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Submission to the Tax Working Group

Tax reform and the housing market: the role of retirement income taxes.

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Summary

1. New Zealand taxes different forms of capital income unevenly.

- Owner-occupied housing, New Zealand's biggest asset class, is taxed very lightly.
- Real interest income earnings from debt securities are taxed at very high rates when there is inflation, as the inflation component of interest income is taxed.
- Investors who finance investments with debt receive as subsidy when there is inflation as they can deduct the inflation component of interest income.
- The absence of a capital gains tax means that assets generating cash returns at short horizons are taxed more heavily than assets generating cash returns at long horizons.

2. Because different classes of capital income are taxed at different rate, the tax system provides incentives to over-invest in lightly-taxed assets and under-invest in heavily-taxed assets. This can lead to a misallocation of capital that reduces the productivity of the economy and reduces living standards.

3. Standard economic theory suggests that the price of property is likely to be artificially high when property income is taxed at lower rates than the income from other assets. This induces an intergenerational transfer to the first generation of property owners and imposes large welfare costs on all subsequent generations who have to pay higher rents or higher prices to purchase property. Because the immediate cause of these welfare costs is the prices people face in the housing market, rather than the taxes they pay, these effects are often ignored in welfare analyses of the tax system. They should not be ignored, however, as they are direct consequences of the way property income is taxed relative to the way income from other assets is taxed.

4. The tax advantage of owner-occupied housing increased substantially after 1990 because of tax reforms adopted in the late 1980s, and because of a large drop in real interest rates. The increasing size of this tax advantage provides incentives for people to pay more for property and to live in larger houses. Since 1990, property prices (adjusted for inflation) have increased faster in New Zealand than other OECD countries, and the size of newly constructed housing has increased faster in New Zealand than other countries for which comparable data exist. This is not proof that changes in the tax system caused these extraordinarily large increases, for many other factors affect the price of housing. Nonetheless there are good reasons to believe that New Zealand's tax system is contributing to artificially high property prices, and few reasons to doubt this relationship. Strangely, there

has been little research into this topic by government agencies even though economic theory suggests that taxing property income at lower rates than other capital income is likely to artificially increase property prices and impose high welfare costs on young people. Research I have conducted (discussed below) suggests these costs could be significant.

5. New Zealand's tax system should be reformed to reduce the extent that different types of capital income are taxed at different rates. One way to do this would be to raise taxes on income from assets such as owner-occupied housing that are lightly taxed, and reduce taxes on income from assets such as interest-earning securities that are highly-taxed. This could be achieved by taxing the imputed rent on owner-occupied houses, by having a capital-gains tax on owner-occupied housing, and by exempting the inflation component of interest income from tax. Some of these reforms are explicitly ruled out by the Terms of Reference. The Tax Working Group should advise the government that if the Terms of Reference are followed, and capital income continues to be taxed on an income basis, large costs will continue to be imposed on young people because the price of housing will continue to be artificially high.

6. There is an alternative way to reduce the extent that different types of capital income are taxed at different rates. Income can be taxed when it is earned (an income tax) or it can be taxed when it is spent (an expenditure tax). Since Fisher (1937) and Kaldor (1955), it has been understood that it is possible to have direct progressive expenditure taxes by taxing income adjusted for the net purchase and sale of assets. In practice, a large number of countries do this by taxing income placed in sanctioned retirement income schemes on an "EET" or "exempt-exempt-taxed" basis: income placed in these schemes is not taxed when it is earned, any earnings are exempt from tax as they accumulate, but the funds are taxed when they are withdrawn. Assets placed in these schemes will be tax advantaged relative to *some* other classes of assets. However, they will be taxed on a similar basis to the way owner-occupied housing is currently taxed in New Zealand. By adopting an EET scheme for retirement savings placed in sanctioned schemes such as KiwiSaver, New Zealand would reduce the tax advantage that housing has over other assets. By reducing this tax advantage, the extent that housing prices are artificially high is likely to be reduced.

7. An EET tax system for retirement savings is proven internationally as many countries including the United States, the United Kingdom, Germany, France, Japan, and Canada tax income placed in sanctioned retirement income accounts in this manner. New Zealand also had a similar scheme until 1989, when it was curtailed in the belief that it would (i) raise large amounts of revenue for the government and (ii) reduce inequality, as the tax exemptions are larger for high income people. Both of these arguments are likely to have been significantly overstated. The revenue argument ignores the value of the taxes that the government receives when the funds in the sanctioned retirement income accounts are withdrawn. The inequality argument ignores the inequality effects that occur when property prices increase because the income from property is taxed less than the income from other assets.

8. The Tax Working Group should commission independent research to investigate the merits of adopting an "Exempt-Exempt-Tax" regime for retirement saving schemes such as KiwiSaver. It is now nearly thirty years since New Zealand adopted a way of taxing retirement savings that is different from most countries in the world, yet it appears that neither the New Zealand Treasury nor the Inland Revenue Department have developed

technical models capable of evaluating the relative merits of these tax regimes. This is disappointing, given the importance of the issue. For more than forty years economic theory has suggested that the response of property prices to the tax system is a key determinant of the welfare effects of the tax system, yet this issue has been largely ignored in the advice the Treasury and the Inland Revenue Department have provided to the Government. .

9. Economic theory suggests that there could be significant economic advantages from adopting a tax system that has an expenditure basis for direct taxation rather than an income basis. Many countries, but not New Zealand, have responded to this evidence by taxing retirement savings on an EET basis. Other, more radical approaches are possible. For instance, New Zealand could consider the Hall-Rabushka flat tax, or the Bradford X-tax. The Meade Report (1978) discussed the relative merits of expenditure and income taxes at length and made other suggestions. The document “The Future of Tax” makes scant reference to these ways of adopting direct expenditure taxes. Even if the Tax Working Group does not believe these options can be introduced in the short term, they should consider whether the potential advantages of having these taxes in the long run warrant a proper investigation of these options in the future.

10. New Zealand taxes the inflation component of interest income and allows firms that borrow to invest to deduct the inflation component of interest income from their taxable income. Economists are almost unanimous in decrying this practice. When there is inflation, even low inflation, taxing the inflation component of nominal interest means that people who invest in interest-earning securities – a group that disproportionately includes older people and the least sophisticated investors – pay extremely high taxes on their real investment income. Similarly, firms that borrow to invest receive a large subsidy. The subsidy to residential landlords is likely to exceed \$200 million each year, one of the largest subsidies to economic activity in New Zealand. The excessive taxation of real interest earnings is a more acute problem in New Zealand than in most other countries as the problem does not exist when income from interest-earning securities is taxed on an EET basis – an option that savers in most countries have, but which is denied to New Zealand savers.

The excessive taxation of real income, and the subsidy to residential landlords who borrow, is likely to increase the demand to invest in owner-occupied and rental property. In turn, this is likely to place upward pressure on property prices, generate an intergenerational transfer from young households to older households, and lower home ownership rates.

