rather than GDP. GNI differs from GDP in that it excludes income earned in Australia by overseas residents (such as by foreign owners of assets in Australia) and includes income earned overseas by Australian residents.

In the long run, a company tax cut would probably benefit Australians (but different models give different results)

The economic modelling of a company tax cut conducted by and for Treasury focuses on the long-term impact on GNI. The models assume that the reduction in the company tax is offset with

increases in other taxes.²² Under a scenario in which a 5 percentage point cut in the company tax rate is funded by an increase to personal income tax rates, GNI is predicted to increase in the long run by 0.5-to-0.6 per cent (\$8 billion-to-\$10 billion in today's economy), as shown in Figure 4.²³

In the long run, workers are likely to be the main Australian beneficiaries of increased foreign investment. A larger capital stock increases labour productivity, which means companies are likely to bid up wages. A 5 percentage point cut in company tax rates is predicted to lead to a long-term increase in after-tax wages of 0.4-to-0.8 per cent. This is net of increases in personal income tax rates to offset the impact of company tax cuts on the budget.²⁴

The predictions of these models depend on the assumptions made. As discussed above, how much investment responds to a change in after-tax rates of return is not known with much precision. There are some reasons to believe the Treasury model assumptions are on the optimistic side.²⁵ Other economic models come to the same results. For instance, the Centre of Policy Studies, in analysing a reduction in the company tax rate to 22 per

²² According to one model, company tax cuts could be up to 55 per cent self-funded; see Murphy (2016), p.27. This is because a larger capital stock increases earnings, leading to higher tax collections, while a lower tax rate also acts as a disincentive for multinationals to shift profits to low-tax jurisdictions.

²³ Kouparitsas, *et al.* (2016), p.28, Murphy (2016) and KPMG Economics (2016). The other scenarios considered funding a company tax cut via an efficient lump-

sum tax, or via reducing government spending. In these scenarios, the impact on GNI was estimated to be as high as 0.8 per cent, as discussed in Daley and Coates (2016a).

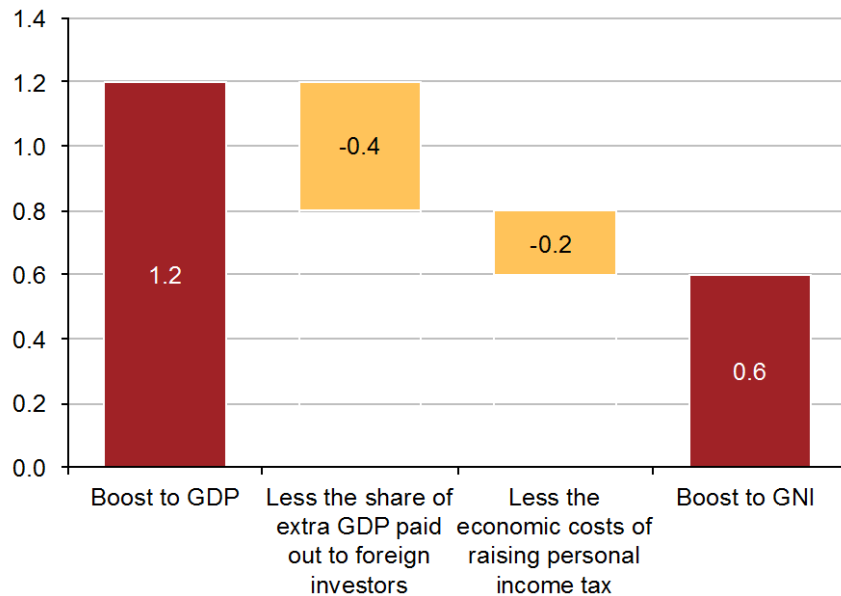
²⁴ Kouparitsas, *et al.* (2016), p.28, Murphy (2016) and KPMG Economics (2016).

²⁵ Daley and Coates (2016a)

cent, found that while output and investment increase, the long-term impact on GNI is negative.²⁶

Figure 4: Treasury modelling suggests the company tax cuts are likely to boost incomes by no more than 0.6 per cent

Expected long-term boost to GDP and GNI from a cut in the company tax rate from 30 per cent to 25 per cent, per cent of GDP and GNI



Note: The above chart uses results from the Treasury analysis of the 2016-17 Budget changes. It compares the increase to GDP under the scenario where the company tax cut is funded by a hypothetical, non-distorting tax, and the increase to GNI where the cut is funded by an increase to a flat personal income tax. Sources: Treasury (2016); Grattan analysis.

