

Regulatory Impact Statement: Partial expensing (Investment Boost)

Decision sought	<i>Analysis produced for the purpose of informing Cabinet decisions</i>
Agency responsible	<i>Inland Revenue and the Treasury</i>
Proposing Ministers	<i>Minister of Finance</i>
Date finalised	<i>2 April 2025</i>

What is the Minister proposing?

The Minister is proposing to introduce a partial expensing regime as part of Budget 2025. Businesses that acquire qualifying assets on or after Budget night would be able to make an additional tax deduction in the year that they acquire the asset. Deductions reduce a business's taxable income. This policy reduces taxes for equity investments in New Zealand businesses. Reducing taxes on equity investments reduces the cost of funds for New Zealand businesses, supporting investment and productivity growth in New Zealand.

The policy works by allowing businesses to take a tax deduction earlier than they otherwise would have. The earlier deduction is equal to 20% of the cost of newly acquired assets (capital investment). New capital investment from nearly all sectors across the economy would benefit from the policy. This includes new investment in non-residential buildings, most plant and machinery, transport and construction assets. Qualifying assets must be "new" meaning that they must not have been used previously in New Zealand. There are some categories of assets that would not qualify for partial expensing, for example, if they are assets that do not depreciate.

Summary: Problem definition and options

What is the policy problem?

The cost of capital for investment in New Zealand is high relative to other OECD countries and this is driven, in part, by our tax settings. The lower investment that this causes negatively impacts productivity and living standards. New Zealand has experienced low productivity growth over the past 10 years.

What is the policy objective?

The primary objective is to increase investment in New Zealand's capital stock (ie, business assets) to support growth in productivity and living standards. The objective is primarily achieved through reducing the tax impost on foreign equity investments into New Zealand (the effective marginal tax rate), which reduces the minimum return New Zealand

investments need to generate to receive funding (the cost of capital) thereby increasing the level of investment. Investment by domestic businesses would also be eligible for and benefit from Investment Boost.

What policy options have been considered, including any alternatives to regulation?

In this regulatory impact statement, we consider two tax policy options that would reduce the tax impost on equity investments in New Zealand businesses relative to the status quo (however, see below regarding Inland Revenue's 2022 Long-term insights briefing (LTIB)):

- a partial expensing (PE) regime, and
- a company tax rate reduction.

This analysis is restricted to tax policy options because the Treasury has identified changes to the taxation of investment as one of the most effective government interventions to lift capital investment. Tax policy settings are able to deliver broad-based changes to investment settings relative to other policy levers. Tax policy changes would also complement other activities the Government is undertaking to encourage foreign investment.

What consultation has been undertaken?

No public consultation has been undertaken because the proposal is Budget-sensitive. Officials have only consulted with a limited number of stakeholders across relevant agencies. Our ability to consult widely is limited because once the proposal is announced firms are likely to delay capital investment in anticipation of the tax incentive. This delay in investment would undermine the policy objective for a period.

Is the preferred option in the Cabinet paper the same as preferred option in the RIS?

Officials consider a broad-based PE regime set at a rate between 5% and 40% is likely to be one of the best ways to achieve the policy objective. Officials advised that PE at around 20% is likely to maximise net benefits. The Minister's preferred option (a broad-based regime set at 20%) aligns with officials' preferred option.

Summary: Minister's preferred option in the Cabinet paper

Costs (core information)

Outline the key monetised and non-monetised costs, where those costs fall (on what people or organisations, or environments), and the nature of those impacts (direct or indirect)

The preferred option (broad-based 20% PE regime) carries a gross fiscal cost of \$6.6 billion over the forecast period. However, the policy would also increase the capital intensity of New Zealand businesses – flowing on to an increase in GDP (and therefore also increased tax revenue). The Treasury estimates tax revenue would increase by \$2.6 billion over the forecast period, leading to a net fiscal cost of \$4.0 billion over the forecast period.

While PE has economic benefits that increase tax revenue, policies used to offset the fiscal cost of PE may have negative economic impacts that reduce tax revenue. The net revenue increase from the overall Budget package may therefore be smaller than the estimate above.

Benefits (core information)

Outline the key monetised and non-monetised benefits, where those benefits fall (on what people or organisations, or environments), and the nature of those impacts (direct or indirect)

A 20% broad-based PE regime would lower the cost of capital for businesses by around 5%. The regime would incentivise more foreign investment, which would increase investment in business capital assets. The Treasury forecasts this increased investment would increase GDP by \$6.4 billion over the forecast period. The policy would also reduce the tax impost on domestic capital investment for small- and medium-sized enterprises (SMEs).

Inland Revenue modelling suggests that further benefits, including further increases in labour productivity and wages, are likely to materialise over a timeframe much longer than the forecast period (fully materialising after 20 years). The changes are also likely to be enduring.

Balance of benefits and costs (core information)

Does the RIS indicate that the benefits of the Minister's preferred option are likely to outweigh the costs?

A 20% broad-based PE regime would materially support the Minister's productivity objectives and, of the policies with similar magnitudes of impact, is likely the most cost-effective tax policy available to support that objective.

Implementation

Legislative changes would be progressed via Budget night legislation and come into effect immediately. Inland Revenue will be responsible for delivering this change. Inland Revenue considers this to be a relatively straight-forward change to implement. Although the changes would come into effect immediately, they would be implemented through changes to tax returns for the 2025–26 income year. These returns are only due after the income year concludes. Inland Revenue would consequently have sufficient time to implement this policy.

Limitations and constraints on analysis

Ministers commissioned advice on tax options for supporting economic growth and productivity. The scope of the advice was limited to exclude large structural reforms. Initial advice included PE and alternatives, after which a PE regime was commissioned. This regulatory impact statement contains an assessment of a company income tax (CIT) rate reduction as a benchmark but does not include analysis of other policy options aimed at reducing the cost of capital. However, other tax policy options such as depreciation loading, allowance for corporate equity, changes to the thin capitalisation rules and indexing the tax system for inflation were extensively analysed by Inland Revenue in its 2022 LTIB. On this basis, Inland Revenue is confident that PE represents one of the most cost-effective tax policy options to increase capital investment for policies with a similar magnitude of impact.

There is good evidence that either a PE regime or a CIT rate reduction will increase capital investment, but there is significant uncertainty about the magnitude of the effect and how the benefits will be distributed across the economy. Our estimates are based on international literature but only indicate the likely order of magnitude of the changes.

The proposal is Budget-sensitive so officials have not consulted with agencies outside the Treasury, Inland Revenue and the Ministry of Business, Innovation and Employment. No external stakeholders have been consulted at this stage and engagement would not be possible before legislation is introduced (as a Budget night initiative).

The practical risks of the policy are mitigated by the fact that a number of other countries have implemented similar regimes, and New Zealand previously had a similar regime in the form of depreciation loading. The policy can also use existing definitions in the legislation to some extent, reducing implementation risks.

I have read the Regulatory Impact Statement and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the preferred option.

Responsible Manager(s) signature:

s 9(2)(a)

**Felicity Barker
Inland Revenue
2 April 2025**

Responsible Manager(s) signature:

s 9(2)(a)

**Jean Le Roux
The Treasury
1 April 2025**

Quality assurance statement	
Reviewing Agency: Inland Revenue and the Treasury	QA rating: Partially meets
<p>Panel Comment:</p> <p>A cross-agency RIA quality assurance panel, with representatives from Inland Revenue and The Treasury, has reviewed the Regulatory Impact Statement “Partial expensing (Investment Boost)” and assessed it as partially meets. While acknowledging that there were constraints on the ability to consult externally, the Panel considers the absence of external consultation weakens the robustness of the analysis and conclusions. Within this constraint, the statement provides clear and concise information to support decisions.</p>	

Section 1: Diagnosing the policy problem

What is the context behind the policy problem and how is the status quo expected to develop?

