TAXPAYERS' UNION

INFLATING THE COST OF TAX:

Why Failing to Adjust Capital Gains Tax for Inflation is Unfair

New Zealand Taxpayers' Union

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INTRODUCTION

Over time, the prices of all goods, services, and assets tend to increase by the rate of inflation. This is not due to a growing economy, or an increase in the fundamental value of anything, but rather a natural result of the continuing erosion of the value of money.

In short, while the prices of bread, bacon, and beer might persistently rise, neither the baker, butcher, nor brewer are being made better off in real terms.

Most aggregate economic analysis adjusts for this effect: economists calculate real GDP to measure economic growth and use real interest rates to analyse the cost of borrowing. Failing to adjust for inflation would be an intellectual failure: no one believes Venezuela and Zimbabwe experienced a transformative economic miracle in recent years even though nominal GDP growth – which does not adjust for inflation – has been extremely strong.

The same approach should be adopted in our tax system but is routinely ignored by legislators hungry for revenue.

Take income tax, for example.

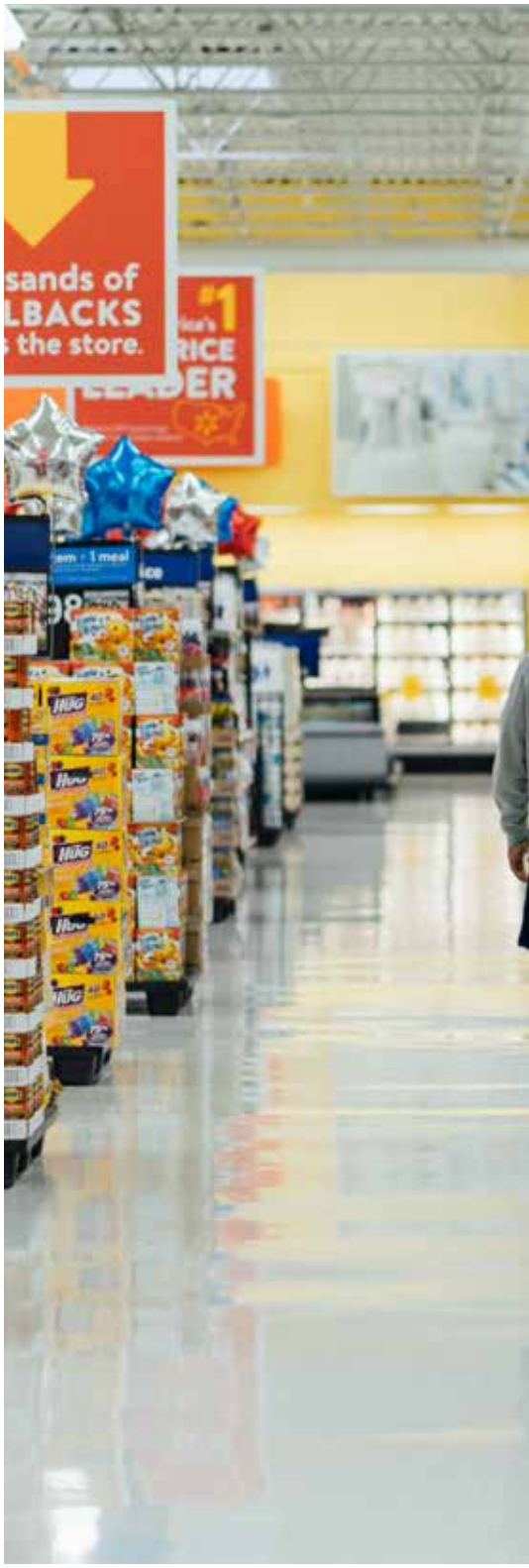
As wages and salaries grow due to inflation, the income tax system blindly considers income earners to be better off and taxes them more as a result, causing income earners' average tax rate to increase. This is often described as fiscal drag or bracket creep. Ending fiscal drag has been a longstanding campaign position of the Taxpayers' Union.

Savings interest income is affected even more brutally. Nominal interest income is taxed instead of real interest income, so savers are punished for the portion of their savings which is just keeping pace with inflation. This can cause the effective tax rate on interest income to exceed 50 percent.

While failing to inflation-adjust the tax system is generally insidious, some groups will always be hardest hit. Fiscal drag hurts middle-income families who are quickly pulled into higher tax brackets, while failing to inflation-proof interest income punishes retirees who prefer low-risk term deposits and savings accounts.

Where possible, these distortions should be removed from the tax system. Punishing savers or middle-income earners for inflation – an economic phenomenon completely out of their control – is misguided at best and punitive at worst.