In the short run, a company tax cut would reduce national income

Cutting the company tax rate also provides substantial windfall gains to investors on their *existing* investments in Australia, while the Commonwealth Budget would take an immediate hit. The market value of Australian equity would increase, because shareholders would anticipate a temporarily higher rate of return after tax. Investors in firms with a high proportion of foreign ownership would probably benefit the most, because dividend imputation would limit the benefits of the tax cut to firms mainly owned by domestic investors.²⁷

²⁶ Dixon and Nassios (2016); Dixon and Nassios (2018).

²⁷ Multinational firms that report large profits in Australia would benefit the most. Multinationals that shift some of their Australian profits to lower-taxed

Figure 5: National income turns positive about six years after a company tax cut
 Impact of a 5 percentage point company tax cut on GNI, \$2017 billions



Note: Long-run impact occurs when the capital stock has completely turned over (about 80 per cent of this occurs within 20 years).
 Source: Minifie and Chisholm (2017).

Since domestic investors are largely unaffected by the company tax rate due to dividend imputation, much of the foregone tax revenue currently collected on *existing* investments will instead flow offshore, reducing national income. For example, cutting the company tax rate to 25 per cent this year would reduce GNI by about 0.25 per cent (\$4 billion).²⁸ As investors respond to a higher rate of return and the capital stock grows, GNI would begin to increase. Based on Treasury models of the cost and economic impact of the company tax cut, GNI would become positive after six years (Figure 5), but the full benefit wouldn't be felt for many years.²⁹ In practice, the phased introduction of the company tax cut would see both the drop in national income and the long-term boost to national income from increased investment spread out over an even longer period.

jurisdictions would gain the same increase in the rate of return on their reported profits, but the benefit would be less relative to the profits they would have reported had they not engaged in profit shifting.

²⁸ Minifie, *et al.* (2017), p.34

²⁹ The Treasury cites an analysis that suggests the full adjustment to the capital stock takes about 20 years, with half completed in 10 years; see Kudrna (2010).

4 Budgetary trade-offs

4.1 Budgetary impacts of the company tax cut

The economic benefits of cuts to the company tax rate have to be weighed against their budgetary cost. Treasury expects the Government's company tax plan to cost the budget \$65 billion over the next 10 years.³⁰

If the company tax rate in Australia had been cut to 25 per cent from 1 July 2017, the budget deficit for 2017-18 would increase by about \$7.4 billion.³¹ Over time, the company tax cut is expected to increase profits and wages, which will lead to budget improvements via increased company tax and personal income tax revenue (Figure 6). There are also likely to be smaller increases in other sources of tax revenue, such as the GST.³²

The modelling conducted by and for Treasury assumed that the company tax cut is budget neutral, under three alternative sources of funding: a 'lump sum' tax; a reduction in 'wasteful' government spending; and an increase in personal income taxes. A lump sum tax is purely hypothetical, and it may be difficult to cut spending sufficiently to fund the tax cut.³³ It is likely a company tax cut would have to be funded, at least in part, by increasing other taxes.

³⁰ Belot, 2017 #5025.

³¹ Minifie, *et al.* (2017), p.35.

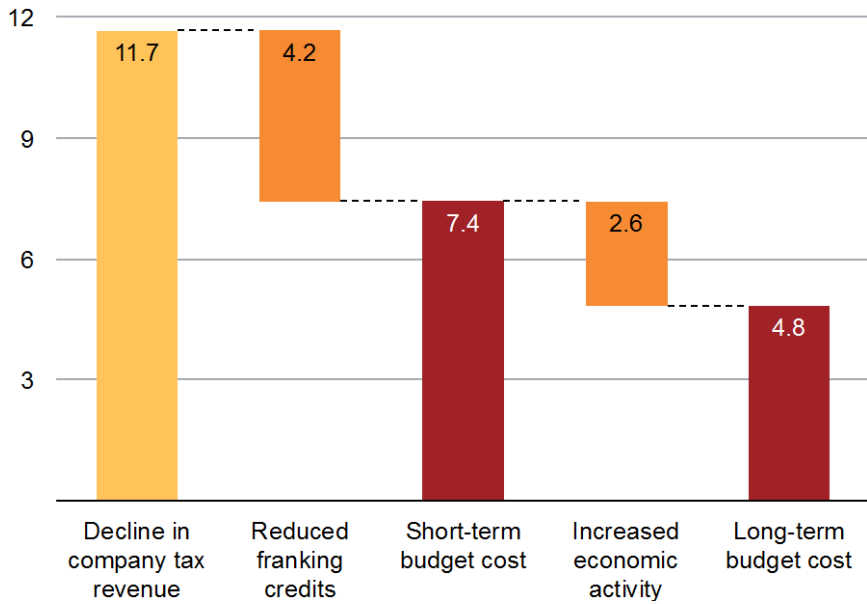
³² The degree to which increased economic activity will improve the budget position depends on how the company tax cut is financed. Estimates range from