1. Relative to other OECD countries, New Zealand has low levels of labour productivity – New Zealand was ranked 31st in 2023 for real GDP per hour worked of the current 38 OECD members. New Zealand has also experienced low labour productivity growth over recent years, averaging 0.2% pa over the last 10 years. Productivity is an important determinant for increases in GDP and living standards, meaning that New Zealand’s weak productivity has broader economic consequences.
2. New Zealand’s productivity challenges are strongly linked to low capital intensity (ie, low investment in business assets) that, in turn, is strongly linked to the level of foreign investment. New Zealand relies on foreign investment to meet its investment needs. This reliance is because our investment needs exceed our domestic savings. As a result, the amount of foreign (inbound) investment influences the overall level of investment in New Zealand and hence our capital intensity.
3. Domestic investment is however also important, particularly in sectors where foreigners are unlikely to invest. This is particularly relevant to SMEs.
4. The Treasury has concluded that low capital intensity is a key driver of New Zealand’s low productivity and identified changes to the taxation of investment as one of the most effective government interventions to lift capital intensity.
5. Taxes can have important impacts on the level of investment. The proposals discussed here are aimed at reducing the tax applied to inbound equity investment to stimulate greater capital investment into New Zealand and thereby improve productivity growth and the incomes of New Zealanders. The proposals will also reduce tax on investments by domestic residents in certain circumstances.

How taxes impact investment

6. A key way that taxes impact on investment in New Zealand is through increasing the return New Zealand investments need to generate to attract foreign investment. That is, taxes increase the cost of capital for New Zealand businesses.

7. Foreign investors will need to receive an after-tax return on investment into New Zealand that is comparable to what they can receive from investing in other countries. This means that taxes imposed by New Zealand on foreign investment often result in foreign investors demanding a higher pre-tax return from investments in New Zealand. For example, if an investment needs to generate a 5% return in the absence of New Zealand tax and New Zealand imposes a 20% tax on the returns from this investment – foreigners who are responsive to tax will now demand a pre-tax return of 6.25% to compensate for the tax.
8. This pre-tax return is called the cost of capital. A higher cost of capital will reduce the amount of investment that is undertaken in New Zealand thereby lowering capital intensity thereby reducing productivity growth in New Zealand and the incomes of New Zealanders.
9. Several studies have shown that New Zealand has a high cost of capital relative to other countries in part because our system of taxes imposes high taxes on inbound equity investment. This means investments in New Zealand likely need to generate a higher return than they do in some other countries to attract investment due to tax settings.
10. There is a theoretical argument that foreign inbound investments should not be taxed at all. This is because when taxation on inbound investment increases the required return, the economic costs of the tax will be passed on to domestic factors such as workers through lower wages. In effect, these taxes result in companies holding less capital than otherwise, harming productivity, lowering labour participation and lowering the wages of domestic labour.
11. However, there are many reasons to retain some taxation on inbound equity investment. One is that when investments generate more than the foreign investor's required rate of return, the tax will not be passed on to domestic factors. These excess returns are called economic rents. Other reasons to retain some tax on inbound equity investment relate to the integrity of the tax system.
12. Taxes will also affect the level of investment in industries not exposed to foreign investment, such as investments generally undertaken by SMEs.

What is the policy problem or opportunity?

13. Several studies have shown that New Zealand has relatively high effective marginal tax rates (EMTR) on inbound investment (Figure 1, Annex 1). EMTRs on equity investments are determined by a range of factors including the headline tax rate on company income, any additional taxes on company income, inflation, expensing and depreciation rules.
14. As discussed above, high effective tax rates on inbound investment increase the required return (cost of capital) for investments in New Zealand. A higher cost of capital decreases the amount of investment that would take place.
15. Reflecting these high EMTRs, OECD data suggests that of the 38 OECD countries, New Zealand has some of the highest costs of capital for tangible assets (including plant, machinery and equipment), and the highest cost of capital for non-residential buildings (see Table 5, Annex 1).¹ The majority of business capital in New Zealand is held in the form of these kinds of assets.

¹ These data reflect tax settings in 2023 (before non-residential building depreciation was set to 0%), meaning New Zealand is now likely an even further outlier for the cost of capital for these assets. [data-explorer.oecd.org - effective tax rates - corporate tax statistics](https://data-explorer.oecd.org/effective-tax-rates-corporate-tax-statistics)

16. Most foreign equity investment in New Zealand will be undertaken through a company. New Zealand's company tax rate is high relative to other OECD countries (see Figure 2, Annex 1). The OECD average company tax rate (24%) is about 4 percentage points below New Zealand's company tax rate (28%). The company tax rate is an important factor when considering how taxes impact EMTRs for foreign inbound equity investment.² However, other factors are also important, including allowed depreciation. The overall EMTR for a New Zealand business also depends on the balance of debt and equity financing so can differ from business to business.
17. There is an opportunity to increase New Zealand's capital intensity and ultimately the incomes of New Zealanders by reducing the effective marginal rates on foreign equity investment into New Zealand. The proposals would also reduce tax on investment by domestic residents.

What objectives are sought in relation to the policy problem?

18. The Minister's economic strategy includes improving New Zealand's productivity performance. Improving that performance requires – amongst other things – improving New Zealand's capital intensity. The policy proposal is targeted at improving capital intensity.

What consultation has been undertaken?

19. The proposal is Budget-sensitive so officials have only consulted with a limited number of stakeholders across relevant agencies. No consultation has been completed with external stakeholders at this stage. Wide engagement with external stakeholders before legislation is introduced (as a Budget night initiative) and immediately comes into effect would not be possible because advance consultation could delay investment, undermining the policy objective.

² If non-resident investors demanded a real 5% return on their capital if there were no taxes, the cost of capital would be 5%. Suppose, however, there are heavy taxes in New Zealand, and this drives up the cost of capital to 7.5%. This would be described as an EMTR of 33.3% ($2.5/7.5$) because after this pre-tax return is taxed at this rate investors end up with the 5.0% return they demand. If the cost of capital were instead driven up to only 6.25% there would be an EMTR of 20.0% ($1.25/6.25$) and if the cost of capital is 5.0% the EMTR is 0.0%.

Section 2: Assessing options to address the policy problem

What criteria will be used to compare options to the status quo?

20. The options will be evaluated against the traditional tax policy criteria of efficiency, equity, revenue integrity, fiscal impact, compliance and administration costs, and coherence.
- a. **Efficiency:** To the extent possible, taxes should be efficient and minimise impediments to economic growth. That is, the tax system should avoid unnecessarily distorting the use of resources (for example, causing biases toward one form of investment versus another) and imposing heavy costs on individuals and firms.
 - b. **Equity:** The tax system should promote fairness. The burden of taxes differs across individuals and businesses depending on which bases and rates are adopted. Assessment of both vertical equity (the relative position of those on different income levels or in different circumstances) and horizontal equity (the consistent treatment of those at similar income levels, or in similar circumstances) is important.
 - c. **Revenue integrity:** The tax system should be sustainable over time and minimise opportunities for tax avoidance and arbitrage.
 - d. **Fiscal impact:** Tax reforms need to be affordable given fiscal constraints, and the tax system must raise sufficient revenue to support the Government's fiscal strategy.
 - e. **Compliance and administration costs:** The tax system should be as simple and low cost as possible for taxpayers to comply with and for Inland Revenue to administer.
 - f. **Coherence:** Individual reform options should make sense in the context of the entire tax system. While a particular measure may seem sensible when viewed in isolation, implementing the proposal may not be desirable given the tax system as a whole.
21. Efficiency is the criteria that is most directly linked to the policy objective of increasing capital investment by lowering the tax impost on investment and therefore carries the most weight in the analysis. The main trade-off between the options considered is efficiency and fiscal cost. Revenue integrity is important in comparing a company tax rate cut versus other measures. The other criteria inform the design of each option, but generally have a smaller impact on the analysis.

What scope will options be considered within?

22. The options considered in this regulatory impact statement are aimed at reducing business taxes to reduce the extent to which taxes discourage investment.
23. Ministers commissioned officials to provide advice on the introduction of a PE regime. PE would result in businesses investing in capital assets paying a lower effective amount of tax than under the status quo. However, we have also considered how PE compares to a cut in the company tax rate because a company tax rate cut is one of the more obvious options for lowering business tax.
24. There are a range of other options for reducing the cost of capital that we have not analysed here.³ These include:

³ These options are all explored in more detail in Inland Revenue's 2022 LTIB.