More importantly, the Government should not add



to the distortions. New taxes should be adjusted for inflation to ensure taxpayers are not punished for the effect of inflation – including on any capital gains tax proposal.

Much like taxing nominal interest income, failing to adjust the taxation of capital gains for inflation can lead to artificially high effective tax rates well in excess of the 33 percent statutory rate. The result is a punitive tax system which taxes investment and growth at rates that easily surpass our major economic rivals for investment.

Start-ups – which typically deliver returns only through capital gains – may be forced to operate in other countries, depriving New Zealand's tech-sector of lucrative investment and well-paying jobs. Farmers – who may have spent decades paying down debt to retire comfortably – will find the combination of inflation and a capital gains tax robs them of their real return once their farm is sold to their children.

Higher inflation exacerbates this effect: as inflation increases, the effective tax rate on capital gains increases. While the Reserve Bank is required to maintain inflation at 1 – 3 percent over the medium run, inflation regularly ran higher in the early to mid 2000s in response to an overheating economy. Had the Government implemented a capital gains tax earlier, taxpayers would have been put under significant pressure.

The solution is to index capital gains for inflation – ensuring taxpayers only pay the statutory rate on their real returns. Unfortunately, the Tax Working Group ruled out indexing capital gains for inflation in their Interim and Final Reports. If the Government chooses to accept their reasoning – that indexing for inflation is too complex – they will have signed New Zealand up to an extreme capital gains tax.

The purpose of this report is to outline a brief model of the additional cost of capital gains taxes which apply to inflationary – as well as real – gains. Further, the report investigates the costs to households who may be facing the tax.

FORMAL DESCRIPTION OF INFLATION INDEXATION

More formally, we can describe capital gains with the following,

$$C_t = C_o[1 + \pi + r]^t$$

where C_o is the value of capital at the beginning of the investment, C_t is the value of capital at time t, π is the value of inflation, and r is the real interest rate.

The nominal capital gain can therefore be presented as:

$$C_{GN} = C_o[1 + \pi + r]^t - C_o$$

The tax paid on the nominal capital gain at year t:

$$T_N = \tau \cdot \{C_o[1 + \pi + r]^t - C_o\}$$

where τ is the tax rate on nominal capital gains.

The real capital gain can be presented as:

$$C_{GR} = C_o[1 + r]^t - C_o$$

The implied tax on real capital gains is can be presented as τ multipled by the difference in capital value at times 0 and t, such that:

$$T_R = \tau \cdot \{C_o[1 + r]^t - C_o\}$$

And therefore the 'over-taxation' from choosing to tax nominal rather than real capital gains is:

$$T_D = T_N - T_R = \tau \cdot \{C_o[1 + \pi + r]^t - C_o\} - \tau \cdot \{C_o[1 + r]^t - C_o\}$$