35-to-55 per cent of the short-term budget cost; see Kouparitsas, *et al.* (2016) and Murphy (2016).

³³ The lump sum tax is assumed to have no impact on economic behaviour. It is economically similar to a broad-based land tax.

Figure 6: The budget cost of a company tax cut will decline as economic activity increases

Estimated contribution to budget deficit of a 5 percentage point company tax cut, \$2017 billion



Notes: Based on 704 estimates across 45 studies.
Source: Minifie et al. (2017), Figure 4.6.

4.2 Australia still faces a long-term budget challenge

The Commonwealth’s stubborn budget deficit has persisted at around 2-to-3 per cent of GDP for eight years.³⁴ Many think that the latest budget estimates are again too rosy, and there will be little improvement for several more years.³⁵ Is it the right time to hurt the bottom line with cuts to corporate tax that won’t pay back for over a decade?

The Government has not explicitly stated how it plans to fund a company tax cut. Projected improvements of the budget balance predominantly rely on growth in personal income tax receipts.³⁶ The government has foreshadowed it will deliver income tax relief in the forthcoming budget. Without other substantial spending or revenue measures, there is a risk that the proposed surplus will once again be pushed further out to the horizon.

³⁴ Daley and Wood (2015).

³⁵ Daley and Coates (2016b).

³⁶ Bracket creep – income growth that pushes wage earners into higher tax brackets – is likely to play a role in budget repair (see Daley and Wood (2015)).

5 There are alternatives to a company tax cut

There are alternatives that could boost investment at a lower cost to the long-term budget bottom line. Grattan Institute's *Orange Book 2016* suggested lowering effective company tax rates via accelerated depreciation on new investment or investment allowances.³⁷ These schemes are cheaper than a company tax cut because they only subsidise *new* investment, they do not provide a windfall gain on historical investments.

5.1 Accelerated depreciation schemes

An alternative to cutting the company tax rate is to allow firms to write off new capital investments faster. Accelerated depreciation schemes are often touted as a more efficient way of increasing investment than company tax cuts, because the tax break only applies to new investment.³⁸

Accelerated depreciation schemes allow firms to depreciate their capital investments at a faster rate, providing them with a tax deduction earlier. Often this involves firms being able to immediately write off some or all of the cost of new investments as they occur.

Australia uses accelerated depreciation schemes for certain types of assets, usually those that have a long life.³⁹ Temporary schemes have been used to stimulate investment in the past. For

instance, small businesses were able to immediately write off up to 50 per cent of new capital investments made in 2009 as part of a wider stimulus package.⁴⁰ The 2015-16 federal budget temporarily increased the amount of new investment small businesses could immediately write off, from \$1,000 to \$20,000. Existing schemes could be expanded to apply to all capital investment.

When a firm is able to immediately write off a proportion of new asset purchases, it pays less tax at the beginning and more tax later on compared to standard depreciation schemes. Unless the immediate write-off is implemented as 'bonus' depreciation, the dollar amount of tax paid over the life of the asset does not usually change.⁴¹ But bringing forward depreciation reduces the real cost of investing for firms, particularly in assets with a long life, such as plant and equipment.⁴² It is as though the government provides an interest-free loan to companies.

³⁷ Daley, *et al.* (2016), p.3.

³⁸ Emerson (2016) and Dennis (2016).

³⁹ When the company tax rate was last cut in 2000-01, a number of accelerated depreciation arrangements were phased out: see Minifie, *et al.* (2017), p.38.

