

## **Tax Working Group Public Submissions Information Release**

### **Release Document**

**September 2018**

**[taxworkinggroup.govt.nz/key-documents](http://taxworkinggroup.govt.nz/key-documents)**

Key to sections of the Official Information Act 1982 under which information has been withheld.

Certain information in this document has been withheld under one or more of the following sections of the Official Information Act, as applicable:

- [1] 9(2)(a) - to protect the privacy of natural persons, including deceased people;
- [2] 9(2)(k) - to prevent the disclosure of official information for improper gain or improper advantage.

Where information has been withheld, a numbered reference to the applicable section of the Official Information Act has been made, as listed above. For example, a [1] appearing where information has been withheld in a release document refers to section 9(2)(a).

In preparing this Information Release, the Treasury has considered the public interest considerations in section 9(1) of the Official Information Act.

# Submission to the Tax Working Group in relation to capital gains tax

Authors: David Sutton, Alison Pavlovich

## Summary

This submission does not consider the arguments for or against capital gains tax (CGT). This is well debated in other papers and, within academic literature, conclusively in favour of the introduction of capital gains tax. The sole focus is upon the form a comprehensive capital gains tax should take if implemented into New Zealand tax law.

In particular, the following recommendations are made in respect of the implementation of a suitable comprehensive capital gains tax system for New Zealand:

1. a realised basis should be adopted;
2. capital gains tax should apply upon emigration and death;
3. the primary dwelling should be included on a concessionary basis in the capital gains tax base;
4. there should be an allowance for already taxed retained earnings when a gain on the disposal of shares is recognised;
5. and finally, and most importantly, the capital gains tax rate should be 28% without an allowance for indexation.

The main contribution of this submission is to offer a suggestion for a coherent system of comprehensive capital gains tax and most significantly, to recommend an appropriate flat rate of tax that has a sound underlying basis and is easy to implement.

### 1. Choosing between an accruals' basis and a realisation basis for New Zealand's CGT regime

Almost all OECD countries that operate a CGT regime currently do so on a realisation basis<sup>1</sup>. Alone, this is not a sufficient basis for New Zealand to choose such an approach, although it may provide indications of the better approach. Burman and White make a strong

---

<sup>1</sup> Evans, C and Krever, R. "Taxing Capital Gains: A Comparative Analysis and Lessons for New Zealand" 23 NZJTL 486; Huang, C. and Elliffe, C. "Is New Zealand Smarter than Other Countries or Simply Special? Reconsidering the Realisation-based Capital Gains Tax in the Light of South Africa's Experience", (2010) 16 NZJTL 269.

case for an accruals-based CGT. Their observation of the conceptual superiority of the accruals'-basis is built around a number of advantages identified of that system. The approach eliminates the need to limit deductions against other income and the taxation system is simplified, when compared to a realisation basis, as fully deductible losses eliminate bias in the tax system against risk-taking. The lock-in effect also does not arise as this relates to the realisation basis only. Such an approach would fully integrate the capital and income taxation regime, with imputation credits no longer contingent on the distribution of profits. Additional benefits include substantially increased taxation progressivity and a structural increase in tax revenues. In addition, the accruals' basis tax on capital gains eliminates the distortion of inflation when taxation on income is delayed until realisation.

Arguably, an accruals'-based CGT would increase revenue volatility as government is effectively sharing part of the investment risk with the investor. Nonetheless, any CGT is going to increase revenue volatility, unless predicated on a risk free return model, discussed below.

There are a number of practical difficulties with taxing capital gains on an accruals' basis. Some assets are difficult to value prior to realisation and, even where they are readily and costlessly available, distortions arise as the taxpayer may be required to sell down their holdings partially in readily divisible assets. Alternatively, where the asset is readily divisible, but its division may materially, qualitatively change the asset, reducing its value, such as by a loss of control or significant influence induced by the reduced holding, a realisation-based CGT would better support fairness to the taxpayer. The realisation basis would also enhance efficiency (over an accruals basis) as there is less distortion to the taxpayer's preferences introduced by the taxation system. Where the asset is not divisible the taxpayer is forced to borrow or access other cash flows, increasing their risk exposure. Alternatively, they can sell the whole asset but this materially influences their economic decisions, introducing economic inefficiency. These are the central objections to the form<sup>2</sup> of CGT. They support the case for a realisation-based CGT, rather than the, in many regards, theoretically superior accruals-basis.