The current justification for these extremely high taxes on some of New Zealand’s least sophisticated investors, and for these subsidies to firms that borrow to invest, is that it is administratively difficult to tax real income. It is difficult to understand how it can be so difficult, given the complexity of some of New Zealand’s other tax rules. The Tax Working Group should request a proper justification from the Inland Revenue Department and the New Zealand Treasury as to why it is not possible to exempt the inflation component of interest income from tax, and why it is not possible to allow firms to only deduct real interest payments from their taxable income. Internationally, tax authorities have a long history of opposing tax reforms on the basis that they are administratively complex, and a long history of being wrong about these issues.

11. Standard tax theory suggests an income tax regime that does not have an accruals-based capital gains tax generates financial incentives that should distort investment patterns. A large

number of people also believe there are equity grounds for taxing capital gains – and many countries have a capital gains tax, although normally on a realisation rather than accruals basis. Capital gains taxes are administratively difficult. If owner-occupied housing is exempt from a capital gains tax, there will still be significant distortions that are likely to lead to artificially high property prices. Neither problem is sufficient to rule out capital gains taxes, but they bias the case towards other solutions. For instance, adopting a comprehensive expenditure basis for direct taxation (such as a Hall-Rabuska flat tax or an X-tax) would make a capital gains tax unnecessary.

12. There are several grounds for introducing a land tax on residential real estate, but they should be applied to both owner-occupied and leased residential real-estate. The reasons for a land tax need to be clearly articulated. It could be introduced as a method of taxing the income from residential property, which is currently lightly taxed. Alternately, it could be introduced as a separate tax on residential property, adopted because they have clear efficiency advantages over other classes of taxes such as income taxes. Either way they provide an easy method of raising revenue.

If land taxes were to be introduced, the Tax Working Group would need to consider three issues. Firstly, is there a way of introducing them in a politically sustainable manner? Currently land taxes paid to local governments are politically sustainable because local governments have limited other means of raising revenue, and the services they provide are sufficiently valuable to the community that people prefer to pay land taxes and obtain the services than do without the services. This suggests that if the Government wishes to introduce land taxes, it may wish to devolve some expenditure classes to local authorities and have them raise the taxes to pay for this expenditure.

Secondly, land taxes are likely to be capitalised into property prices, which would involve an intergenerational transfer from current property owners to future property owners (Palmon and Smith 1998). Standard economic analysis suggests the welfare properties of this transfer depend on the extent that current property owners are compensated. While a land tax is likely to be equity enhancing, because it would reduce the extent that New Zealand's uneven application of income taxes artificially raises property prices, ultimately the willingness of the community to alter the current pattern of intergeneration transfers is a political decision.

Thirdly, a land tax that exempted owner-occupied property would introduce its own set of distortions, and significantly reduce its ability to raise revenue. While the Terms of Reference prevent the Tax Working Group from considering land taxes applied to owner-occupied property, the Tax Working Group should include statements about the consequences of this exemption.

13. The document "The Future of Tax" makes only limited mention of social security taxes – and the Executive Summary of the document makes no mention of them at all. This is extraordinary, because the single largest difference between New Zealand's tax system and the tax system of most other OECD countries is the amount of revenue raised by social security taxes. In 2016, New Zealand raised approximately 1.1% of GDP in social security taxes (the ACC levy): the OECD average was 9 percent.

14. A key aspect of social security taxes is that they are applied to labour income but not capital income. Because so little revenue is raised by social security taxes in New Zealand,

the amount of revenue raised from income taxes is very large by OECD standards. In turn, this means that New Zealand has relatively high effective taxes on capital income – or at least on capital income that comes from assets other than property income. To the extent that taxes on capital income distort the allocation of capital, and these tax rates could be lowered if New Zealand had higher social security taxes, New Zealand has adopted a tax system that distorts capital allocation decisions by an unusually large amount. One would expect this to result in low levels of non-residential business capital – and, indeed, New Zealand has unusually low levels of non-residential business capital relative to other OECD countries.

15. The absence of social security taxes reflects two factors. The first is that New Zealand has a retirement income system that is different from almost all other OECD countries. In most countries, the amount of retirement income is dependent on the amount of social security taxes a person pays – and so not only is it necessary to record tax payments, but these countries have chosen to record a specific set of tax payments, those paid as social security taxes paid on labour income. As New Zealand’s government pension does not depend on contributions, it has been unnecessary to record tax contributions. Of course, this does not mean New Zealand could not have a specific social security tax applied to labour income to fund New Zealand Superannuation – and, indeed, Ireland has adopted this approach even though the amount people receive from its government retirement scheme does not depend on the level of contributions.

The second factor is philosophical: for many years, the Government and its departmental advisors have used the “broad-base, low rate” slogan to justify having the same tax rates on capital and labour income. In New Zealand, the concept of horizontal equity – “fair treatment of those in similar circumstances” (p19 of “The Future of Tax”) - is used to argue that income derived from capital or labour should be taxed in the same fashion.

16. The Tax Working Group should be prepared to question the assumption that capital income and labour income should be taxed at the same rates. There is very little theoretical justification for this position. Since the optimal tax literature was introduced by Mirrlees in the 1970s, it has been clear that there are few good reasons to tax capital incomes and labour incomes at the same rate. In practice, most OECD countries do not tax capital income and labour incomes at the same rates. In most cases, OECD countries use social security taxes to tax labour incomes at higher rates than capital incomes. In other cases, countries have deliberately decided to tax labour incomes at higher rates than capital income because any distributional gains stemming from taxing capital incomes at high rates are offset by excessively large efficiency losses. Denmark, Norway, Sweden and Finland, countries with low income inequality, are all countries that deliberately choose to tax labour incomes at higher rates than capital incomes. The “Nordic Dual Income Tax” system these countries have adopted since the late 1980s has gained considerable acclaim from international tax experts.

17. The Tax Working Group should highlight the extent that New Zealand’s decision to tax capital and labour incomes at the same rates (i) is anomalous in the OECD, (ii) is unsupported by theoretical considerations and (iii) may be contributing to New Zealand’s low capital intensity and poor economic productivity. It is not to be expected that large changes to the way New Zealand taxes capital and labour incomes can be introduced in the immediate future, for changes of this nature take time to obtain political and community support.

Nonetheless, the Tax Working Group should signal that it is not necessary to tax capital and labour income at the same rates and that other tax philosophies such as the Nordic Dual Income Tax System should be considered as part of long term tax reform.

18. The Terms of Reference do not explicitly mention compulsory retirement savings schemes. However, the introduction of a compulsory saving scheme is probably the policy that best meets the objectives of the Terms of Reference. Consider a scheme in which people are (i) required to place funds in a retirement savings scheme such as KiwiSaver, and (ii) required to use these funds to finance part of their retirement. Such a scheme would automatically allow a reduction in tax rates, as these contributions would not be taxes but contributions to a person's own fund. These schemes improve the efficiency of the tax system, not only because such contributions would reduce tax rates on capital income, but because the contributions are incentive-compatible as people keep whatever money they place in their own accounts. Moreover, it is straightforward to design a scheme to meet equity goals, and theory suggests that such a scheme would reduce long term wealth inequality. Compulsory savings schemes are intergenerationally neutral and would reduce the inequitable intergenerational transfers that occur when retirement incomes are funded through a pay-as-you-go mechanism. In New Zealand these transfers impose large and increasing costs on young generations.