- a. Other accelerated depreciation regimes such as depreciation loading. Depreciation loading allows new assets to be depreciated at their current rate, uplifted by some multiple (eg, 1.2). Depreciation loading would have similar impacts to PE; however, officials consider there are some reasons to prefer PE over depreciation loading.⁴
 - b. Other options such as an allowance for corporate equity (ACE)⁵ and changes to thin capitalisation rules (we note that the Government is currently reviewing aspects of the thin capitalisation rules).
 - c. Larger scale reform options such as indexing the tax system for inflation.
25. The PE option we assess is set at a rate of 20%. This rate was largely determined by the fiscal envelope but maximising the net benefits of the policy was also considered. The assessment would not change substantively for PE options in the range of 20% to 30%.
26. The company tax rate option has been set to be directly comparable to the PE option. We have chosen to hold the cost of capital reduction constant between the two options. We note that the company tax option is not a full proposal. Reducing the company tax rate would have a range of flow on impacts that would need to be addressed. For example, the creation of new rules to minimise avoidance opportunities that would arise from a larger gap between the company tax rate and personal tax rates.
27. We understand this measure is part of a suite of measures to increase investment being considered by the Government that includes regulatory and non-regulatory measures.

What options are being considered?

Option One – Status quo

28. Maintain current policy settings. Businesses would continue to apply standard depreciation rules for capital investment where depreciation rates generally aim to mirror economic depreciation (ie, fall in asset value assuming no inflation). The company tax rate would be maintained at 28%.

Option Two – PE at 20%

29. Option two (PE) provides a tax benefit to businesses (whether a company or not) undertaking new investment compared to the status quo.
30. PE allows businesses to immediately deduct a portion of a new asset's capital cost as a tax expense in the calculation of taxable income. The remaining portion of the asset's capital cost is depreciated over time under standard depreciation rates. Relative to the status quo PE provides a larger immediate tax deduction to businesses, reducing tax payments in the year the asset is first used and thereby reducing the present value of tax over the life of an investment.⁶ See Example 1 for an illustration.

⁴ If the tax system were indexed for inflation, PE is likely to be considerably more neutral than depreciation loading. Depreciation loading would counteract some of the inflation biases causing high EMTRs for asset classes such as plant, machinery and equipment with higher rates of economic depreciation. However, in the current context where depreciation on non-residential buildings is set at 0%, a key argument in favour of PE over depreciation loading is that PE will reduce the high EMTRs faced by buildings.

⁵ An ACE allows businesses to deduct the cost of equity. There would likely be challenges implementing an ACE within our system of company/shareholder taxation.

⁶ Present value is the concept that a dollar received today has more value than a dollar received tomorrow, and likewise a dollar owed today is more costly than a dollar owed tomorrow.

31. PE would be restricted to new capital investments – technically it would only be available for assets that are new to the tax base (and have not previously been used in New Zealand). This would mean a firm that owns a depreciable asset on the day before the new scheme came into force would not benefit from a higher upfront depreciation rate on these assets. If an asset that qualifies for PE is sold to a second user, the asset will not receive PE a second time and the business can only claim depreciation at the old depreciation rates.⁷
32. The proposed PE regime has the following design parameters:
- a. PE rate of 20% (20% of the cost of an asset can be immediately expensed, the remaining 80% of the cost is depreciated using existing depreciation rules).
 - b. Qualifying assets acquired on or after 22 May 2025 would be eligible for PE.
 - c. Qualifying assets are all depreciable property (as defined in the Income Tax Act 2007) except residential rental property and fixed life intangible property. Certain mining and primary sector assets that do not strictly meet this definition would also be eligible. Capital expenditure on improvements would also be eligible. Businesses would be able to opt to apply partial expensing or depreciate capital assets according to standard depreciation rules.
 - d. Qualifying assets are assets that are created or constructed in New Zealand and all assets imported into New Zealand. Assets that have previously been used in New Zealand for private or business purposes (other than as trading stock) would not be eligible for Investment Boost.
33. Non-depreciable property would not receive the benefit of PE (except as noted in paragraph 32(c)). This includes inventories, land, low-value assets that can be immediately written off on acquisition, certain intangible assets and trading stock.

Example 1: PE at 20%

ABC company buys a new machine for \$10,000 on 1 October 2025. ABC company expenses 20% of the cost of the machine immediately under PE giving it a deduction of \$2,000 for the 2025–26 income year. Deductions reduce a business's taxable income. The remaining \$8,000 is depreciated using the straight-line method at a rate of 10% per annum. The machine is used for six months in the 2025–26 income year so the company can take an additional deduction of \$400 in that year ($\$8,000 \times 10\% \times (6/12)$). This means that the total deductions for the machine in the 2025–26 income year are \$2,400 whereas without PE it would have been \$500. At a 28% company tax rate, tax in year 1 is \$532 lower than it would have been (although it will be higher in later years). The company would continue to take deductions of \$800 per annum until it writes the asset off.

The depreciation rules otherwise continue to operate as they do now. For example, deductions can be recovered if the machine is sold for more than its adjusted tax value. Suppose ABC company sells the machine during the 2026–27 income year for \$9,000. The machine has an adjusted tax value of \$7,600 because the company has claimed \$2,400 of deductions. Depreciation recovery income is the lesser of the gain (\$1,400) and the depreciation deductions (\$2,400). Therefore, \$1,400 is recognised as income in the year of sale.

⁷ If an asset is sold for more than its book value, then the usual clawback rules apply.

Option Three – Reducing company tax rate by 5 percentage points

34. We also consider a company tax rate reduction of 5 percentage points.⁸ A 5 percentage point reduction is the reduction needed to have approximately the same impact on the cost of capital and therefore GDP as a 20% PE regime. This option would reduce the company tax rate from 28% to 23%.

⁸ The exact rate change is 5.05 percentage points, from (28% to 22.95%) this is rounded in the text for readability.

How do the options compare to the status quo/counterfactual?

	Option One – <i>Status quo</i>	Option Two – Partial expensing	Option Three - Company tax reduction
Efficiency	0	++ Effectively reduces cost of capital Continues to tax economic rents	+ Effectively reduces cost of capital
Equity	0	0	0
Revenue integrity	0	- Creates some new integrity risks	-- Increases gap between company tax rate and top personal income tax rate
Fiscal impact	0	- \$6.6 billion over the forecast period	-- \$10.8 billion over the forecast period
Compliance and administration costs	0	0 Minimal increase in administration costs (\$1m one-off) and compliance costs	0 Minimal increase in administration costs and compliance costs
Coherence	0	- Investment incentives create risks around capture by interest groups. This is minimised with a broad-based regime	0
Overall assessment	0	++ (note: efficiency is weighted higher than other criteria)	+ (note: efficiency is weighted higher than other criteria)

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Efficiency

35. PE and a company tax rate reduction both reduce EMTRs on foreign equity investments and thereby reduce the cost of capital. Both options are therefore consistent with the policy objective to increase the level of investment and capital intensity in New Zealand and thereby increase GDP and incomes. These macroeconomic impacts are discussed in later sections.
36. Table 1 sets out the changes that have an equivalent impact on the cost of capital. Note, a company rate reduction only benefits businesses structured as companies, whereas PE would be available to all businesses including businesses that do not trade as companies, for example sole traders.

Table 1: Change in cost of capital

	Percentage decrease in cost of capital ⁹			
	20% PE	5 pp reduction in company tax rate	12% PE	3 pp reduction in company tax rate
Cost of capital	5.2%		3.1%	

37. A key difference between the two options is that PE lowers EMTRs only when a business undertakes new investment. As a result, it allows for a given reduction in cost of capital at lower fiscal cost. These cost of capital estimates are based on several modelling assumptions; these assumptions and robustness analysis are in Annex 2.