---

<sup>2</sup> The primary objection is almost certainly to the existence of a CGT. This objection is not conceptually grounded but is based on a more general preference to avoid taxes.

Burman and White<sup>3</sup> make a case for the risk free return model of capital gain taxation. The McLeod Committee report<sup>4</sup> indicated some support for this model. They observe that this approach does not increase the volatility of government revenues, that the investor shares none of the investment risk with the government but that, politically, it may be difficult to persuade taxpayers that they are liable to tax at points where their assets have fallen substantially in value.<sup>5</sup> Under this regime, capital is taxed on an imputed risk free rate regardless of the actual change in value. The case for the risk free return model for an accrual-based CGT relies on the assumption that there are no pure profits. That is, markets efficiently price risks and that returns share a uniform positive correlation with risk, so that the return above the risk free rate is matched exactly with incremental risk. In effect, under such assumptions, taxing the risk premium to the risk free rate involves socialising risk. The McLeod Committee further expound that this could be substituted by governmental risk free borrowing, applied to buy a portfolio of risky assets. This would have the same net effect without a cost to the taxpayer.

There is a need to consider several key issues with the risk free rate model. One important issue relates to the safety of certain conceptual underpinnings of the case for the risk free rate model. There is an extensive body of research supporting the view that markets are not as efficient as the earliest proponents of the efficient markets' hypothesis supposed<sup>6</sup>. Equally, it also involves a higher net inflow of economic benefits to the investor than would arise from an investment at the risk free rate. The alternative to an exclusion of CGT liability up to a certain level is that the risky investor is permanently shielded from full taxation of their gains.

---

<sup>3</sup> Burman, L, and White, D. "Taxing Capital Gains in New Zealand: Assessment and recommendations" (Paper presented to Victoria University Tax Working Group, Victoria University of Wellington, Session three, Rutherford House, September 2009)

<sup>4</sup> McLeod Committee Report, formally known as the Tax Review 2001, "Final Report"; Elliffe, C. and Huang, CC. "Hard to argue with the benefits of capital gains tax" *The New Zealand Herald* (online ed, Auckland, 11 January 2011)

<sup>5</sup> A further difficulty not discussed by Burman and White is that a RFRM would effectively increase relative returns to the risk premium. In this sense a CGT would, contrary to an important argument against the tax, stimulate risky investment. Under standard assumptions, investors' risk appetites would systematically migrate to greater risk.

<sup>6</sup> Cassidy, John "The inefficiency of the market isn't an open question" *The New Yorker* (online ed, 15 Oct 2015); Shiller, RJ. "Irrational Exuberance", NJ (2013, Princeton University Press). As it relates to this discussion, the higher long-term returns on riskier assets is the important factor determining the need to tax the risk component of risky returns.

An alternative accrual based option is broadly in line with those suggested by Vickrey<sup>7</sup> and Auerbach<sup>8</sup>, involving the allowance of the taxpayer to carryover CGT liability, with the liability amount attracting interest until the asset is realised. This proposal removes some of the key objections to a CGT. This avoids the earlier liquidity complications described as supporting a realisation basis to CGT. Some parts of this proposal require greater specification, such as the interest rate used but these are minor issues. Potential concerns of greater substance lie in the fact that a CGT regime based on accruals reifies market prices at any given point without the income coming in. To illustrate why this has substantial implications, rather than just trifling conceptual ones, let us suppose that an investor bought shares in a company for \$10,000. The investor holds those shares for five years, before selling them for \$10,000. Over the holding period, the shares rise in value by 25% a year before falling by the full amount of the first four years' cumulative gains in the fifth year. Over the holding period, the investor has incurred a liability to CGT and interest of (we will assume the company tax rate of 28%) \$4,260. The final year loss of value of \$14,414<sup>9</sup> results in a tax deductible of \$4,036, leaving the investor with a time-eroded \$10,000<sup>10</sup> and a liability to CGT of \$224. It is difficult to construct the case in which this outcome improves justice or efficiency. If we add the assumption of no income flowing from the investment over the holding period for simplicity, but without compromising the conceptual integrity of the scenario, the investor has had nil income and an effective capital loss but has a 'wash up' liability to \$224.