The Tax Working Group should signal that a compulsory saving scheme can be used to reduce the size of a tax-funded retirement scheme, to lower tax rates, to reduce the size of the intergeneration transfer implicit in New Zealand's current tax-funded social security scheme, and to reduce wealth inequality. These advantages make it worthwhile to investigate further, even if it is not seen as a core element of future tax reforms.

19. New Zealand currently finances a large fraction of its government expenditures on a pay-as-you-go basis out of contemporary taxes. In general, pay-as-you-go funded programmes that provide resources to older people result in intergenerational transfers from young people to older people, while pay-as-you-go funded programmes that provide resources to young people result in intergenerational transfers from old people to young people. The size of these transfers is large. Moreover, because there is no inherent reasons why the transfers net to zero, pay-as-you-go funded programmes typically result in intergenerational transfers. These transfers make it difficult to change expenditure programmes, even when change is desired, because the changes have different impacts on different cohorts. In short, pay-as-you-go funding makes tax and expenditure system inflexible.

The Tax Working Group should consider whether it is feasible to choose a set of taxes that allow some expenditure programmes to be funded on an intergenerationally neutral basis, to allow different cohorts to easily change these schemes as their preferences change. For example, the retirement incomes of successive young cohorts could be funded on a save-as-you basis so that different cohorts could pay different amounts of taxes and receive different sized retirement incomes, as they choose. Alternately, young cohorts could be asked to pay for a certain fraction of their education expenditures. Such flexibility could easily be introduced by having age-specific or cohort-specific tax rates. If New Zealand used intergenerationally-neutral age-specific or cohort-specific taxes to fund some classes of expenditure programmes, it would become easier to change the tax system in the future. This

would reduce the likelihood that future generations of New Zealanders get trapped with a set of taxes that are no longer optimal but which are difficult to change.

Tax reform and the housing market: the role of retirement income taxes.

1.Theoretical perspectives

Ever since Mirrlees (1971), tax theory has analysed how a society's equity objectives and the performance of its economy and are affected by its tax system. The theory of optimal taxes searches for taxes that maximise social welfare while minimising the extent taxes distort people's economic choices including how much they work, how much they save, and how they invest. The literature uses formal general equilibrium models, as to calculate the welfare effects of a tax system as it is necessary to calculate how prices are affected by the tax system and how the final incidence of a tax may be quite different from the immediate incidence of the tax.

Recent work has focussed on two related questions concerning the taxation of capital incomes (Meade 1978; Auerbach 2008; Mankiw et al 2009; Banks and Diamond 2010; Mirrlees et al 2010; Mirrlees et al 2011; Auerbach 2012; Diamond and Saez 2012):

- (1) should capital income and labour income be taxed at the same rates, or should they be taxed differently?
- (2) to what extent should the taxes be levied on an income basis and to what extent should they be levied on a consumption basis? If they are levied on a consumption basis, what types of consumption taxes should be levied?

On the first question, the consensus view is that capital and labour incomes need not be taxed at the same rates. Thirty years ago, following Atkinson and Stiglitz (1976), Judd (1985), and Chamley (1986) a much stronger view was popular, that it was optimal to have a zero tax rate on capital incomes. While the theoretical literature has largely moved away from this position, there is no theoretical basis for taxing capital and labour at the same rates.¹

The key issue concerns an equity-efficiency trade-off. Capital incomes tend to be higher for those with more income and wealth, and, importantly, for people with more income potential. This provides an 'equity' motivation to tax capital incomes at a higher rate than labour incomes. However, capital income taxes tend to be more distortionary than labour income taxes, which suggests capital income should be taxed at lower rates.² The balance depends on how much a government favours redistribution and how much it tries to reduce economic distortions. This may change over time: for example, if income inequality increases due to an increase in the size of capital incomes and an increase in the concentration of these incomes, a society may wish to increase the taxes on capital incomes for equity reasons.

On the second question, the growing recognition that consumption taxes are less distortionary than income taxes has meant that an increasing fraction of tax income is raised through expenditure taxes in countries throughout the world. So far, two types of expenditure taxes have proved popular. Most countries in the world now use indirect value added taxes. A large number of countries also use generalised (Fisher) consumption taxes. These recognize that

¹ There is still some debate as to whether or not it is optimal to tax capital income at all: for example, consider the contrasting positions of Mankiw et al (2009) and Diamond and Saez (2012). Nonetheless, most experts now appear to believe that while there is no good reason to tax capital and labour incomes at the same rate, the optimal tax rate for capital incomes is not zero.

² See Slemrod and Bakija (2017) for an extensive discussion on the relative size of the distortionary effects of taxes on labour market decisions and capital allocation decisions.

consumption is equal to income minus the net purchase of assets, and levy taxes on income adjusted for the net purchase of some type of assets. In practice, this means retirement savings are taxed on an EET (“Exempt-Exempt-Tax”) basis: income placed in a retirement savings account is not taxed when it is earned, the earnings are not taxed as they accumulate, but the whole sum is taxed when it is withdrawn. Note that generalised Fisher consumption taxes are graduated and tend to be more progressive than a flat rate VAT, but less progressive than an income tax. Thus generalised expenditure taxes allow a country to have the equity advantages of a progressive tax system without all of the distortions of an income tax system (Kaldor 1955).

Theoreticians have discussed other types of expenditure taxes, notably the Hall-Rabushka flat tax and the Bradford X-tax.³ Both of these modify the way an indirect value-added tax is applied to make it progressive. While these taxes have yet to be adopted overseas, many tax theoreticians view them favourably as ways to simplify the tax system and improve economic efficiency without unnecessarily sacrificing equity goals. Note that consumption taxes can mean but do not necessarily mean that capital income and labour income are taxed at different rates.

The optimal tax literature emphasises that the appropriate mix of taxes depends on the preferences people have over distribution as well as the efficiency costs associated with different types of taxes. There is no single correct answer. The literature also emphasises that all welfare consequences of a set of taxes need to be estimated. Since the incidence of any particular tax depends on the extent that wages and prices adjust to the taxes, economic models capable of calculating the way that wages and prices respond to taxes are needed to properly evaluate the welfare cost of taxes. These models can be quite complex to develop and estimate (see for example, Altig et al 2001). Many general lessons can be derived from models used to analyse the tax systems of other countries, or the relative merits of (say) expenditure and income taxes. Unfortunately, only a limited set of models have been developed to analyse the welfare consequences of New Zealand’s tax system. This would not matter so much if New Zealand had a similar set of taxes as other countries. However, New Zealand’s tax system differs in many ways from the tax systems of other OECD countries, making the models used in these countries less appropriate to the New Zealand situation.