Efficiency advantages of PE

38. PE is targeted towards new capital investment whereas a company tax cut benefits new and sunk investments. This targeted approach means fiscal resources are used efficiently to stimulate new investments, rather than providing windfall gains to existing investments. This targeting is the key driver for why PE has larger macroeconomic impacts for a given fiscal cost than a cut in the company tax rate.
39. Compared to a cut in the company tax rate, PE also more effectively taxes economic rents. A cut to the company tax rate reduces taxes on the entire return from an investment. This includes economic rents which are returns in excess of the minimum return required for investment. PE reduces the minimum pre-tax return required from an investment but economic rents from these investments continue to be taxed at similar levels to the status quo. Economic rents are an efficient source of revenue, so it is desirable to tax them. This is illustrated in Example 2.

⁹ The *user cost of capital*, which is the cost of capital plus economic depreciation decreases by 2.30% and 1.38% for 20% and 12% PE respectively. Table 1 assumes a 5% real return (see Table 6, Annex 2)

Example 2: PE and economic rents

Consider a company that invests \$1 million and generates \$10 million in revenue, resulting in a \$9 million profit. We would describe this as an economic rent, because the revenue is far in excess of what would be required to incentivise the investment. With PE, the company can accelerate deductions for a portion of the \$1 million investment, leading to a small tax revenue loss for the Government. In contrast, a company tax rate reduction lowers the tax on the entire \$9 million profit, resulting in a larger tax revenue loss. Thus, PE is more efficient because it targets the initial investment cost without significantly affecting the substantial profits.

Efficiency risk of PE: debt financing and subsidies

40. A potential economic cost that could arise from PE is if it results in the tax system subsidising investments and therefore incentivising unprofitable investments. This risk does not arise with a cut to the company rate.
41. Subsidies will arise if PE leads to negative EMTRs. Even though investments with negative EMTRs still increase the net capital stock, negative EMTRs are likely to create a net cost for the country. For example, if companies are borrowing at 5% to invest in assets that have a pre-tax return of 4%, this is likely to lower national income and therefore the wellbeing of New Zealanders.
42. Whether PE results in subsidies to investments depends on the rate, with subsidies more likely at higher rates. This issue only arises with investments that are debt financed to some degree. For a fully equity financed investment, full PE (ie, full expensing in the first year) would be equivalent to a 0% effective marginal tax rate. The subsidy arises for debt financed investments given the interaction with interest deductions. Firms with higher levels of debt are more likely to be subsidised.
43. However, analysis suggests that at 20%, PE results in minimal subsidisation. At 20%, PE would require debt levels well above 60% of total funding to gain a degree of subsidisation.¹⁰ In our modelling, 60% debt funding provides minimal subsidisation up to a PE regime of 40%. See Figure 3 in Annex 3 for additional analysis.¹¹

Efficiency risk of PE: asset neutrality

44. All else equal, differing tax rates arising from investments in different assets will tend to bias investment decisions (this is called non-neutrality). This reduces productivity as businesses do not invest in the projects with the highest return. Investment incentives such as PE can bias investment decisions, particularly if they are not applied to all kinds of capital investment. This issue does not arise with a company tax cut.
45. Economic costs from a narrowed base (ie, a PE regime that is not applied to all kinds of capital investment) will tend to have worse impacts the higher the PE rate.

¹⁰ Current thin capitalisation rules can limit tax deductions for interest in New Zealand when a company is controlled by non-residents and has debt levels above 60%. These rules mean that, in practice, this subsidy would be unlikely to be significant for foreign investment.

¹¹ In Figure 3, negative EMTRs indicate subsidies.

46. A broad-based PE regime at 20% is unlikely to create significant tax biases (see Table 9 in Annex 3). We consider the proposed asset scope mitigates the most significant potential forms of bias while managing integrity risks. In particular, officials have strongly recommended the inclusion of non-residential buildings. While common to exclude these assets from partial expensing regimes internationally, excluding non-residential buildings is likely to significantly bias investment away from this significant category of business assets. Further, regimes that exclude non-residential buildings are generally temporary measures for which it would not make sense to include these long-lived assets.
47. However, other asset exclusions are likely to introduce new distortions:
- a. **Inventories.** The PE regime applies to most depreciable property. Inventories are not depreciable property and are therefore excluded from the regime despite facing relatively high effective tax rates. PE may exacerbate investment biases against inventory. However, mitigating this impact would require rules for inventories that go beyond the depreciation regime. This bias is avoided by a company tax rate reduction.
 - b. **Residential rental buildings.** Residential rental buildings are excluded from PE eligibility for the following reasons:
 - i. The objective of this policy is to increase investment in business capital to promote productivity, and residential housing will have a smaller effect on labour productivity than other asset types.
 - ii. There is also substantial uncertainty around modelling EMTRs for residential housing, which makes determining whether PE would lead to subsidies unclear (see Annex 3).
 - c. **Fixed-life intangible property (FLIP).** FLIP includes things like patents and copyrights. As proposed, PE would not apply to FLIP. This exclusion is a departure from neutrality so may create investment biases. However, FLIP is subject to special depreciation rules and there are consequently integrity concerns with allowing PE for FLIP as these assets could be used to shift profits internationally.
 - d. **Assets that have been used previously in New Zealand.** PE would only apply to assets that have not been used in New Zealand previously. Secondhand assets are unlikely to be as responsive to PE as other assets because these assets are already part of New Zealand's capital stock. There are also integrity concerns with including these assets in the policy. However, excluding domestic secondhand assets introduces a distortion between domestic and international secondhand goods. Restricting PE to the first owner of a new asset may also create a lock-in effect where the asset is more valuable to its first owner than any subsequent owner.¹²
48. EMTRs for equity financed investments will generally be higher than for debt financed investments. An attraction of cutting the company tax rate is that it reduces costs of capital more for equity financed investments and takes the tax system closer to neutrality between equity and debt financing.

¹² For example, under certain assumptions, PE reduces taxes on a \$100,000 packing machine by \$620 over the life of the machine. This benefit is only available to the first owner of the machine and may be clawed back if the machine is sold above its tax book value. All else being equal, the machine is worth more to the first owner than a subsequent owner who must depreciate the asset under the normal rules.

Equity

49. Our view is that the majority of the increase in national income from PE would flow to workers. This increase would come from a combination of higher wages and higher employment. We therefore expect that the benefits of PE will be spread broadly across a wide range of New Zealanders.
50. The distinction between new and used assets may disadvantage businesses that are more likely to purchase used assets. However, this disadvantage may be tempered by a small decrease in the price of used assets as more firms upgrade their existing assets.

Revenue integrity

Transition period

51. PE creates an incentive to characterise asset purchases made as part of a past investment as a new investment. We do not consider that this would undermine the policy goal.

Misalignment

52. A key advantage of PE over a company tax rate reduction is that it does not exacerbate avoidance opportunities arising from the gap between the company tax rate and the top personal income tax rates.

International tax avoidance

53. PE would not reduce international tax avoidance pressures caused by New Zealand's company tax rate being higher than company tax rates in many other countries. A cut in the company tax rate would reduce this pressure.

New vs secondhand

54. Limiting the ability to claim PE on used capital assets prevents integrity issues (ie, businesses could trade capital stock between themselves to maximise their deductions annually).

Fiscal impact

Fiscal estimates

55. The costing profile of a 20% PE regime and an equivalent company tax rate reduction are as follows:

Table 2: Fiscal impact of policy (millions)

Year	2024/25	2025/26	2026/27	2027/28	2028/29 & outyears	Forecast period
PE	208	1,830	1611	1,714	1,278	6,641
Company tax reduction ¹³	262	2,403	1,964	2,898	3,302	10,829

¹³ The company tax reduction fiscal estimate assumes that an additional 10% of company earnings are retained after a company tax cut. This is because of expected behavioural adjustment to the tax change. Retaining earnings has become more beneficial, while paying dividends has remained unchanged (due to imputation).