Concerns that economic agents may be encouraged to take risks at levels below those that would arise in the event of a tax system that does not introduce any distortions are realised in the scenario outlined above. The approach also violates equity considerations. There are, at the minimum, a range of plausible scenarios in which both of these qualities are significantly reduced under a CGT predicated on a carry-over accrual-based CGT. For these reasons, such an approach should be rejected.<sup>11</sup>

---

<sup>7</sup> Vickrey, W. "Averaging of income for income-tax purposes", 47 *Journal of Political Economy* 379.

<sup>8</sup> Auerbach, A. "Retrospective capital gains taxation" 81 *American Economic Review* 167.

<sup>9</sup> \$10,000, compounded over 4 years at 25% gives a total capital gain of \$14,414

<sup>10</sup> \$8,959 at a 2% inflation rate

<sup>11</sup> Notably, the scenario presented represents merely a class of potential cases. Not all outcomes will be as biased against the taxpayer (or even biased against the taxpayer). If, in year five, the investment observes the same return as was the case for the preceding four years, and the investor sells, the taxation implications would be consistent with equity and efficiency conceptual foundations. However, the scenario approximately mirrors a realistic situation in which an investor gained exposure to an investment at some point in a rising market and, following the collapse of that market, was forced (or chose) to liquidate their investment.

Burman and White<sup>12</sup> describe the realisation basis as the ‘second best option’. This research does not support this view, making the case for a realisation-based CGT. This case is essentially deductive, ruling out accruals-based CGT options based on their potential to violate the core principals of a sound tax system. The realisation-based CGT limits loss allowance to current capital gains, with the carry-over of loss deductions where there are insufficient current gains available, such as might arise with a generalised market downturn.

The popularity of the realisation basis, along with the problem of hard-to-value assets<sup>13</sup>, added to the liquidity problem, and potentially, a range of scenarios in which any accrual-based system would significantly impair fairness or efficiency, draws towards the conclusion that any acceptable, workable CGT is realisation based. From this conclusion, the discussion turns to address the mechanics of a realisation-based system of CGT. The approach adopted in this research develops the preferred system by considering the principal objections to CGT *simpliciter* and developing specification of a realisation-based CGT to minimise the substance of those objections.

## 2. Capital gains tax should apply upon emigration and death

In contrast to the US system, it is conceptually sounder to tax capital gains at death to prevent an indefinite deferral of tax. The case has been made that gains could be carried over at death to prevent the forced liquidation of family businesses to meet CGT liabilities. This argument presupposes that the dissolution of family businesses is otherwise necessary and that it is necessarily undesirable that this occurs. This position is not persuasive<sup>14</sup>. The presumption must be that the intergenerational transfer of wealth is innately desirable. Such a presumption appears to stretch any reasonable understanding of the concept of equity.

---

<sup>12</sup> Burman and White, n 3 at 18.

<sup>13</sup> Evans and Krever n 1; Krever, R. “Structural Issues in the Taxation of Capital Gains”. 1(2) Australian Tax Forum 168

<sup>14</sup> Since no later than Adam Smith’s *Wealth of Nations* inheritance tax has been argued for on economic grounds (Steltzer, I, 2007, Listen to Adam Smith: inheritance tax is good, The Spectator, <https://www.spectator.co.uk/2007/10/listen-to-adam-smith-inheritance-tax-is-good/>). A related point is that more than 80% of family businesses fail in the hands of the third generation, the first creates and builds, the second typically sustains, and the third squanders, hence the expression ‘shirtsleeves to shirtsleeves in three generations’ (Next Generation Survey 2016, Great Expectations: the next generation of family business leaders, <[www.pwc.com/gx/en/services/family-business/next-gen-survey.html](http://www.pwc.com/gx/en/services/family-business/next-gen-survey.html)>). There is no sound economic basis to the preservation of privilege. At its core this argument is an appeal to some mawkish emotional impulse tied, presumably to heritage. Concerns about inheritance as a driver of wealth inequality have been raised by Thomas Piketty in *Capital in the Twenty-First Century* (Harvard College, New York, 2013). In his bestseller, Piketty argues that inherited wealth is likely to play a greater role in peoples’ fortunes than work or skill, as wealth concentrates and higher returns to capital are achieved.

Equally, the argument ‘from family business dissolution’ presupposes that the beneficiary of an estate is unable to meet a portion of the cost of the family business (the CGT liability arising on transfer) to acquire the business. An external acquirer would pay the full market value in an arms-length transaction between willing and knowledgeable parties. It is not clear that equity or efficiency are advanced by sponsoring a particular understanding of heritage, or that it is the role of a competent system of taxation. A further complication with this approach is that it aggravates the ‘lock in effect’ (discussed later). On these grounds roll over after death should not be part of a realisation-based CGT.