2. New Zealand’s unusual tax system.

New Zealand’s tax system has two big differences from the tax systems used in other OECD countries. The single biggest difference is that New Zealand raises an extremely low share of taxes from social security taxes. Social security taxes are typically levied on labour incomes but not capital incomes and thus are one way of taxing capital incomes less than labour incomes. In 2016, New Zealand raised about 1.1% of GDP in social security taxes (the ACC levy). The average OECD country raised 9% of GDP in social security taxes (see Table 1 and Table 2.) These taxes are largely used to pay pensions. One of the reasons NZ does not have dedicated social security taxes is that the size of pension receipts is unrelated to the size of

³ For a comprehensive discussion of these taxes see Slemrod and Bakija (2017). Auerbach (2008) also discusses the relative merits of these taxes.

the tax payments they have made.⁴ In contrast, in most OECD most countries the size of the pension an individual receives depends on the tax contributions they have made over their lifetime.

Table 1 : New Zealand’s tax revenues in 2016

Income tax	\$31.6b	12.5%
Corporate tax	\$11.1b	4.4%
Interest and dividends	\$2.3b	0.9%
GST	\$18.2b	7.2%
Other indirect	\$6.5b Petrol and road user \$2.3b, Tobacco \$1.9b, alcohol \$0.9b	2.8%
ACC	\$2.8b	1.1%
Total	\$74.3b	29.4%

Source: New Zealand Government (2016). Author’s calculations

Table 2: Tax collection by country - 2015/ 2016

	US	UK	Germany	OECD Average	NZ
Income Tax	12.0	11.7	11.3	11.5	17.8
-Personal	9.9	9.1	9.5	8.8	13.4
-Corporate	2.2	2.5	1.8	2.9	4.4
Consumption Taxes	3.7	10.4	9.8	10.7	10.0
Social Security Taxes	6.1	6.2	13.9	9.1	1.1
Total	25.4	32.9	36.5	34.2	29.4

Source: Slemrod and Bakija (2017 p 16) plus New Zealand Government (2016). Author’s calculations.

⁴ One other OECD country, Ireland, provides a pension unrelated to the size of tax payments or contributions to a compulsory saving schemes. However, Ireland has social security taxes applied to labour but not capital incomes.

Because most OECD countries raise large amounts of taxes from social security taxes applied to labour income, they need to raise less revenue through income taxes that are applied to both capital and labour income. The difference is large. The average OECD country raises 11.5% of GDP in income taxes whereas New Zealand raises 17.5%. In most OECD countries, therefore, labour income is taxed at considerably higher rates than capital income because labour income is subject to Social Security taxes and income taxes, whereas capital income is only subject to income tax. New Zealand has not chosen this path. This means New Zealand raises a larger fraction of income from capital income and corporate taxes than other countries, as shown in Table 2.

The second major difference between New Zealand's tax system and the tax systems of most OECD countries concerns the taxation of retirement savings. New Zealand taxes retirement savings in a different way than most OECD countries, and this means New Zealand relies on income taxes rather than expenditure taxes to a greater extent than other countries. A large number of OECD countries (including the US, UK, Germany, France, Japan, Canada but not Australia) use an EET scheme for retirement savings placed in a sanctioned savings account.⁵ This helps convert their income tax scheme into a generalised expenditure tax scheme. Until 1989 New Zealand also followed this practice. Since then, however, retirement savings have been taxed on a "Tax-Tax-Exempt" (TTE) income tax basis. This difference means the distortionary effects on saving and investment in New Zealand are likely to be different than in other OECD countries. In particular, as argued below, it may have large consequences for the way the tax system affects the market for owner-occupied residential property in New Zealand. It is also relevant for a second issue: New Zealand has more punitive taxes on interest income than most OECD countries as it taxes the inflation component of interest income. In contrast, if people interest-earning securities in a retirement savings account subject to an EET taxation regime, real interest earnings are taxed at the appropriate statutory rate.

It is sometimes argued that countries that tax some forms of retirement savings on an EET basis subsidise retirement savings. The language behind this contention is not useful. Income can be taxed when it is earned (income taxes) or income can be taxed when it is spent (expenditure taxes). To say that retirement savings in sanctioned accounts are "subsidised" if they are taxed on an expenditure basis while some other forms of income are taxed on an income basis is to assume that income taxes should be the default type of taxes. There is simply no reason to make this argument. Most economists argue income taxes distort economic behaviour more than expenditure taxes. If a country prefers to tax sanctioned retirement savings accounts on an expenditure basis and impose more distortionary income taxes on other forms of assets, it is as equally valid to say that the country excessively taxes other assets as it is to say that the country subsidises retirement savings.

⁵ Austria, Belgium, Canada, Finland, France, Germany, Greece, Iceland, Ireland, Japan, Korea, Mexico, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Spain, Switzerland, Turkey, the United Kingdom, and the United States all have a version of an EET retirement income saving scheme. Hungary has an alternative form of an expenditure tax, a TEE scheme, which. Denmark, Italy, and Sweden have ETT schemes. New Zealand and Australia are the obvious outliers, and Australia provides some 'concessions' to the taxation of retirement income saving by having low taxes on employee contributions and low taxes on interest and dividend income. See Whitehouse (1999) or Yoo and de Serres (2004).

3. New Zealand's uneven taxation of capital income

The differences between New Zealand's tax system and the tax systems of most other OECD countries might not matter so much if New Zealand adopted a consistent approach to the taxation of capital income. Unfortunately it does not. Different forms of capital income are taxed at very different rates in New Zealand.

- Owner-occupied housing, New Zealand's biggest asset class, is taxed very lightly.
- Real interest income earnings from debt securities are taxed at very high rates when there is inflation, as the inflation component of interest income is taxed.
- Investors who finance investments with debt receive a subsidy when there is inflation as they can deduct the inflation component of interest income.
- The absence of a capital gains tax means that assets generating cash returns at short horizons are taxed more heavily than assets generating cash returns at long horizons.

When the income from different classes of assets are taxed at different rates, there is an incentive to invest in assets that have low pre-tax returns but high after-tax returns, and a disincentive to invest in assets that have high pre-tax returns but low after-tax returns. This can result in a misallocation of capital and lead to low productivity and low incomes.

Feldstein (1977) pointed out a second problem that can arise if property is taxed at lower rates than other assets, as is the case in New Zealand. He demonstrated that the price of property is likely to be artificially raised when property income is taxed at lower rates than the income from other assets. This induces an intergenerational transfer to the first generation of property owners and imposes large welfare costs on all subsequent generations who have to pay higher rents or higher prices to purchase property. Because these costs operate through the prices people face in the housing market, rather than the taxes they pay, these costs have often been often ignored in welfare analyses of the tax system. However, they should not be ignored as they are direct consequences of the way property income is taxed relative to the way income from other assets is taxed.

Various authors have developed theoretical models to flesh out Feldstein's results including Calvo, Kotlikoff and Rodriguez (1979), Fane (1984), Chamley and Wright (1987), Skinner (1996), Batina and Ihuri (2000), Gervais (2002), Petrucci (2006) and, in a New Zealand context, Coleman (2008, 2010, 2014). These papers all support Feldstein's argument – that if land is lightly taxed relative to other asset classes, prices are likely to be artificially high and this induces an intergenerational transfer that adversely affects young and future generations. Some of the adverse effects can be offset if the older generations bequeath their property to younger generations. Even in this case, however, there can be adverse welfare consequences as young households may be forced to delay homeownership or the purchase of a large house until they inherit – and some people will not inherit at all.