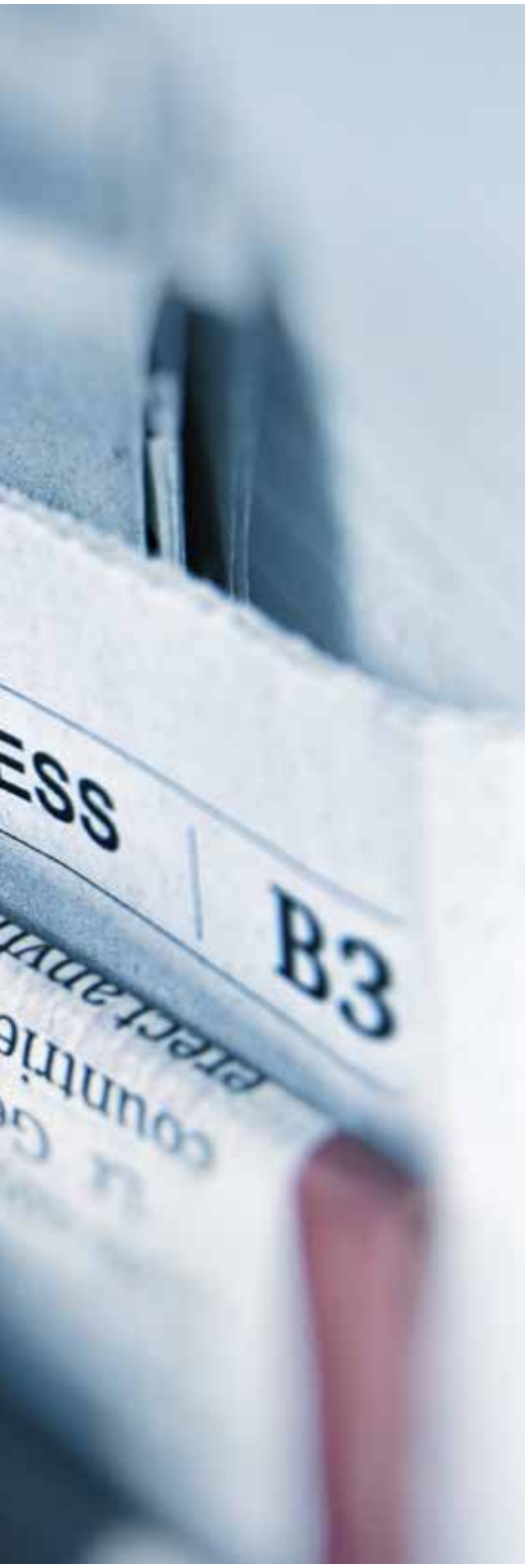
Or more simply

$$T_D = \tau \cdot \{[1 + \pi + r]^t - [1 + r]^t\}$$

The effective tax rate is the inflation-adjusted tax paid on nominal gains as a proportion of total real capital gains, such that:

$$T_N / C_{GR} = \tau \cdot \{C_o[1 + \pi + r]^t - C_o\}\} / C_o[1 + r]^t - C_o$$

The effective tax-rate function increases with the statutory tax rate. High inflation pushes nominal returns up, which are then taxed, causing the real effective tax rate to increase. If inflation is sufficiently high (larger than two times the real return on capital), the real effective tax rate can exceed 100%. This effect is captured in the scenario presented by the Working Group in its Final Report, where it states that a one percent real return on capital and a two percent inflation rate should be assumed in all revenue forecasts.



The real effective tax rate can also exceed 100 percent if the asset is held for a sufficiently long time due to the compounding effect of inflation.

For assets which experience no real capital gain, the effective real tax rate will be above 100% for all positive rates of inflation and periods of time until realisation. A greater than 100 percent tax rate simply implies that the asset loses accrued real value through time.

This paper presents a series of scenarios, with different assets experiencing different rates of real capital gain.

THE EFFECT OF FAILING TO INDEX FOR INFLATION

Example 1: Rental Property

One of the major targets of a capital gains tax is landlords (and other residential property investors). There is a perception that rental property is undertaxed compared to other forms of investment and that a capital gains tax can correct this disparity.

Suppose you purchase a rental property (after the capital gains tax is introduced) worth $500,000, which experiences a nominal capital gain of four percent per annum, you hold the property for 20 years before it is sold, and inflation averages two percent per annum.

This is a higher rate of real capital gain than is assumed by the Working Group in its Final Report to generate revenue forecasts (two percent, rather than one), so the effective tax rate generated will be lower.

After 20 years, the property will be worth $1,095,562 – so a nominal gain of $595,561. In real terms however, the property has only experienced a capital gain of $242,973.

Tax is paid on the nominal (rather than real) gain at a rate of 33 percent, so the owner will receive a tax bill of $196,535. Once this tax is adjusted for inflation, this implies an effective real tax rate of 55.7 percent.

In contrast, if the property only generated a one percent real annual capital gain, the effective tax rate would be 83.1 percent.

This is the assumption used by the Working Group to generate forecasts. Taxpayers should be concerned that capital gains tax revenue projections depend on effective real tax rates well in excess of twice the statutory tax rate.

Example 2: Family Bach

While the purpose of the capital gains tax is to fairly tax income, family baches and holiday homes (not generally owned to generate income) would be taxed under the Working Group's proposal.

While some households will make strong capital gains on their baches, there are many baches dotted around the country that aren't worth millions of dollars and are not expected to appreciate significantly in value, yet these properties will still be subject to capital gains tax.

Suppose, for example, a family owns a bach worth $450,000 when the capital gains tax is introduced. Further assume the bach appreciates in nominal value by three percent per annum, two percent of which is inflation, and is sold upon death after 30 years of ownership. These are price growth rates assumed by the Tax Working Group in its Final Report for the purpose of calculating revenue forecast estimates.

After 30 years, the bach has appreciated in nominal value by $642,268, but in real terms only by $156,532. Tax is payable on the nominal capital gain, so the owner receives a bill of $211,948. After this tax bill is adjusted for inflation, the effective tax rate is 76.5 percent.

Example 3: Lifestyle Block

While the Government has claimed that the 'family home' will be exempt from capital gains tax, many properties are not exempt. Homes on property larger than 4500m^2, for example, will be eligible for capital gains tax on the land which exceeds the 4500m^2 threshold.