56. The fiscal cost of PE will be high immediately, as the new purchases are eligible for PE while the existing stock has deductions under the standard depreciation schedule. The cost is attenuated over time as new purchases will still be eligible for PE, but the existing stock will have lower deductions as 20% of their value was immediately expensed upon purchase. The fiscal cost of a company tax reduction should be more constant over time in comparison.

Fiscal cost offset

57. All other things being equal, increased economic activity from the measure will increase tax revenue, which will partially offset the fiscal cost of PE. The fiscal estimates provided above do not account for this potential increase in tax revenue. The Treasury estimate the potential increase to be \$2.6 billion over the forecast period. Estimates of the fiscal cost offset for a company tax rate cut have not been produced.

Compliance and administration costs

58. There would be one-off administration and compliance costs from implementing PE. The administration costs are estimated to be around \$1 million by Inland Revenue, which would be absorbed in its baseline. Compliance costs are harder to estimate. Software providers may need to change software to account for the new rules.¹⁴ These costs are small as a proportion of the total costs and benefits. Inland Revenue expects there would be a similar one-off compliance and administrative cost associated with a company tax rate cut.

Coherence

59. Investment incentives can reduce the coherence of the tax system and risk capture by interest groups. The recommended PE proposal is a neutral broad-based measure to lower high EMTRs that discourage inbound investment and consequently is unlikely to reduce coherence. In its last LTIB, Inland Revenue highlighted that PE is a possible response to concerns with high EMTRs on inbound investment.

¹⁴ The ease of these changes may depend on whether systems have capability to adapt to changes either as a legacy from the previous depreciation loading regime in New Zealand or from international experience with PE regimes.

Is the Minister's preferred option in the Cabinet paper the same as the agency's preferred option in the RIS?

60. Yes, the Minister's preferred option is the same as officials' preferred option.

What are the marginal costs and benefits of the preferred option in the Cabinet paper?

Affected groups (Identify)	Comment <i>Nature of cost or benefit (ongoing, one-off), evidence and assumption (compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Additional costs of the preferred option compared to taking no action			
Crown	Reduced tax revenue.	\$6.6 billion over forecast period. Some of this cost will be offset by increased tax revenue from higher economic growth, estimated as a \$2.6 billion offset.	Medium
Inland Revenue	One-off administration costs absorbed in baselines	\$1 million	High
Total monetised costs		\$6,641 million	
Non-monetised costs			
Additional benefits of the preferred option compared to taking no action			
Domestic residents (Wage earners)	<p>In the long run, we expect an increase in net national income (NNI) – the income of New Zealanders – due to increased capital intensity and labour productivity.</p> <p>Inland Revenue's analysis suggests that one-fifth of the GDP growth will flow into NNI, this indicates that four-fifths of the GDP growth goes to capital stock maintenance and foreign investors through the return on their investments.</p> <p>Wages are estimated to rise in the long run as labour productivity increases. Wages increase by more than the NNI increase as some of the fiscal savings of businesses (ie, fiscal cost to</p>	<p>Real NNI is estimated to increase by 0.3% in the long term (20 years) compared to the status quo under the central scenario.</p> <p>Real wages are estimated to rise by 1.5% in the long term compared to the status quo under the central scenario.</p>	Low (see modelling assumptions in Annex 2)

	the Crown) is passed onto workers.		
Crown	Increased GDP will be a result of increased capital stock and increased productivity. This will increase tax generated over time.	Inland Revenue estimates that real GDP will be approximately 1% higher in the long term (20 years) compared to the status quo. Treasury estimates a nominal increase in GDP of \$6.4 billion in the forecast period. This would lead to additional tax revenue of \$2.6 billion.	Low (see modelling assumptions in Annex 2)
Total monetised benefits		\$6.4 billion increase in GDP over forecast period.	
Non-monetised benefits		High	

Impact analysis

Macroeconomic impacts

61. This section discusses the potential macroeconomic impacts from PE and an equivalent cut in the company tax rate. Officials have used a range of information to determine the potential range of impacts of tax policies that reduce the cost of capital. This includes:
 - a. Review of international literature from other similar tax changes.
 - b. Inland Revenue's static long-run macroeconomic model.
 - c. The Treasury's dynamic short-run macroeconomic model.
62. There is, however, a high level of uncertainty as to the precise magnitude of impacts, although the direction of impacts is certain.

Impacts in international literature

63. International literature finds a positive effect on capital investment and GDP from both PE and company tax cuts. International studies have been used to inform the selection of parameters used in modelling. These assumptions are discussed in greater detail in Annex 2.
64. Results from international studies are broadly consistent with Inland Revenue and Treasury estimates. A summary of similar overseas regimes and their estimated economic impacts are found in Table 8 in Annex 2.

Inland Revenue's static long-run macroeconomic model

65. Inland Revenue has modelled the economic impacts of PE and an equivalent cut in the corporate tax rate using Inland Revenue's static long-run model. Results are set out in Table 3.
66. This model operates through two main steps:
 - a. The model calculates the average cost of capital facing inbound investment by calculating an average of the cost of capital across various sectors. The model takes

account of debt and equity financing. The model can calculate the change in the average cost of capital from changes in tax settings such as introducing PE at various rates or changing the company tax rate. This component of the model is based on a methodology that has been used by other agencies such as the OECD, and was described in Inland Revenue's 2022 LTIB. Inland Revenue considers there is a high level of certainty as to the magnitude of these impacts, although results depend on some assumptions, particularly the assumed required rate of return of foreign investors (see Table 7, Annex 2).

- b. The model then calculates how a change in the cost of capital increases the capital stock in New Zealand (investment). The increase in capital stock then flows through to increases in GDP, wages, labour supply and NNI in the long term (ie, 20 years). The measures that are most directly related to the well-being of New Zealanders are wages and NNI. This is because some of the increase in GDP flows to non-resident investors in the form of return on investment. NNI is net of this cost, and net of the higher depreciation cost that comes from a higher capital stock. The magnitude of these estimates has a low degree of certainty.
67. Inland Revenue has used international literature to calibrate the model parameters discussed in (b) above. Our assumptions are within the range of assumptions typically used in the literature. However, these estimates should be viewed as giving the likely orders of magnitude for changes in investment and other variables, rather than indicating precise values. Our estimates are also based on several critical assumptions¹⁵ and changes in these assumptions can have material effects. Our estimates are more reliable in indicating the relative impact of different options. More details on the model can be found in Annex 2.

Table 3: Inland Revenue modelling estimates – long-term (approx. 20 years) percentage increase in macroeconomic variables compared to status quo (real)

	Percentage increase from			
	20% PE	5 pp reduction in company tax rate	12% PE	3 pp reduction in company tax rate
GDP	1.0		0.6	
Capital stock	1.6		0.9	
Wages	1.5		0.9	
NNI	0.3		0.2	

68. These macroeconomic estimates reflect the expected long-term real¹⁶ percentage changes for the given measures because of the policy. This change can take considerable time to materialise (ie, 20% PE would result in the real capital stock being 1.6% higher in the long term than under the status quo). We estimate that roughly half of the impacts will accrue within the first five years after implementation, with the remaining impacts accruing over a long period (approximately 90% of the effect would occur within 20 years).

¹⁵ See Annex 2. One assumption is the required real rate of return (the after-tax return foreign investors require). Table 3 assumes a 5% return. Table 7, Annex 2 additionally provides results assuming a 3% or 7% return.

¹⁶ That is, excluding the impacts of inflation.

69. Recent international literature in this area has noted high margins of error in estimating the macroeconomic effects of tax measures that reduce effective tax rates. For example, a study by leading researchers in the United States (US) estimated an increase in corporate capital of between 1.9% to 12.5% for a package of reforms targeting the effective tax rates of businesses. Inland Revenue's modelling is considerably less sophisticated than the model used in that study, so we expect our error bounds are likely to be larger.