If the New Zealand Government wishes to tax capital income on an income basis, without artificially raising the price of property, it will need to do at least three things. First, it will need to raise the amount that income from owner-occupied property is taxed, most likely by taxing the imputed rent from property or by adopting property taxes as an alternative to taxing the imputed rent directly. This will go some way to raising the tax rate on income from

owner-occupied property to the appropriate statutory rate. Secondly, it should tax real capital gains, preferably on an accrual basis, to offset the way that an income tax system without capital gains taxes imposes different effective tax rates on investments which return cash income at different horizons (Samuelson 1964.)⁶ Thirdly, it should exempt the inflation component of interest income from tax, and it should only allow firms that borrow to invest to deduct real interest payments against their taxable income. Failure to make all three of these changes will continue to mean owner-occupied property and rental property are tax advantaged investment classes against relative to interest bearing securities. In turn, this means that New Zealand's tax system will continue to impose large cost on young and future generations by causing property prices to be artificially high (Coleman 2017).

As the Terms of Reference rule out increasing taxes on owner-occupied property, it seems unlikely that New Zealand will be able to enact a series of income tax reforms that eliminate the tax advantages received by the owners of owner-occupied property. This means it is unlikely that New Zealand will eliminate the costs the tax system imposes on young households by reforming the income tax system. Nonetheless, it would be possible to improve the situation by reducing the extent that investors in interest bearing securities have to pay excessively high tax rates tax on their real interest income when inflation rates are positive. This issue is considered at greater length below.

4. Does the tax system actually raise property prices?

The theoretical literature is nearly unanimous that when the income from property is taxed at differently than the income from other assets, these differences will be capitalised into property prices, unless the supply of property is perfectly elastic (which it is not). Unfortunately the extent that property prices are actually affected by taxes is much less clear. It has proven very difficult to isolate the effect of taxes from a myriad of other factors that affect property markets. This is not to say that the tax system does not affect property prices: it is merely to say the evidence is unclear.

There are exceptions to this rule. For example, there is increasingly strong evidence that exogenous variations in land taxes are capitalised in property prices (Palmon and Smith (1998), analysing property taxes in Texas; Hoj, Jorgensen and Schoe (2018), analysing property taxes in Denmark.) An increase in land taxes reduces the amount people are willing to pay for property to an extent that the incidence of the tax is nearly fully borne by the owners of the property at the time of the tax change. This means that even though subsequent owners have to pay higher taxes, they are compensated by paying lower prices for their property; and thus they are likely to be better off overall, to the extent that the high property taxes are used to reduce other taxes. Microeconomic evidence from these studies is fully consistent with the theoretical approach discussed above.

Is it possible to discern whether New Zealand's tax system has affected property prices? Here the evidence is less clear. Economic theory suggests that the distortionary effects of New Zealand's tax system on property prices should have increased substantially after 1989, after

⁶ Samuelson demonstrated that an accrual based capital gains tax was needed to offset the distortions introduced into investment markets when capital income is taxed on an income basis. In practice, to minimise compliance costs countries that have capital gains taxes apply the taxes on a realisation basis. It is assumed that if New Zealand adopted a capital gains tax it would be applied on a realisation basis.

New Zealand changed the taxation of retirement savings from an expenditure basis to an income basis without simultaneously changing the way owner occupied property was taxed (Coleman 2017). The size of the tax distortion gets large as real interest rates decrease, so the subsequent sharp decline in real interest rates should have led to significant increases in property prices. Property prices did increase, with the size of the increase accelerating as real interest rates declined, as the theory suggests. Indeed, since 1990 New Zealand has experienced the largest real increase in property prices of any of the twenty-three countries for which data is compiled by the International House Price Database produced by the Federal Reserve Bank of Dallas.⁷ This evidence is clearly consistent with the theoretical prediction that an increase in the extent that a tax system favours housing should increase property prices. Yet it is not possible to prove that this large increase in house prices was caused by the changes in the tax system rather than other factors. Quite simply, too many other factors have changed in the New Zealand economy since 1990 to be able to untangle the separate effects of each factor. There is, of course, no reason to doubt that the changes in the tax system were a factor behind this extraordinary increase in property prices. Nonetheless, it is not possible to accurately estimate the extent that the taxes were behind the increase in property prices, and thus it is difficult to assess the size of the welfare costs of the income from housing at lower rates than the income from other assets.

The large increase in house prices means that residential property is now the largest class of assets in New Zealand. According to the Reserve Bank of New Zealand's household balance statistics, the value of housing and land in March 2017 totalled \$1031 billion, of which \$771 billion was owner-occupied property and \$260 billion was rental property. At the same time, the net value of household assets was \$1440 billion – so property was 73 percent of net household assets.⁸

5. Taxation of the inflation component of interest rates.

The Terms of Reference rule out taxing the imputed rent of owner-occupied housing, imposing capital gains on owner-occupied housing, or imposing land taxes on owner-occupied housing. These exemptions mean it is not possible to tax the income from owner-occupied housing at the same rates as the income from other assets, if capital incomes are taxed on an income basis. However, it is still possible to reduce the difference in the tax rates on interest-earnings securities and the tax rates on owner-occupied housing and on rental property by changing the way interest-earnings securities are taxed.

For nearly a century, it has been understood that the inflation component of nominal interest income is not income (Viner 1923). It is universally understood by economists that if the inflation rate is positive and you tax the inflation component of interest income, the effective

⁷ House prices increased by 234 percent in inflation adjusted terms between 1990 and 2017, 6% more than the second highest country (Ireland) and 19 percent more than the third highest country, Australia.

⁸ The value of housing can be compared to other aggregates. In the March 2016, the latest year for which data are available, the value of property was \$908 billion, or 69 percent of the value of net household wealth, \$1311 billion. This includes the value of foreign assets owned by New Zealanders. The value of government assets was an additional \$225 billion making the total value of assets owned by New Zealand entities (foreign and domestic) equal to \$1537 billion. The value of assets located in New Zealand owned by New Zealand and foreign entities (including the New Zealand government) was \$1696 billion. (The difference between \$1537 billion and \$1696 billion is the net foreign asset position.) Residential property is still the largest asset class when other, non-household, assets are taken into account.

tax rate on real interest income is increased above the statutory rate. Similarly, if you allow firms to deduct the inflation component of interest income from their taxable income, they are paying less tax than they ought. Even at low inflation rates, these distortions are substantial. In 2017, for instance, residential landlords borrowed \$70 billion. Even if the inflation rate is as low as 1 percent, this means residential landlords can deduct \$700 million of real principal repayments from their taxable income, a subsidy worth over \$200 million per year. New Zealand households lend in excess of \$150 billion. When the inflation rate is 1 percent, lenders are expected to pay tax on \$1.5 billion more than they ought. Many people who invest in interest-earning securities are elderly, risk averse, or unsophisticated investors. For some reason the New Zealand Government believes these investors should pay more tax than any other class of investors in New Zealand. It is a strange country that taxes the simplest, most easily understood, and the most easily purchased financial security at the highest rates. It suggests the Government has little interest in equity, its protestations notwithstanding.