Clearly, the same principle must apply upon emigration. As most tangible assets are difficult to emigrate, the likelihood of a capital gains tax arising upon emigration on New Zealand based tangible assets is low – assuming New Zealand will tax on a source basis. However, it is possible that emigration of an individual could mean tangible assets located outside New Zealand and intangible assets could leave the New Zealand tax jurisdiction. Without a capital gains tax on assets upon emigration, opportunities to avoid the tax will arise. Also, the opportunity to impose the capital gains tax due will reduce.

3. The primary dwelling should be included in the capital gains tax base, with an allowance for ‘excess’ holding costs and capital improvements.

While we understand taxation of the primary residence has been removed from the Tax Working Group’s scope, omitting its discussion from this paper would detract from the cohesive solution suggested here.

Practical considerations include widespread resistance to the taxation of homes. Overseas approaches balance this issue by applying a generous tax-free threshold. This approach is implicitly progressive as the incidence of tax falls more heavily on more expensive housing but the solution is imperfect. To illustrate this suppose the threshold is set at the average Auckland house price (\$1,000,000)<sup>15</sup>. A threshold set at that level would have practical implications for Eketahuna properties around about the time the sun burns out and all life on earth ceases to exist. Potential solutions would be necessarily complicated,

---

<sup>15</sup> Barfoot and Thompson “January 2018 housing market update” (Barfoot and Thompson, 2018) <[www.barfoot.co.nz/market-reports/2018/january/market-update](http://www.barfoot.co.nz/market-reports/2018/january/market-update)> states the average price of January house sales was \$934,753, an increase of 1.5% over the preceding three months.

involving the determination of regional property prices, those regions mean property prices, standard deviations from the means, and determination of regional boundaries. Without becoming excessively complicated the determination of regions would be necessarily crude and involve capricious ‘cut points’. Despite these issues, some method of shielding capital gains on principal residences is politically necessary and is also required to prevent excessive discord with the principles of equity and efficiency<sup>16</sup>. However, a blanket exemption of the primary residence is not accepted as forming part of the best approach.

Suppose a principal residence owner moved between two similarly priced Auckland properties due to changed family circumstances. In each case, the houses are priced at the mean Auckland house price of \$1,000,000. The taxpayer is liable to tax on the property sold and has to take out a mortgage to finance that tax liability to buy the second house. Except for the type of utility required by the homeowner, the market evaluates the properties as equivalent. This condition appears to strike at fairness and may disrupt efficiency, as the home owner may avoid the change in properties or rent out the first property and lease the second. This would interfere with the taxpayer’s preferences as they require one house, and the ownership of that house, rather than to become a landlord and a renter at the same time. With these concerns in mind, rather than an arbitrary threshold, a preferable option is tax exemption in relation to gains applied to the purchase of another property (following an approach applied in certain overseas jurisdictions), so that the investor’s gains are untaxed in the scenario above. A threshold that draws very expensive housing into the CGT net, increasing the progressivity of the tax system, may also augment such a regime. Where an investor has held a property for twenty years and it has risen in value from \$200,000 to \$1,000,000, and the investor sells it, the CGT liability without a repurchase allowance would be 28% of \$800,000 or \$224,000. If we assume the taxpayer buys another house for \$500,000, their CGT liability reduces to \$140,000.

*Arguendo* suppose taxpayer A invests in a business, preferring to rent accommodation, enabling the taxpayer to devote his capital to the business. Taxpayer B buys a house at the same time as taxpayer A chooses to rent and build his business. Over a period of ten years A’s business grows in value from \$100,000 to \$1,000,000. Taxpayer B’s house appreciates from the same initial value to \$1,000,000 also. Taxpayer B sells her house and

---

<sup>16</sup> A survey conducted by Sharma and Davey, n 9, found that a majority of tax experts favoured an exemption for the family home, because it is the family home. The argument in this research is more pragmatic, arguing that, to the extent an exemption is indicated, it relates to political necessity rather than observance of principles.



applies all of the proceeds from the sale to another house. Under the proposed CGT regime, B is not liable to CGT whereas taxpayer A is. Further suppose that retained earnings comprise half of taxpayer A's gain on sale of his business<sup>17</sup>. Taxpayer A is liable to CGT on \$400,000 at 28% or \$112,000. This outcome is consistent with neither equity or efficiency concepts and, so, must be considered sub-optimal. In this sense, it is a concession to political realities rather than a conceptually-based element of the proposed system. It must be remembered that the aim is an improved taxation system, rather than an ideal system. Notwithstanding, the initial introduction of a \$1,000,000 threshold represents a reasonable first step towards a comprehensive CGT<sup>18</sup>. Equally, as noted earlier, inefficiency is inevitable with or without a principal residence exemption. The counter-argument is that unavoidable deficiencies inherent in a CGT regime are smaller than those that arise without a (fairly) comprehensive CGT.