Treasury forecast model (Matai)

70. The Treasury uses Matai, a macro-economic forecasting model of the New Zealand economy, to aid in the production of its economic and tax forecasts. The Treasury has taken Inland Revenue's estimate of the change in capital stock during the forecast period and used Matai to estimate the short-term macro-economic impacts and the revenue off-set from increased economic growth.
71. Matai is a dynamic model and also accounts for the inflationary component of the policy and the adjustment of interest rates in response. This model output allows a comparison between fiscal costs and estimated future tax revenue in nominal terms. Table 4 provides the estimates from Matai.

Table 4: Treasury's Matai model's estimated fiscal and economic effect of PE over the forecast period (nominal)

	Fiscal cost (\$b)	Nominal GDP impact (\$b)	Tax revenue increase (\$b)	Net operating balance effect (\$b)
20%	(\$6.6)	\$6.4	\$2.6	(\$4.0)

Distributional analysis

72. The estimates for a broad-based PE regime reflect an improvement of economic outcomes (wages and NNI) for New Zealanders. Our wage growth estimates indicate a small but material improvement to New Zealand's overall labour productivity.
73. As noted, not all the benefit of increased GDP (production) flows to New Zealanders because some will flow to foreign investors as return on their investment.
74. Our view is that the majority of the increase in national income will flow to workers in the long run as a result of increased capital intensity and labour productivity. This increase will come from a combination of higher wages and higher employment. We therefore expect that the benefits of PE will be spread broadly across a wide range of New Zealanders. However, that assessment carries several caveats:
- Companies across different industries and regions may respond differently, meaning workers will not be affected uniformly.
 - Benefits to individual workers will depend on whether the new capital that is invested in their workplace complements (positive effect) or substitutes (negative effect) their current job.
 - As noted, with respect to the macroeconomic estimates above, it will likely take as long as 20 years before the full positive effects manifest.
75. International evidence provides mixed results on how the specific benefits of investment-targeted tax measures are shared between workers and capital owners. This makes it difficult to better assess the distributional impacts. Further, drawing meaningful lessons

from these studies can be difficult because they model different economies (eg, the US), and different policies (eg, company tax rate reductions).

76. The impacts on domestic investors depend on two things. PE may reduce the cost of capital for investments in New Zealand, meaning lower returns for domestic investors. However, domestic investors also receive the tax reduction benefit of PE.

Section 3: Delivering an option

How will the proposal be implemented?

78. The Income Tax Act 2007 would be amended via Budget night legislation. New assets purchased from 22 May 2025 would be eligible for PE. Aligning the announcement of the policy with the implementation date reduces the risk of firms delaying investment in response to the incentive.¹⁷
79. Inland Revenue would be responsible for delivering this change. Inland Revenue considers PE to be a relatively straightforward change and estimate one-off costs of approximately \$1 million. This cost covers system changes associated with the proposal, including updating content and resources for taxpayer (such as the online calculator) and updating staff on the changes. These costs can be met within baselines. The bulk of the changes would be made as part of a regular annual release process.

How will the proposal be monitored, evaluated, and reviewed?

Monitoring

80. Inland Revenue would monitor compliance with the tax change as part of its usual monitoring of taxpayers.

Evaluation

81. The policy would give rise to long-term growth effects that are likely to be difficult to untangle from other factors in the economy. It may be possible to evaluate the effect of the policy once data for a number of years is available. Both agencies would consider approaches to measure the impact of the policy once sufficient data becomes available. Inland Revenue will consider what information can be collected via existing processes.

Review

82. Inland Revenue regularly reviews tax settings on an ongoing basis and provides advice and updates to the Government accordingly. Policy officials maintain strong communication channels with stakeholders in the tax advisory community, including through the generic tax policy process, and these stakeholders would be able to correspond with officials about the operation of the new rules at any time. If problems emerge, they would be dealt with either operationally, or by way of legislative amendment if agreed by Parliament.

¹⁷ A delay in investment would undermine the growth impacts of the policy. However, delaying the policy's implementation would provide more time for software providers to update their systems.

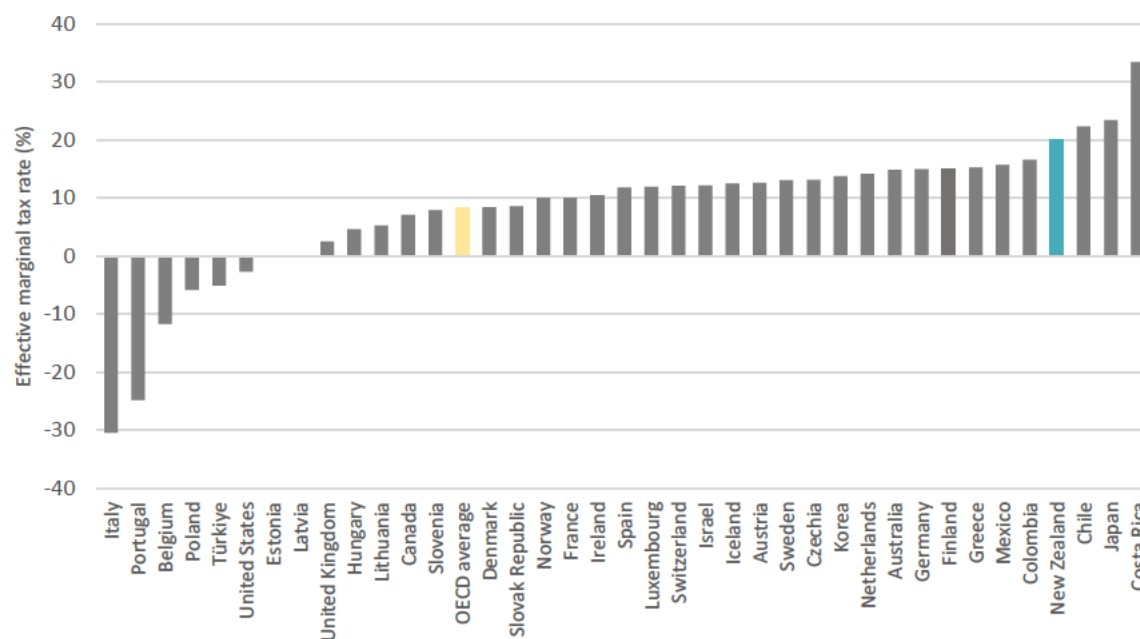
Annex 1: Key figures – New Zealand EMTR and CIT rates relative to OECD

83. Table 5 shows the cost of capital and the rankings of different countries across four different asset classes and a composite measure. Countries are ranked from highest cost of capital to lowest cost of capital. A higher ranking (ie, lower number) implies that a country has higher taxes on that asset class than other countries.