⁴⁰ The immediate write-off acted as a 'bonus' under this scheme – firms were still able to depreciate 100 per cent of their capital purchases over the asset

lifetimes. in addition to the immediate deduction. This type of scheme is often referred to as an *investment allowance*.

⁴¹ An asset's life is the period over which it is usually depreciated.

⁴² Gravelle (2014).

How accelerated depreciation affects investment

International evidence suggests that the ability to bring forward depreciation will increase investment. For instance, a US study found that in the long run, investment rose when firms could write off costs faster.⁴³ Short-term schemes can also stimulate investment as firms rush to beat a deadline.⁴⁴ A study of a bonus investment allowance scheme in Germany, for instance, found capital investment increased, particularly in assets with a long life.⁴⁵ But after the scheme expired there was a significant decline in investment, suggesting that much of the boost was due to firms bringing their investment forward.

While a temporary accelerated depreciation scheme may boost investment, frequent changes to depreciation rules can create uncertainty for business.⁴⁶ And firms may hold off investing in assets if they anticipate a future favourable change to depreciation rules.⁴⁷

An accelerated depreciation scheme could be introduced permanently, producing a similar impact on investment as cutting the company tax rate.⁴⁸ For a firm deciding whether or not to invest in an asset, an immediate deduction of 22 per cent of new investment is approximately equivalent to a 5 percentage point company tax cut.⁴⁹ The immediate write-off reduces the after-tax

upfront cost of an asset purchase, while a company tax cut increases the value of the after-tax profit the asset generates.

How accelerated depreciation affects tax revenue

In the long run, the budget cost of introducing a permanent accelerated depreciation scheme is lower than the cost of a company tax cut that has the same effect on investment. In later years, governments recover more and more of the tax revenue foregone earlier. But the cost to the budget in the initial years can be very high. An immediate tax deduction of 22 per cent on all new capital purchases would cost the government about a third more than a 5 percentage point company tax cut in the first year of operation, and it would not be until the sixth year that the yearly budget cost fell below that of a tax cut (Figure 7).

There is also some empirical evidence suggesting that accelerated depreciation schemes can have substantial budget costs in the initial years. For instance, allowing small businesses to immediately write off \$20,000 in asset purchases was estimated to cost the budget \$800 million in the 2016-17 financial year.⁵⁰ Yet small companies are likely to account for only a twentieth of total business investment.⁵¹ Allowing an immediate write-off for all investment would cost significantly more.

⁴³ Park (2016).

⁴⁴ Gravelle (2014).

⁴⁵ Eichfelder and Schneider (2014).

⁴⁶ Minifie, *et al.* (2017), p.38.

⁴⁷ House and Shapiro (2006).

⁴⁸ For example, the Australian Labor Party has proposed allowing businesses to immediately deduct 20 per cent of investment in eligible depreciable assets, except structures and buildings. The policy would apply to eligible investments

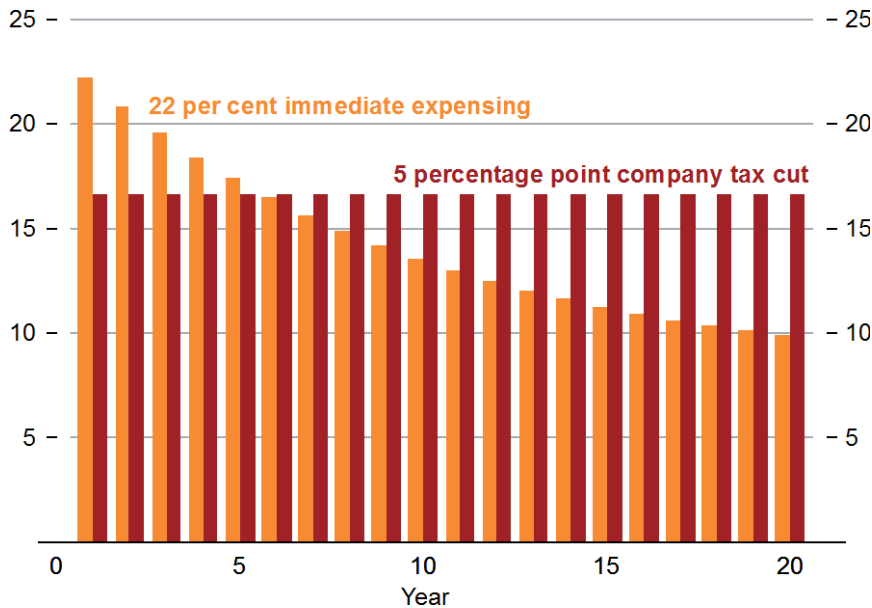
over \$20,000, and would include depreciating intangible investments, such as patents. (Bowen (2018)).