Given the 'damned if you do, damned if you don't' features of the repurchase exempted approach, a superior alternative may be found to that of the proposal above. Concessions in the taxation of primary residence capital gains are typical of existing CGT regimes. We propose that the form of necessary concessions should balance the integrity of the CGT base while yielding to political realities only as much as is necessary.

A more conceptually coherent concession is an imputed rental (as income) calculus. This involves treating an imputed 'rental' as notional taxable income and imputed 'expenses' as deductible against the notional rental income. The notional expenses represent interest and other costs associated with the property. These amounts are capitalised with the cost of the asset to reduce the taxable capital gain (assuming notional expenses exceed notional rental income). Part of operationalisation supports a standardised, schedular approach provided by the IRD, with values assigned to net outgoings. Imputed rentals would be determined on a standardised basis, also provided by the IRD, and directly related to and calculated on empirically-determined averages, based on capitalisation. While these proposals appear

---

<sup>17</sup> Exempting retained earnings from the CGT regime forms part of the specifications of this research and is discussed later.

<sup>18</sup> Arguments for an alternative capping approach have also been made. Jacob Spoonley, "A Sanctuary from the Taxman? The Design of the Primary Residence Exemption" 21 *NZJTL* 69, argues for a capped exemption of \$300,000. This value is really about the magnitude of the required tax-exempt level to satisfy political acceptability, rather than about tax concepts or system optimisation. Such a cap (exemption from CGT for gains made up to the cap) would increase 'churning'. It is also very generous, unlikely to result in significant government revenues from this source but it would avoid CGT on most middle-class houses, and so increase political acceptability.

complicated, a modest periodic impost only is involved for the IRD and there would be no incremental specific financial records required from the taxpayer. Implementation would require simple, clear explanations to assuage concerns that may arise among the general public.

This proposal is illustrated in the example below:

In relation to this allowance, assume, for example, that a homeowner has sold her house for \$600,000, having bought it five years earlier for \$400,000. We can calculate the average capitalisation by adding the purchase and sale price, divided by 2<sup>19</sup>. If an imputed rental of \$5,200/\$100,000 of capitalisation is determined by the IRD, and the value of imputed net outgoings (interest, paid or notional, maintenance, rates, insurance) is \$7,500/\$100,000 of capitalisation, \$2,300/\$100,000/year of holding is capitalised. The equation is then:

$$\$2,300 \times 5^* \times 5^{**} = \$57,500 \text{ (In relation to the present example)}$$

\* \$100,000's of house capitalisation)

\*\* years house held

The net effect of these calculations is that the CGT liability relates to \$142,500 (\$39,900) as opposed to tax liability of \$56,000 in relation to a gain of \$200,000, without the exempt amount<sup>20</sup>.

Potential objections based on excessive compliance or administrative costs wilfully exaggerate those incremental costs. The IRD could periodically make annual or even multi-year updates to the relevant schedules based on market developments. The taxpayer could retain the tax-deductible services of a tax agent (if required) to calculate the exempt capital gain. Given the modest task involved, such services could not reasonably be burdensomely expensive. The only substantive concern is that what are fairly straight-forward proposals may not be universally perceived as such by the general public. This concern indicates the

---

<sup>19</sup> An average capitalisation could be used, taking the end-point values, divided by two, multiplied by years held. In the present case, this would provide an average capitalisation of \$500,000.

<sup>20</sup> In addition to this, material improvements should be capitalised at cost. This substantially addresses the 'mansion effect' whereby homeowners may be inclined to over-capitalise their homes to secure tax-free advantages.

need for clear explanations and examples to support implementation. In this regard, the concern is no greater than when GST was introduced to New Zealand in 1986. The taxpayer would not need to make annual returns, or calculate imputed income or expenses annually. The compliance cost would arise only at realisation and require the purchase price and sale price, to determine the multiplier of IRD schedule rates for imputed income and expenses over the holding period.