The inequity of taxing the inflation component of interest income does not stop there. When the income from interest earning securities is taxed more heavily than the income from property assets, there is an incentive for landlords and owner-occupiers to bid up the price of land. When the supply of land is inelastic, this causes the price of land to be bid up to artificially high levels, causing an intergeneration transfer that lowers the welfare of young and future cohorts. Coleman (2008) used a sophisticated model to analyse the welfare implications of taxing the inflation component of interest income in the New Zealand context and suggested it would raise house prices, reduce home-ownership rates, and lower the welfare of most young households when the supply of housing was relatively inelastic.

So why does the Government continue to excessively tax the incomes of widows and unsophisticated investors, and subsidise landlords who borrow to invest? Is it because they believe that it is appropriate to exploit widows and unsophisticated investors, simply because they are easily exploited? Is it because the efficiency costs of other means of raising taxes are so high that they believe they must ignore the equity consequences of their choices? Do they like subsidising landlords and driving up the price of housing? The standard argument given by tax authorities is that it is too difficult to exempt the inflation component of interest payments and receipts from tax, and that if it were not done properly the distortions of doing a half-hearted job would be so bad that the cure would be worse than the disease. The tax authorities could be correct. The problem is that they have never explained why it is so exceedingly difficult to only tax the real component of interest income that the country has to put up with a egregious set of distortions. Based on the experiences of Israel, Elkins (2007) suggests that it is not in fact that difficult.

It is possible that the real reason for taxing nominal rather than real interest is simply bureaucratic inertia. Tax departments have a long record of stating it is not possible to introduce one particular tax or another – and then being proved wrong. A famous example is the US Inland Revenue Service opposition to collecting income taxes by withholding the money from firms. As Milton Friedman, the proponent of withholding taxes, later said

“One of the major opponents of the idea was the IRS. Because every organization knows that the only way you can do anything is the way they've always been doing it. This was something new, and they

kept telling us how impossible it was. It was a very interesting and very challenging intellectual task. I played a significant role, no question about it, in introducing withholding.” (Doherty, 1995)

Or to quote Sir Josiah Stamp, the famous British tax investor and tax expert

“The first argument that is brought against every new proposal departing from conventional lines is nearly always that it is ‘impracticable’,” (Stamp 1921, p95.)

The Inland Revenue Department and the New Zealand Treasury should be asked to explain exactly why it is so difficult to tax the real interest income rather than nominal interest income, and what the consequences would be if they made an effort that was only a little less than perfect. The model developed by Coleman (2008) suggests that there could be significant welfare improvements from taxing real interest rather than nominal interest.

It should be noted that the issue is more acute in New Zealand than in countries which offer their citizen retirement income schemes that are taxed on an EET basis. This is because the problem does not exist when income from interest-earning securities is taxed on an EET basis – an option that savers in most countries have, but which is denied to New Zealand savers.

6. The Taxation of Retirement Income Accounts

There is an alternative way to reduce the extent that different types of capital income are taxed at different rates. New Zealand could tax funds placed in dedicated retirement income schemes such as KiwiSaver on an expenditure basis rather than an income basis, as it did prior to 1989. What is the key distinction? Income can either be taxed when it is earned (an income tax), or taxed when it is spent (an expenditure tax). Since Fisher (1937) and Kaldor (1955), it has been understood that it is possible to have direct progressive expenditure taxes by taxing income adjusted for the net purchase and sale of assets. Direct expenditure taxes are typically implemented by applying a progressive tax to a person’s income adjusted for the net purchase and sale of certain assets, on the basis that this total is close to a person’s expenditure on consumption goods and services. For example, if someone earned \$100,000 and saved \$15,000 in a retirement account, they would pay tax on \$85,000.

Capital income can be classified into three classes and if all three classes are taxed consistently on an income or expenditure basis the tax system will not distort investment choices. In practice, few tax systems are non-distortionary. Most OECD countries adopt an expenditure tax system but only provide expenditure tax treatment to two of these classes, for example. The first class is earnings that are placed in a government-sanctioned retirement saving fund. In the vast majority of OECD countries, these are taxed on an expenditure basis by adopting an ‘Exempt-Exempt-Taxed’ (EET) rule. Income that is placed in a fund is not taxed when it is earned; interest and dividend earnings and any capital gains are not taxed when they accumulate in the fund; but when assets are withdrawn from the fund upon retirement, they are taxed. The second class is owner-occupied housing. In this case, a prepayment or ‘Taxed-Exempt-Exempt’ (TEE) expenditure tax rule is adopted: the house is purchased or paid off from income that is taxed when it is earned, but no tax is paid on the imputed rent produced by the property or any capital gain that accrues to the owner. The third class is income from any other investments, including leased residential housing. This is taxed on an income tax or ‘Taxed-Taxed-Exempt’ (TTE) basis: income is taxed when it is first earned; it is taxed as it accumulates; but it is not taxed when it is withdrawn and spent. Overall this tax regime distorts against the ‘other’ investment class, but because it provides people with the opportunity to hold

many classes of investments in sanctioned retirement income funds on an equivalent basis as owner-occupied housing, it provides few incentives to over-invest in housing.

If a country wishes to tax capital income on a neutral income-tax basis, it needs to do three things: tax on retirement income accounts on a “Taxed-Taxed-Exempt” basis; tax all capital gains (including those from owner-occupied housing) on an accrual basis; and tax the imputed rent from owner-occupied housing. New Zealand attempted to move to a non-distortionary income tax system in 1989. However, only the first of the three changes were implemented. As a result, rather than eliminating the distortions associated with the standard OECD approach, it created a new set of distortions. In particular, owner-occupied housing was taxed at much lower rates than other assets, and leased residential housing was taxed advantageously relative to debt instruments.

Coleman (2017) adopted a ‘relative institutions’ approach to analyse the consequences of the 1989 tax change. He demonstrated that since 1989, the favourable tax environment for owner-occupied housing relative to other assets has provided incentives for households to live in larger houses than they otherwise would, and to bid up the price of land in locations that are conveniently located to desirable amenities. The favourable tax environment for investments in leased residential housing provides incentives for rent/price ratios to fall, either through a reduction in rents (if the supply of residential property is elastic) or through higher house prices (if the supply of residential property is inelastic.) Home ownership rates should fall. It is plausible that since 1989 the changes in the tax regime have provided incentives for people to increase the size of their houses by 25%, and to pay twice as much for land in areas where there is significant transport congestion.

New Zealand’s property markets have changed in a manner consistent with these incentives since 1989. The average size of newly constructed houses has increased faster than in Australia or the United States and is amongst the largest in the world. Property prices have soared, rent/price ratios have declined sharply, and the number of private landlords has increased by more than 300 percent. However, it is not possible to definitively attribute these changes to the tax changes, as other factors that affect housing markets such as the international decline in interest rates and rising incomes have also changed since 1989. The paper attempts regression analysis to unpick the importance of the various affects, but concludes it is not possible to estimate the role of the tax changes. The evidence is consistent with the conjecture that the tax changes are part of the cause of the change, but cannot prove it.