Table 5: Cost of capital and rankings, 2023

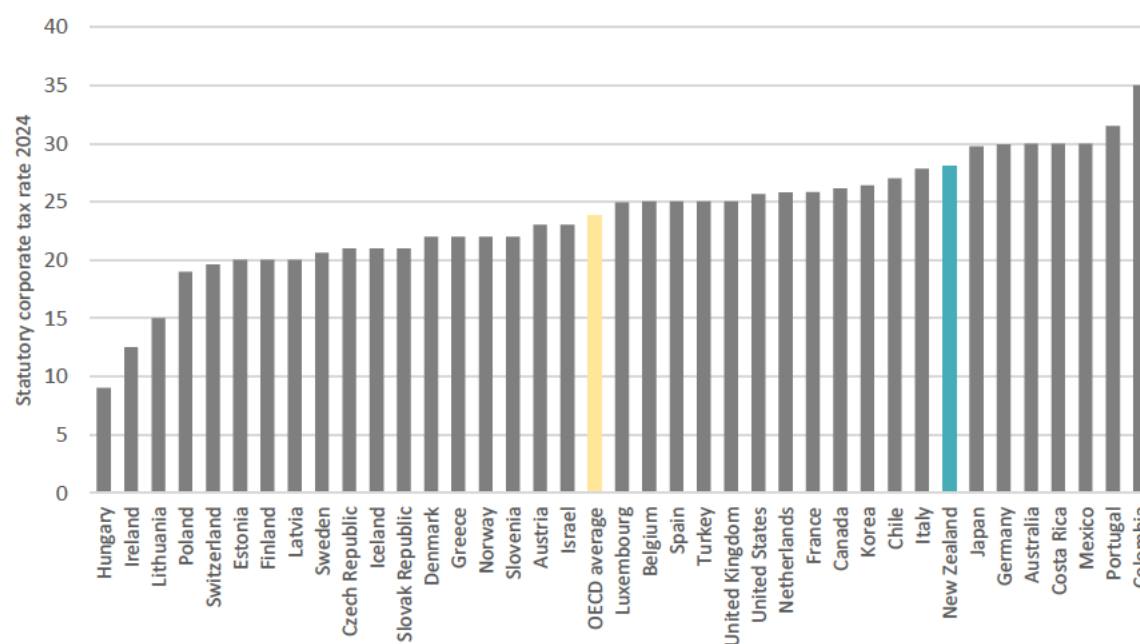
Country	Composite		Buildings		Inventories		Acquired software		Tangibles	
	Cost of capital	Rank	Cost of capital	Rank	Cost of capital	Rank	Cost of capital	Rank	Cost of capital	Rank
Australia	3.86	4	3.42	15	3.90	7	4.45	2	3.66	4
Austria	3.66	9	3.46	12	3.51	28	4.03	9	3.64	5
Belgium	3.57	13	3.13	29	3.53	26	4.13	7	3.49	10
Canada	3.41	24	3.20	26	3.92	5	3.38	23	3.15	27
Chile	3.13	34	3.05	32	3.96	4	2.62	36	2.90	35
Colombia	3.98	1	3.79	3	4.13	2	4.21	6	3.78	2
Costa Rica	3.78	5	3.71	5	4.11	3	3.71	16	3.60	6
Czechia	3.54	15	3.53	8	3.49	29	3.97	10	3.18	25
Denmark	3.43	23	3.41	16	3.73	14	3.08	31	3.48	11
Estonia	3.00	35	3.00	33	3.00	35	3.00	32	3.00	32
Finland	3.68	8	3.22	23	3.65	19	4.71	1	3.13	28
France	3.46	20	3.22	24	3.90	6	3.38	24	3.34	16
Germany	3.33	28	3.63	6	3.68	17	2.58	37	3.43	13
Greece	3.60	12	3.28	20	3.59	22	3.95	11	3.59	7
Hungary	3.20	33	3.28	20	3.32	34	3.13	29	3.06	31
Iceland	3.45	21	3.10	30	3.65	19	3.85	13	3.20	23
Ireland	3.40	25	3.14	28	3.37	33	3.79	14	3.29	19
Israel	3.50	18	3.29	19	3.63	21	3.57	21	3.51	8
Italy	2.32	38	2.57	38	2.76	38	1.24	38	2.70	37
Japan	3.88	3	3.73	4	3.89	9	4.43	3	3.46	12
Korea	3.66	9	3.45	13	3.75	13	4.22	5	3.22	21
Latvia	3.00	35	3.00	33	3.00	35	3.00	32	3.00	32
Lithuania	3.22	31	2.93	35	3.46	31	3.33	26	3.15	26
Luxembourg	3.54	15	3.32	18	3.53	26	3.62	20	3.69	3
Mexico	3.61	11	3.09	31	3.90	7	4.37	4	3.07	30
Netherlands	3.68	7	4.07	2	3.56	23	3.78	15	3.33	17
New Zealand	3.88	2	4.09	1	3.82	12	3.71	16	3.90	1
Norway	3.69	6	3.50	9	3.73	14	4.05	8	3.49	9
Poland	2.71	37	2.81	37	2.77	37	2.65	35	2.64	38
Portugal	3.48	19	3.22	24	4.16	1	3.36	25	3.18	24
Slovak Republic	3.38	26	3.17	27	3.56	23	3.41	22	3.36	14
Slovenia	3.30	29	3.35	17	3.49	29	3.26	27	3.13	29
Spain	3.55	14	3.49	10	3.70	16	3.64	18	3.36	15
Sweden	3.51	17	3.25	22	3.67	18	3.88	12	3.25	20
Switzerland	3.44	22	3.43	14	3.39	32	3.63	19	3.30	18
Türkiye	3.29	30	2.91	36	3.85	11	3.19	28	3.20	22
United Kingdom	3.35	27	3.49	10	3.86	10	3.09	30	2.93	34
United States	3.21	32	3.61	7	3.56	23	2.89	34	2.78	36
Average	3.44		3.32		3.62		3.53		3.28	

Figure 1: Effective marginal tax rate for companies, 2020¹⁸



Source: OECD, 2024

Figure 2: Statutory company tax rate, 2023



Source: OECD, 2024

¹⁸ Reproduced from [Scope of Inland Revenue's long-term insights briefing](#).

Annex 2: Modelling

Inland Revenue's macroeconomic model

84. Inland Revenue's macro model uses a version of a model that was generously provided to Inland Revenue by Jane Gravelle, which has been further developed by Inland Revenue since then. The model is a static long-run constant elasticity of substitution model. This model is calibrated to two key outputs, the net capital stock and GDP.
85. An important input into the model is the aggregate cost of capital. This is calculated based on the OECD methodology as outlined in Inland Revenue's 2022 LTIB. Changes in the cost of capital can be calculated according to this methodology for a variety of tax measures (ie, accelerated depreciation, corporate tax rate cuts, PE).
86. The underlying assumptions made in the macro model are in line with those produced by recent international literature, and this supports our view that the macroeconomic estimates are likely to be within the same broad order of magnitude of international estimates.
87. The macroeconomic benefits of PE are largely driven by the increase in national capital stock, which is most sensitive to the assumptions made on the substitutability between labour and capital (that is, the greater the substitutability, the larger the effect on capital stock, wages and GDP will be).
88. The credibility of the overall macroeconomic estimates can therefore be tested by how close the assumptions are to international reviews. The central estimate assumes an elasticity of substitution between capital and labour of 0.5. This is selected based on estimates of the user cost of capital elasticity, which broadly approximates the elasticity of substitution. The 0.5 estimate is in the middle of the range of user cost of capital estimates used in international studies, which vary between 0.0 to 1.0, although estimates of between 0.3 and 0.7 are most common. See for example Nolan and Nolan (2021), Rose, Sinning and Breuig (2021), Bond and Xing (2015), Zwick and Mahon (2017), Edgerton (2010) and Chodorow-Reich, Smith, Zidar and Zwick (2024).
89. We assume a labour elasticity of 0.15, which is in line with the labour elasticity assumed by the Australian Tax Office. The results of the modelling are not very sensitive to this assumption.
90. We assume the average debt weighting of private firms is 43%. This assumption is consistent with the results of Inland Revenue's 2022 LTIB.
91. The model is calibrated to the private sector net capital stock and GDP because government capital stock and production are assumed to be insensitive to investment incentives. The results of these models are then scaled to the total size of the economy.
92. There is also an adjustment post hoc to the responsiveness of capital intensity for the number of firms in losses. Firms in losses gain no timing advantage from PE, which means their investment decisions should be unaffected by the policy. In addition, firms in losses may be liquidity constrained and thus unable to invest in new capital. Data indicates that approximately 20% of the capital owners are in losses as of 2023 so the capital response is scaled down by a factor of 20%.
93. For robustness, results for different real rates of return are shown in Tables 6 and 7.
94. For the purpose of the Treasury's short-term forecast model, they assume that 40% of the long-run impact on capital stock occurs in the forecast period.