According to Land Information New Zealand there are more than 400,000 freehold properties larger than 4500m^2. Further, the average size of these properties is 20,000m^2. Media estimates have the average size of a lifestyle block as close to 40,000m^2.

According to the Working Group's proposal, property owners will be liable to pay

capital gains tax on land exceeding the 4,500m^2 threshold.

For example, suppose a family purchases a small lifestyle block property for $800,000 that exceeds the 4500m^2 principal-residence exemption limit but nonetheless serves as their primary residence. Further, assume the value of land that exceeds the threshold is worth $400,000 of the $800,000 total value.

If the property appreciates at four percent per year, (two percent of which is inflation) after ten years the property will be worth $1,184,195. The value of the property which exceeds the 4500m^2 will be $592,097, and if the property is then sold, there will be a taxable gain of $192,097 – implying a bill of $63,392.

This is despite the property being the family's primary residence and the Government's commitment that the family home would not be subject to capital gains tax.

There is some reprieve for lifestyle block owners: since only the portion of land exceeding the 4500m^2 threshold is taxable, the effective tax rate on capital gains is lower than had the whole property been subject to tax: 30.35 percent rather than 60.7 percent. Interestingly, due to the effect of inflation, the effective tax rate on capital gains still exceeds the statutory rate of 33 percent – despite only half of the property's value being subject to tax.

Failing to inflation index capital gains is especially punishing for assets that don't appreciate in real terms.

Example 4: Low-Yield Bach

Suppose a married couple owns a run-down bach which has been owned by various members of the family for a few generations. Since the bach is not the principal residence of the couple, it is subject to capital gains tax.

To obtain a certified value as of 31 March 2021, the couple hires a valuer who assesses the bach as worth $500,000.

Because the bach is run-down and not in a summer hotspot such as Queenstown or Whangamata, the value of the bach only increases by the rate of inflation with no annual real capital gain. We assume inflation runs at two percent per annum.

Suppose once the couple passes on after twenty five years, their children inherit the property and decide to sell it, since maintaining the house is too much work.

The Working Group has indicated that passing property down to a relative is not a taxable event, but if the relative then goes to sell the property, they would receive a tax bill that applies to all past gains since the property was last sold or the capital gains tax was introduced.

In this instance, even though the asset has not appreciated in real terms by one cent, the inheritor of the bach will be forced to pay $105,699.99 in capital gains tax, or $64,427.41 in real terms - equivalent to 12.9 percent of the value of the bach.

THE WORKING GROUP ON INDEXING FOR INFLATION

Unfortunately, the Working Group recommended against indexing their capital gains tax proposal for inflation. From the Working Group's perspective, adopting a capital gains tax regime that fails to index for inflation is justified for two reasons.

First, they argue that since no other form of tax is indexed for inflation, capital gains tax should similarly not be indexed for inflation.

This is a bad argument. If the Working Group agrees that the tax system should, in principle, be indexed for inflation, they should support indexing capital gains for inflation. Parliament's failure to rectify current inequities in the tax system (applying tax rates above 50 percent to interest income, for example) is not an argument against indexing capital gains for inflation.

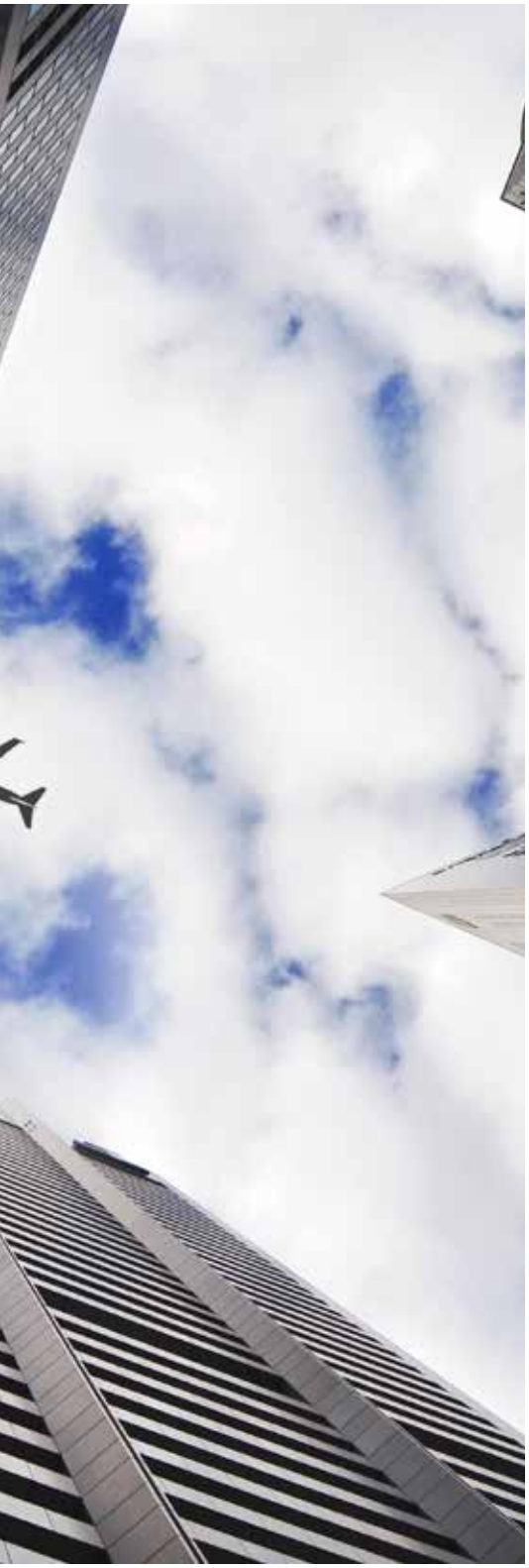
It is also intellectually dishonest to compare a failure to index marginal tax rates for inflation to a failure to index capital gains for inflation: the effects of the latter are much worse. If inflationary gains are taxed, the effective marginal tax rate on real gains increases significantly, while failing to index marginal tax rates for inflation just incrementally increases the average tax burden on all taxpayers over time. In short, the effects of inflation on the proposed capital gains tax regime are far more severe than the effect of inflation on marginal income tax rates.