What are the distributional consequences of the 1989 tax change? When housing is taxed on an expenditure basis but other assets are taxed on an income basis, housing is taxed on an advantaged basis. Standard theory suggests this should lead to higher land prices and a boon for the first land owning generation. But the benefits accruing to the land-owners of one generation do not come for free. They are offset by large costs that are imposed on all generations born after the tax change was introduced. They generate a higher net international debt position than would otherwise occur. And they are regressive, falling disproportionately on first home owners with low equity and renters.

Since 1989, several investigations of New Zealand’s tax system have concluded that it favours owners of housing assets by not taxing imputed rent or the capital gains on owner-occupied housing. These investigations have typically concluded it is not politically possible to introduce these taxes. This may be the case – few countries have these taxes. But it should not be

concluded that successive generations of New Zealanders have to suffer the distortionary effects of a tax system that is regressive, that places upward pressure on house prices, that encourages excessively large houses, and which imposes large costs on all cohorts than the first generation of land-owners. The root cause of the problem is taxing housing on an expenditure basis while other assets are taxed on an income basis. New Zealand could correct this distortion by taxing other assets on an expenditure basis, the solution adopted by most other countries.

Why did New Zealand change its tax system in 1989? The documents from era suggest that the change would (i) raise large amounts of revenue for the government and (ii) reduce inequality, as the tax exemptions are larger for high income people. Both of these arguments are likely to have been significantly overstated. The revenue argument ignores the value of the taxes that the government receives when the funds in the sanctioned retirement income accounts are withdrawn. The size of these assets can be considerable – Isaksen et al (2014) estimated that the implicit value of these tax assets exceeded 50 percent of GDP in Denmark and the Netherlands in 2010. The inequality argument ignores the inequality effects that occur when property prices increase because the income from property is taxed less than the income from other assets.

The Tax Working Group should commission independent research to investigate the merits of adopting an “Exempt-Exempt-Tax” regime for retirement saving schemes such as KiwiSaver. It is now nearly thirty years since New Zealand adopted a way of taxing retirement savings that is different from most countries in the world, yet it appears that neither the New Zealand Treasury nor the Inland Revenue Department have developed technical models capable of evaluating the relative merits of these tax regimes. This is disappointing, given the importance of the issue. For more than forty years economic theory has suggested that the response of property prices to the tax system is a key determinant of the welfare effects of the tax system, yet this issue has been largely ignored in the advice the Treasury and the Inland Revenue Department have provided to the Government. .

In the document “The Future of Tax” the Tax Working Group appears to consider the arguments in favour of an EET tax system for retirement income but dismisses them on the basis “*This approach ensures that economic distortions to save in a retirement account instead of through other savings are minimised,*” and “*If New Zealand were to switch to a system where income earned on the investment was not taxed, the fiscal cost would be significant.*” (p26). Both of these justifications are flawed. The former ignores the difference between the taxation of retirement savings and owner-occupied housing, New Zealand’s largest asset class, in the current system. The latter appears to ignore the present value of taxes to be paid in the future (when funds are withdrawn) if New Zealand were to adopt an EET regime for retirement savings. The Tax Working Group has not provided proper justification for either of these statements, and neither seems to be based on formal economic modelling. Given New Zealand’s unusual policy stance, and the potential importance of this issue, the Tax Working Group should be asked to clearly justify why New Zealand’s decision *not* to tax savings placed in sanctioned accounts on an EET basis is appropriate.

7. Capital Gains Taxes

Standard tax theory suggests an income tax regime that does not have an accruals-based capital gains tax generates financial incentives that should distort investment patterns (Samuelson 1964). A large number of people also believe there are equity grounds for taxing capital gains – and many countries have a capital gains tax, although normally on a realisation rather than accruals basis. However capital gains taxes are administratively difficult, and almost never applied on an accruals basis.

Coleman (2010) developed a model to analyse the possible effect of introducing a capital gains tax in New Zealand when the inflation rate is positive but relatively modest. At the heart of the model is a dynamic, forward looking maximization problem in which agents make choices about the type of housing in which they live, how much they consume and save, and how much they borrow and lend. These agents, who differ by income, age, and wealth, have choices over whether to rent or buy, to live in large or small houses, or to share housing with other people. They face realistic bank imposed constraints on the amount they can borrow and the repayment schedule they face if they purchase a house, and they face a tax system that closely reflects that prevailing in New Zealand. Particular attention is paid to the various ways that taxes on housing income differ according to whether one is an owner-occupier of housing or a landlord. House prices and rents are determined endogenously in the model, and reflect the interaction of decisions by households, landlords, and a construction sector to supply or demand housing. The model calculates dynamic steady-state paths for house prices and rents, and a set of equilibrium housing supply and demand patterns that depend on fundamental parameters such as interest rates, construction sector supply elasticities, the inflation rate, and the particulars of the tax system. The paper examines how these prices and demand patterns change as taxes and the inflation rate change, and uses these results to evaluate the consequences of different possible tax systems.

The paper examines the effects of four variants of a capital gains tax regime. While all four are accruals based, they differ according to whether owner-occupied housing is taxed or exempt, and whether capital gains are treated as income and taxed at households' marginal income tax rates, or whether capital gains are simply taxed at a flat rate. Many of the results of the four variants are similar, although there are important differences, particularly in the amount of revenue that is raised by the tax. In general, when the inflation rate is moderate, capital gains taxes lead to an increase in rents, an increase in the home-ownership rate, a small reduction in number of large houses in the economy, and an increase in the net foreign asset position. It is possible that homeownership rates could rise by several percent if a capital gains tax were introduced. However, the effects on economic welfare are ambiguous, for many low-income households suffer a welfare loss from the increase in rents.

Two other results seem general. First, a capital gains tax that exempted owner-occupied housing would raise little revenue, whereas one that applied to all households would raise enough to allow a sizeable reduction in the GST rate. For this reason, low income households that rent are better off when a capital gains tax does not have exemptions. Secondly, the increase in rents and the increase in home-ownership rates will be larger if the capital gains tax rates on owner-occupied residential property are lower than those on leased residential

property, either because the former is specifically exempted from capital gains tax or because landlords typically have higher marginal tax rates than households who typically rent.

Beyond these general outcomes, the paper demonstrates that the welfare implications of a capital gains tax depend a lot on the detailed structure of the economy. It matters whether the supply of housing is elastic or inelastic. It matters whether construction costs are high or low. It matters whether people prefer to own rather than rent. It matters whether young people respond to rent increases by sharing with more people, or by deciding to buy a house themselves. Indeed, some of these factors matter so much that they determine whether a capital gains tax is largely beneficial or harmful.

The paper ignored many of the practical and political issues that would have to be solved if capital gains taxes were to be introduced. While the simulations of the model suggest a capital gains tax that includes owner-occupied housing has better welfare properties than a capital gains tax that does not, the political and practical difficulties of introducing an accruals based capital gains tax should not be underestimated. Applying a capital gains tax only to realised gains has its own problems, notably the incentives it generates to remain in unsuitable houses or living arrangements in order to avoid the tax.