The conceptual basis for this exemption is that incremental running costs incurred in home ownership, over the costs of rental, are effectively an asset's holding cost. There is no conceptual reason that these should not be added to the capital asset cost (capitalised), along with costs associated with capital improvements. This allowance provides that part of the property gain in value that is purely a function of a movement in market prices as opposed to an 'earned', or paid for, component of the increase in that property value, is the part that attracts CGT. In this sense, the treatment is analogous to the exemption from CGT of gains attributable to cumulative retained earnings related to the gain realising investor's shares in the listed company.

Notably, this proposal is developed cognisant of the recommendation of Evans and Krever<sup>21</sup>, who argue that political necessity probably does require that the family home (principal residence in un-emotive speak) must be granted some kind of concession. They explore the Scandinavian option which is similar to the first proposal raised in this research, that roll-over on the purchase of another home avoids CGT. For the reasons outlined above, this approach is rejected here. Other design features Evans and Krever outline include the need for care to avoid 'double-dipping', by ensuring that the property in question is a genuine residence. Their concern is to limit principle residences to a single home per family unit.

#### 4. CGT double taxes retained earnings held by companies.

To the extent that CGT is assessed on gains in the market value of corporate stock, CGT applies double taxation to retained earnings. Under the current regime, dividend imputation credits attach to earnings distributed as dividends. Imputation credits relieve share investor liability to taxation paid by the company, up to the company tax rate. Where a company chooses to retain all or a portion of its earnings (as is typical) those retained

---

<sup>21</sup> Christopher Evans and Richard Krever, *Taxing Capital gains: A Comparative analysis and Lessons from New Zealand*, 14 *Taxation Today*.

earnings contribute to the value of the shares upon realisation by the shareholder. The effect is that the shareholder is being taxed on what is, in effect, new contributed capital, rather than the income derived from that capital. Conceptually, the company could pay out 100% of earnings and issue new shares to shareholders to provide required capital. There would be no claim on the additional contributed capital by the impost of a CGT. Arguably, this presents a reason to implement a system structuring the CGT to discount the cumulative value of retained earnings from the increase in market value of the investor's shares, at the point of realisation of those shares. The issue of the double taxation of savings has also been raised but it does not appear to have great merit. Taxation of returns on savings is distinct from the taxation of savings.

To illustrate this proposal we might envisage a situation in which a taxpayer owns shares in a company. They hold 10,000 shares and over their eight-year holding period, the shares have risen in value from \$1.00 to \$8, for a total gain in the value of their shareholding of \$7. The shareholder sells their shares after eight years of holding them. Over each of the years of shareholding, the company paid out half of its profit after tax, attaching dividend imputation credits to those dividends at the company tax rate of 28%. The remaining half of each year's profit was retained and reinvested in the company's business. If we suppose a simplified scenario, in which the company earned \$1,000,000 in year one, rising by 10% a year over each of the eight years this results in total retained earnings of \$6,289,739. If we assume that the company's market capitalisation is \$10,000,000 in year one, and that the number of shares on issue has remained constant (again, all simplifying assumptions but none of which importantly distort the principles illustrated), the result is a gain in company value of \$70,000,000. Taxed at 28% without an allowance for cumulative retained earnings CGT liability is \$19,600,000 against \$17,838,873.08 with an allowance for retained earnings<sup>22</sup>. In relation to \$6,289,739 of retained earnings, double taxation has occurred. Allowing for retained earnings over the investor's holding period, would reduce the tax liability to or \$17,839<sup>23</sup>. Without the allowance the taxpayer would be liable to CGT of \$19,600<sup>24</sup>.

---

<sup>22</sup> This calculation relates to the whole company, implicitly assuming all investors bought and sold their shares at the same time and for the same price. This, naturally, is at best extremely unlikely but is presented in addition to the individual investor's exposure to CGT.