The burden on taxpayers caused by failing to index capital gains for inflation is demonstrated by the Working Group's revenue forecasts. Modelling from the Working Group indicates that over two thirds of future revenue can be attributed to inflation alone[1].

Specifically, the Working Group estimates capital gains tax revenue with inflation indexing as equal to 0.4 percent of GDP after ten years, while in absence of indexation the tax generates revenue equivalent to 1.36 percent of GDP. 70.6 percent of capital gains tax revenue is purely attributable to taxing inflation. Five years after implementation, 68.3 percent of tax revenue can be attributed to taxing inflation.

Secondly, "the lack of inflation adjustment is something of a quid pro quo for taxing on a realisation, rather than accrual, basis."

1 Appendix E – Inflation and the Tax System, available at https://taxworkinggroup.govt.nz/sites/default/files/2018-09/twg- bg-3985472-appendix-e-inflation-indexing-the-tax-system-1.pdf



Tax Working Group member Craig Elliffe makes this point again in an interview for Stuff[2]. He argues that

"because a capital gains tax is a "deferred tax", not one that people pay every year, the benefit that investors get from only paying tax when their profit is realised through a sale can be quite substantial."

The second argument (as presented in the Interim Report) misses the significant distortionary effect of taxing inflation, even on realisation.

The choice of real gains is essential for analysing the effect of a tax on nominal gains. Unfortunately, it is not explained by the Working Group why they choose to use a five percent real capital gains rate, instead of the formerly justified one percent rate. The Interim Report also does not discuss the effect of the choice of assumed real annual capital gain on the effective tax rate.

The differences in choice of real capital gain imply substantial differences in effective tax rates. Using a five percent real rate of capital gains implies a 42.7 percent capital gains tax rate, whereas if we instead use a one percent capital gain rate (as argued for on page 136), the effective capital gains tax rate is 90.9 percent.

2 https://www.stuff.co.nz/business/109818642/capital-gains-tax--what-we-know-about-how-it-would-work

CONCLUSION

The capital gains tax rate as proposed by the Working Group would be one of the highest in the world. Failing to account for inflation would cause the effective tax rate on capital gains to become even more punitive. Under the Working Group's own assumptions, the effective tax rate could exceed twice the statutory rate under certain circumstances.

The justifications provided by the Working Group to not index for inflation are insufficient. While other parts of the tax system are not indexed for inflation, they should be.

The failure of Parliament to acknowledge the unfairness of taxing savers and earners on inflation is not a sufficiently good justification to introduce an additional inflation tax in form of capital gains taxation.

Failing to index for inflation imposes artificially high tax burdens well exceeding the statutory rates currently being argued for.

While the Tax Working Group might see non-indexation as a quid-pro-quo for choosing to tax on realisation, taxpayers who hold assets that deliver only modest annual real capital gains will face very high effective tax rates – in some scenarios exceeding twice the statutory tax rate of 33 percent. For the capital gains tax regime to avoid being punitive, any gains should be indexed for inflation.

These distortions are clear from the Working Group's own analysis, which forecasts two thirds of capital gains tax revenue is solely attributable to inflation, rather than real gains.

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