Table 6: Cost of capital for different real rates of return

	Percentage decrease in cost of capital for 20% PE		
	Assuming 3% real rate of return	Assuming 5% real rate of return	Assuming 7% real rate of return
Cost of capital	6.0	5.2	4.9

Table 7: Changes to key variables for different real rates of return

	Percentage increase from 20% PE		
	Assuming 3% real rate of return	Assuming 5% real rate of return	Assuming 7% real rate of return
GDP	0.60	0.96	1.45
Capital stock	1.14	1.57	2.09
Wages	0.92	1.48	2.24
NNI	0.18	0.29	0.44

Table 8: Detailed overview of recent similar international regimes and their economic impacts

Country	Year	Design	Economic impact
Australia	2009 only	<p>Small businesses (turnover less than \$2m) received 30% PE for first six months, then 50% for final six months. All other businesses received 30% PE for first six months, then 10% for the final six months.</p> <p>All depreciable assets eligible (ie, excludes land and certain intangible assets).</p>	<p>Estimates produced by the Reserve Bank of Australia in 2018 found that 2009 real GDP growth (1.7%) would have been much lower (0.5%) in the absence of the policy.</p> <p>However, given the policy was only in effect for one year, and that year was in the middle of the GFC shock, it is difficult to extrapolate the long-term effects of the policy.</p>
Australia	2020 to 2023	<p>Policy 1 – 2020 to 2023</p> <p>100% PE (full write off) on new assets valued at \$150,000 or less, for businesses with turnover less than \$5b. Small businesses (turnover less than \$50m) can write off secondhand assets. All assets below value threshold eligible.</p> <p>Policy 2 – 2020 to 2021</p> <p>Businesses with turnover less than \$500m received 50% PE for two years. Excluded</p>	<p>Limited estimates are available from the Australian Treasury produced prior to the implementation of each policy, which suggest material increases in GDP. However, these estimates include the effect of other policies introduced at the same time, and no estimate is available that measures the effect of either policy independently.</p> <p>Australian Reserve Bank finds a significant lift in investment following tax cuts to corporate rate and expensing regimes that took place</p>

		most primary industry assets and all non-residential buildings.	during credit constrained periods, but not during Covid shutdown periods.
United States	2001 to present	<p>The US is unique in that it has maintained a consistent series of temporary PE regimes since 2001. These have functioned as a quasi-permanent regime with a rate that has varied considerably over time. The US is currently phasing out PE, though the current administration is expected to reverse this.</p> <p>Generally, the PE rate has been 50%, with notable spikes to 100% in 2011, and between 2017 and 2022, with phasing having reduced the current rate to 40%.</p> <p>All assets with useful lives less than 20 years are eligible (ie, excluding non-residential buildings and high-end long-life machinery).</p>	<p>Numerous credible studies have been produced on the economic impacts of the US's various PE regimes, though most studies have focused on periods when the rate has been temporarily increased (ie, 2004, 2011, 2017 to 2022).</p> <p>There is general consensus in the literature that the US's PE model has materially increased capital investment, with corresponding positive effects on GDP.</p> <p>Credible estimates on the most recent policy changes (2017 to 2022) suggest a 1.7% increase in capital stock from 100% PE after 10 years, though direct GDP impacts are less clear at this time.</p>
United Kingdom	2008 to present	<p>Annual Investment Allowance (AIA) – all businesses are eligible for the equivalent of 100% PE (full write off) on all new plant and machinery assets (excluding cars) up to a maximum threshold.</p> <p>Since its introduction, the AIA's maximum threshold has increased from £50,000 to its current £1,000,000 level.</p>	<p>Limited evaluations of the growth effects of the AIA are available, but those available suggest the narrow eligibility criteria of the policy limit its effectiveness.</p> <p>Official estimates by His Majesty's Revenue and Customs (UK equivalent of Inland Revenue) note that the recent increase in the threshold from £200,000 to £1,000,000 had small effects on investment, and did not estimate a material increase in GDP growth.</p>

United Kingdom	2021 to present	<p>Policy 1 – 2021 to 2023</p> <p>Temporary policy between 2021 and 2023, all incorporated businesses (ie, excluding sole traders) eligible for 130% PE (ie, full write off, with 30% subsidisation) on new machinery and equipment, which did not include buildings, cars and all intangible assets.</p> <p>Policy 2 – 2023 to present</p> <p>Introduced as a temporary measure in 2023 (intended to expire in 2026) but made permanent in 2024. All incorporated businesses (ie, excluding sole traders) now eligible for 100% PE (full write off) on new machinery and equipment (with the same exceptions).</p>	<p>No official or independent estimates are currently available on the effect of the 2021 changes.</p> <p>Official estimates from the UK's Office for Budget Responsibility estimate that the 2023 changes would increase GDP by 0.2% in the long term.</p> <p>An important caveat to this estimate is that the UK already had generous deductibility rules for most eligible assets (see the AIA above), so the marginal extra benefit of this policy is lower than estimates produced for other high-rate PE regimes in other jurisdictions (which were working from less generous deductibility rules).</p>
Canada	2015 to present	<p>From 2015, all businesses are eligible for 25% PE on all new depreciable machinery and equipment used for manufacturing and processing, or used for producing clean energy. From 2028, the PE rate will reduce to 15%</p> <p>Between 2018 and 2023, the PE rate was temporarily increased to 100% (full write off) for all eligible machinery and equipment acquired before 2028. Between 2024 and 2027, the rate will decline to 75%, then 55%, then back to the new default 15%. In 2018, higher first year deductions were also allowed for a range of other assets. For example, non-residential buildings were allowed to take a deduction of 15% in the first year (returning to the ordinary 5% in subsequent years).</p>	<p>No official estimates have been produced on the economic impacts of Canada's PE policies since 2015, and officials are not aware of any credible studies that have examined the GDP impacts of these policies specifically.</p>
Germany	2019 to 2024	<p>Introduced a temporary accelerated depreciation regime (similar but distinct policy from PE, see earlier in this report) for all new moveable assets (ie, excluding buildings, and fixtures for buildings). Set to expire in 2025, but has been continually renewed each year since introduction.</p> <p>Businesses can multiply standard depreciation rates on eligible new assets by 2.5, for the life of the asset.</p>	<p>No official or independent estimates are currently available on the effect of these changes.</p>

Annex 3: Neutrality

95. The neutrality of tax settings is an important consideration. If some investments are given more favourable tax treatment than others, then more investment will flow to the tax-favoured investments than would happen under a neutral tax system. Equalising the tax treatment of these assets would cause investment to flow from the formally lowly taxed investment to the formally highly taxed investment. This will mean gaining higher-returning investments while losing lower-returning investments. Economic efficiency and the productivity of New Zealand's capital stock will tend to increase.
96. We have measured the impacts of PE on the neutrality of tax settings by looking at the standard deviation in the cost of capital (that is, the variability in the cost of capital between different asset types; see Table 9 below). This variability is a simple indicator of the likely impacts on neutrality. A PE regime at 20% shows a similar variability in cost of capital as no PE regime. From this we conclude that 20% PE does not create significant tax biases between asset types. At higher rates of PE there are increases in variability of the cost of capital which is likely to start to create tax biases. This bias arises mainly from the exclusion of residential houses from the PE regime.

Table 9: Weighted average and standard deviation of costs of capital under levels of PE¹⁹

Level of PE	Mean of cost of capital	Standard deviation of cost of capital
0%	6.716%	0.42%
10%	6.538%	0.40%
20%	6.360%	0.42%
30%	6.182%	0.46%
40%	6.004%	0.53%

97. Figure 3 shows EMTRs for investments in different asset classes at different levels of PE. It shows that up to 40% PE, PE is not resulting in subsidisation (which would be indicated by negative EMTRs).²⁰
98. We follow the OECD in excluding residential buildings from our EMTR analysis in Figure 3. Analysing residential buildings raises several issues listed below:
- There is significant uncertainty in modelling the effective tax rate on residential rental buildings. Primarily, the uncertainty stems from a lack of data on whether and how fast residential buildings lose value over time.
 - Our analysis assumes assets are purchased by an initial owner and used throughout their useful lives rather than sold to someone else. Sales to others and possible capital gains are a particular issue for residential properties.
 - Our analysis assumes that assets are owned by companies, which is less relevant for residential rental assets than many other assets.

¹⁹ This analysis includes all main types of depreciable assets, including residential housing.

²⁰In Figure 3 – “P, M and E” is plant, machinery and equipment.

Figure 3: EMTRs for different asset classes assuming 60% debt financing for varying levels of PE (0%, 20%, 40%)