<sup>23</sup>  $63,710,261 \times 0.28 \times (1/1000)$

<sup>24</sup>  $\$7 \times 0.28 \times 10,000$

Possible objections to the proposed approach of deducting cumulative retained earnings from the change in market value over the investor's holding period are likely to be logistical. Those objections may include the costs associated with calculating the retained earnings' reduction of the capital gain, for the purpose of calculating the net CGT liability. If such an argument relates to cost and, in particular, excessive cost, the recipient of the capital gain would be allowed to avoid its calculation by paying CGT on the full amount. An expected outcome of this is that those receiving capital gains will agree that the cost of calculating the discount is acceptable. The reality is that, at least as it relates to listed companies, or other entities of reasonable size, an expectation of records maintenance sufficient to reveal pre-tax profits, tax on profit, after tax profit and dividends dispersed, is reasonable. Adapting to this incremental compliance impost, certainly post-transition is undemanding.

## 5. Rate - The erosive effect of inflation on capital gains and the tax deferral effect

The main basis to assert the case for a concessional tax rate for capital gains is that inflation erodes the value of capital gains made. If we create a hypothetical scenario in which an investor has made a \$46,937<sup>25</sup> gain on an investment in residential property over a five-year period, we can use such a case to illustrate the practical effects of CGT<sup>26</sup>. At the end of the five-year period, the investor sells their residential property. Over that time, the investor has deferred taxation, gaining the benefit of returns on an increased capital base progressively, without the requirement to pay CGT. We may assume an inflation rate in the middle of the RBNZ's target range of 1-3% or, alternatively, using data averaging the five quarter period 2017, and the first quarter of 2018, we arrive at an average of 1.74%. The benefit of tax deferral is determined at the tax rate supported in this research of 28%, and amounts to that rate multiplied by 0.28. To these assumptions, we will add an assumption of 8% investor returns rate<sup>27</sup>, noting that the practical implications are sensitive to any changes

---

<sup>25</sup> This is arrived at using an annual return of 8%, approximating long-term residential property returns, and assuming negligible net income, after expenses.

<sup>26</sup> It should be noted that, while hypothetical, conformity with an approximation to the current situation, in terms of the inflation rate and residential property returns, is observed. The current period is marked by historically low inflation and interest rates. Implicitly treating these values as permanent, biases the calculations (without sign). Low inflation rates weaken the case for differential treatment of capital gains, while low return rates weaken or lessen the argument that deferred taxation represents an offset to the erosion of capital gains due to inflation. Equally, the timeframe may importantly affect the results.

<sup>27</sup> The nature of this assumption is supported by long-term investment returns. See: Bart Frijns and Alireza Tourani-Rad, *The long-run performance of the New Zealand stock markets: 1899-2012* (Auckland Centre for

in one or more of these assumptions. A further assumption, which is for the purposes of simplification, rather than for realism, is that the gains enjoyed by the investor occur in even increments over each of the five years. Notably, depending on the deviation from this assumption the net position of the investor may materially change but without bias.

Based on these assumptions the effect on the investor is:

- Inflation: This is calculated by determining the present value of \$50,000 received as a lump sum in five years' time, discounted at a rate of 1.74%. A further calculation required is the value of the initial investment in current real terms, at the point of realisation. For this purpose an initial investment of \$100,000 is assumed. Of this initial investment 50% is equity and 50% is debt. These levels are assumed constant over the holding period of five years<sup>28</sup>. For simplicity, we can assume 5 annual periods as the basis for calculating the net present value. This provides a value of \$46,937. An implication of this is that any tax rate on a nominal \$46,937, against a real gain of \$138,926.44<sup>29</sup>, entails a higher real rate of taxation. In effect, the tax rate on the full \$38,926.44 gain, at \$13,142, represents a real rate of 33.76%<sup>30</sup>.
- Deferred taxation advantage: As outlined above, to determine the value of tax deferral, we must calculate the value of savings on 28% tax paid at the end of each period over five years. For consistency, we are assuming the incidence of tax liabilities would fall in a similar pattern to the inflation rate but with a delay of one

---

Financial Research, AUT Business School, [www.nzfc.ac.nz/archives/2014/papers/programme/II-2b.pdf](http://www.nzfc.ac.nz/archives/2014/papers/programme/II-2b.pdf), 2014). Fjirns and Tourani-Rad calculate the long-run return on investment in the New Zealand stock market of 10.75%. Notably, secondary market equities do not represent a major part of New Zealand portfolios and also that the majority of the return is in the form of dividends. In terms of residential property, Chaston, "Adjusting for inflation, the gains in house prices in the past four years are actually nothing special when viewed over a full 50+ year timeframe" *Interest.co.nz* (May 28, 2017, [www.interest.co.nz/property/87961/adjusting-inflation-gains-house-prices-past-four-years-are-actually-nothing-special](http://www.interest.co.nz/property/87961/adjusting-inflation-gains-house-prices-past-four-years-are-actually-nothing-special)) identifies a long-run return on residential property of 8.2% (median house price). In light of these values, and the case that the investor's rate of return should be determinative of the implied tax shield effect of tax deferral on capital gains. It is also employed cognisant of 70% of New Zealand wealth held in residential property assets (Robin Oliver "Capital Gains tax- The New Zealand Case" *A Paper prepared for the Fraser Institute 2000 Symposium, on Capital gains Taxation*, (September 15-17 2000, Vancouver, BC, Canada, 2000)).