⁴⁹ Minifie, *et al.* (2017), Appendix B.

⁵⁰ Treasury (2015a), p.19.

⁵¹ Of the total depreciation by taxable companies in 2013-14, only 5 per cent was made by companies with a turnover of less than \$2 million (Minifie, *et al.* (2017), p.39).

Figure 7: Accelerated depreciation would cost more than a company tax cut in the short term, but less in the long term
 Percentage of company tax revenue lost relative to baseline scenario, representative firm



Notes: Baseline scenario: company tax rate of 30 per cent, no immediate expensing of capital purchases. Parameter assumptions are based on economy-wide aggregates (capital stock depreciates at a rate of 6.5 per cent, investment rate of 10 per cent, ratio of profits-before-tax to capital of 10 per cent). The model does not account for additional investment driven by either scenario (though both are likely to have a similar impact) nor any resulting increase in economic activity. Dividend imputation is not taken into account, but this would be likely to impact both scenarios in a similar way. See Minifie et al. (2017), Appendix B, for further details.
 Source: Minifie et al. (2017), Figure 4.7.

5.2 Investment allowances

An alternative to accelerated depreciation would be to give firms an investment allowance: that is, they would be able to claim a tax deduction for a proportion of new capital investment, but continue to depreciate 100 per cent of an asset’s value over its life – essentially amounting to an investment subsidy.

An investment allowance makes capital intensive investments more attractive, but doesn’t provide any additional incentive to invest in operational expenditures that can already be written off in full.

The investment allowance that would generate an equivalent amount of investment as a 5 percentage point company tax cut

depends on the life of the asset, but would generally be less costly to the budget.⁵²

But there are non-budgetary costs to investment allowances. Such schemes add complexity to the tax system and increase compliance costs for firms. They add to the incentive for individuals to buy assets for personal use through a company balance sheet, or even for companies to claim expenses as capital purchases. It may be costly for governments to manage these risks.

Despite the costs, investment allowances could be used to boost investment and better manage budget costs in the transition to a company tax cut. For instance, a small investment allowance could be introduced alongside a plan to cut the company tax rate over a number of years. The investment allowance could then be phased out as the tax rate is cut.

⁵² For an asset usually written off over 20 years, Minifie and Chisholm (2017) estimate that a firm would require an investment allowance of about 14 per cent. This would reduce government revenue by about 16 per cent less than a 5 percentage point company tax cut. The required investment allowance is smaller

for assets usually written off faster, and larger for those with a longer life. Dixon and Nassios (2018) estimate that an investment subsidy would lead to a larger long-term gain to national incomes than a company tax cut of the equivalent budgetary cost.

6 Conclusion

It is true that corporate tax cuts will increase investment, jobs and economic output in Australia. But analysis from the Commonwealth Treasury and others shows that the benefits to Australians will be smaller once you take into account how the profits flow out of Australia, and the costs of other taxes to compensate. Because additional corporate investment will phase in slowly, the benefits of company tax cuts for Australian incomes will be a long time coming. And there are substantial costs in the ‘short term’ – the next five-to-ten years – as national income falls.

There are alternatives to a company tax cut that would minimise the windfall for existing foreign investors, reducing the drag on national incomes. Options include an investment allowance, or faster depreciation rates that only apply to new investments. Such schemes can be designed to provide an equivalent boost to investment as a company tax cut, at lower long-term budgetary cost, and without reducing national incomes in the short-term. These approaches would not provide a ‘free kick’ to existing shareholders, but could prove more difficult to administer.

Alternatively, the government could take this opportunity to pursue genuine tax reform. The Henry Tax Review set out a comprehensive vision for Australia’s future tax system. Revisiting recommendations from that review – including introducing higher taxes on non-renewable resources as part of a company tax reform package – would provide a higher economic payoff than the current government proposal.

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