<sup>28</sup> This simplifying assumption is likely to overstate the level of investor equity at the start of the period which makes the configuration conservative or more likely to find for a preferential rate for CGT.

<sup>29</sup> \*  $PV = \frac{FV}{(1+i)^n}$ , where  $PV$  is present value,  $FV$  is future value, and  $n$  is the number of periods. The total return is calculated then \$50,000 debt finance is deducted to determine the erosive effects of inflation on an initial investment of \$50,000 of investor equity and all of the related returns, occurring evenly across the investment period.

<sup>30</sup> Deducting the tax deferral effect results in this adds \$2,092 back to the inflation-eroded investor return.

year. This allows us to calculate present value over 4<sup>31</sup> periods, at 8%. Multiplying 8% by 0.28 reflects an imputed need to finance the CGT (from a non-divisible asset). We can calculate the value of the tax shield as \$2,092. This gives a total value of \$41,019.

- The net tax effect is an increased tax liability over the nominal rate of 32 %<sup>32</sup>, reducing the tax inflationary effects of taxing capital gains without adjusting for the real gain. Allowing that the risk premium is likely to be conservative in this calculation, and that CGT will largely fall on wealthier taxpayers, this seems to be an ideal outcome.

Notably, a large number of assumptions influence the calculus above and at least a number of those assumptions are not likely to be consistently reliable. Important among these are that interest rate spread between the risk free rate and the first mortgage rate remain constant. Notwithstanding, there is substance to the view of those arguing capital gains should be taxed at a lower rate than other income if an equality is to be achieved between the taxation of capital gains and the taxation of other income. However, what becomes clear, under what are a relatively benign set of assumptions for the case for a concessionary CGT rate due to the erosive effects of inflation, is that the relevant rate need not be very much lower. Under the assumption that taxpayers exposed to CGT liability are generally in the top marginal income tax bracket (33%), and in light of the plausible scenario presented above in which real tax rates are only modestly higher on capital gains than they are for other income, 28% is a reasonable approximation to a just and efficient rate of taxation and is the corporate tax rate. This has the ancillary advantage of avoiding the (admittedly minimal) risk of over taxation, due to pushing the CGT liable taxpayer into a higher tax bracket in periods in which they realise capital gains and also minimises differential tax rates and, thus, tax planning opportunities.

## The proposed CGT regime

Tying together the elements outlined in the discussion to this point, the proposed CGT is realisation-based and it involves a tax exemption for part of the capital gains on the sale of primary residences. However, there is a liability to CGT where home capital gains exceed the

---

<sup>31</sup> We assume here, that liability to CGT arises at the end of each period because practical constraints are likely to frustrate collection that is more frequent, whereas the inflation effect arises upon investment.

<sup>32</sup> ( $\$38,926.44 + \$2,092 = \$41,019$ ;  $\$13,142/\$41,019 = 32\%$ ).

exempt amount. The scheme also proposes a reduction in the assessable capital gain by the amount of cumulative retained earnings in companies in which an investor realises capital gains. The CGT rate proposed is 28%, consistent with the company rate, and there is no carryover upon death<sup>33</sup>. Collectively, these elements serve to mitigate very many of the more substantial objections to CGT or to a certain rate of CGT.

---

<sup>33</sup> Notably, Stiglitz, J. *Economics and the Public Sector* (2<sup>nd</sup> ed, Norton, 1986) argues against exempting death as a ‘roll-over’ event, and he identifies it as one of four core principles of a sound CGT system. It is also interesting to note that those arguing for a rate of CGT equal to the marginal tax rate also felt the CGT regime should be part of income tax legislation (Survey of experts conducted by Sharma, S. and Davey, H. “Characteristics of a preferred capital gains tax regime in New Zealand”, 21 NZJTL, 113).