The simulations also suggest that a flat rate property tax has many of the same properties as an accrual based capital gains tax with no exemptions, and if a capital gains tax is desired but not considered practical this may be a suitable alternative. The similarity between these two taxes will be greater if nominal property price appreciation is dominated by inflation rather than real factors, and if the inflation rate is relatively stable.

Most OECD countries that have capital gains taxes exempt owner-occupied housing from the tax and only tax leased residential property when a sale is realised. This is a much more straightforward tax to implement than an accruals based tax, but still removes some of the housing market distortions that arise from taxing differently that inflation component of interest earnings and the inflation component of capital gains. Nonetheless, the simulations suggest the effects of this type of capital gains tax could be largely replicated by exempting the inflation component of interest income from tax, a strategy that may be easier to implement in practice. Such a strategy would have the added advantage that real after-tax interest rates and returns to capital are unaffected by the inflation rate.

In short, since the welfare consequences of a capital gains tax applied to all households are similar to the welfare consequences of a flat rate property tax, and since the welfare consequences of a capital gains tax that exempts owner-occupied housing are similar to the welfare consequences of a tax system that exempts the inflation component of interest income from income tax, it may be easier to introduce these alternative tax regimes than a capital gains tax. Since the Terms of Reference rule out the introduction of a capital gains tax on owner-occupied property, the Tax Working Group should strongly consider exempting the inflation component of interest income from tax as an easier strategy than a flawed capital gains tax.

8. Land Taxes

Land taxes have an honourable history in New Zealand, although they are currently applied by local governments rather than central governments. In 2013, land and property taxes raised \$4.6 billion in revenue, of which 70 percent came from residential property and the rest came from commercial property. These taxes are levied on owner-occupied and rental property. Land taxes have been widely used in the past in other countries. Land taxes were the dominant source of government income in the United States from the 1840s to the 1930s (Wallis 2000.)

Land taxes can be approached from two different perspectives. First, they can be considered an alternative tax to income tax. Their main advantages as a separate tax source is that they distort economic behaviour little, they can raise large amounts of revenue, and their incidence largely falls on people who own land when the tax is introduced, people who are typically relatively wealthy (Oates and Schwab 2009). From an optimal tax perspective, this makes them nearly perfect taxes – so much so that there are those who perversely argue that they are too good to use, for governments will never be able to resist the temptation to raise them to ever higher rates. Their main disadvantage is that they can be difficult to sustain politically. This is because the majority of voters own land in most societies, and they realise that they could engineer an intergenerational transfer from younger generations to themselves by reducing land taxes, for this would increase the price of land. Land taxes are most successful where governments have few alternative means of raising revenue other than land taxes, for voters are less likely to cut taxes if it means cutting necessary services. In New Zealand land taxes and property taxes imposed by local governments have been easy to sustain for this reason.

The second approach is to consider a land tax as an indirect means for collecting income taxes on property assets that are otherwise subject to low levels of income tax. New Zealand does not impose income taxes on the income from owner-occupied property; land taxes can be considered an indirect means of taxing this income by means of a tax on the underlying asset, not the income stream. If a land tax is viewed in this manner (rather than as an exceptionally efficient means of raising revenue), the appropriate size of a land tax depends on the extent that income from property assets is under-taxed. In 2013, for instance, when local taxes on residential property raised approximately \$3.2 billion dollars, the value of housing services in the economy was about \$29 billion. This means the average tax rate on housing income was about 11 percent, a value that can be considered low relative to the statutory income tax rates. These figures suggest land taxes should be increased if they are to be used as a proxy means for taxing the services provided by land – but in this case they should be raised on all property, owner-occupied and rental property.

The Terms of Reference rule out applying additional land taxes to owner-occupied property. This rather negates the purpose of using land taxes. Coleman and Grimes (2010) used the Coleman (2008) model to explore the possible effects of different types of land taxes in New Zealand. They did not concentrate on the case that a land tax would only be applied to rental property, for the model suggested it would lead to a significant reduction in the size of the

rental sector and little revenue would be raised. (The rental sector would shrink because it would become relatively cheaper to purchase owner-occupied property than to rent property for all who households that could raise a sufficiently large deposit.) In their examination of the effects of land taxes applied to all property, they showed the distributional consequences would depend on the elasticity of the supply of property. When the supply of property is inelastic, increases in land taxes would tend to lower property prices, reduce inequality, cause an intergeneration transfer from the first generation of property owners to all subsequent generations, and, in the long run, reduce the net foreign debt position of the economy. The main downside is the willingness of society to make such an intergenerational transfer. This is a political issue, but the willingness may be quite high given that the current tax system artificially inflates property prices and a land tax would merely be a means of reducing the extent that the current tax system imposes high costs on young people.

If the Terms of Reference prevent the Tax Working Group from considering land taxes applied to owner-occupied property, the Tax Working Group should include statements about the consequences of this exemption.

Rangel (2005) provides a different perspective on the use of land taxes. He explored the provision of intergenerational assets that are developed in one period and then passed on to another generation. He argues that while a middle-aged generation has an incentive to under-provide tax-financed intergenerational assets such as infrastructure or environmental assets that are valued by future generations, their decisions affect the price of land. When land taxes are used to fund intergenerational assets or reduce debt, they correct the disincentive to under-provide intergenerational assets and issue too much debt. This is because if a young generation has to increase taxes in the future to finance assets that should have previously provided, and it raises land taxes to generate the funds, it will automatically reduce the price the currently middle-aged generation will receive when it sells its land. Land taxes are thus the perfect type of tax to fund intergenerational assets as they prevent the under-provision of these assets. Rangel argues that if constitutional means could be used to restrict future generations to use land taxes to raise revenues to fund intergenerational assets, it would provide the correct incentives to the current generation to provide adequate quantities of intergenerational assets.

If it is not yet clear, my personal preference would be to increase land taxes as an alternative to capital gains taxes, but only if the taxes are applied to all residential property. It would not be necessary to apply land taxes to non-residential property, so long as there were a suitable way of defining what was and was not residential property. The revenue from land taxes would be useful, and these taxes would correct the way the current tax system artificially raises the price of land and thus reduce inequality. Ideally part of tax revenue could be used to make contributions to the New Zealand Superannuation Fund. This would prevent the steep increase in future tax rates that will be necessary to fund future superannuation payments.

9. Miscellaneous other issues.

This submission argues that New Zealand's tax system distorts the way New Zealanders invest in different types of capital assets, and that these distortions are likely to raise property prices and impose large intergeneration costs on young and future generations. It points out that New Zealand has adopted a very different tax regime than most other OECD countries, resulting in particularly distortionary policies towards owner-occupied housing as these are systematically taxed less than other assets. New Zealand also has relatively high taxes on capital incomes derived from business, as the government attempts to tax capital income and labour incomes equally (with the notable exceptions that it imposes very light taxes on incomes derived from capital gains and owner-occupied housing). It has also argued that there is very little theoretical justification for New Zealand's options. There are not particularly good reasons to tax capital incomes at the same rate as labour incomes, and most countries do not, preferring to tax labour incomes at higher rates than capital incomes. Nor are there good theoretical reasons to prefer an income basis for taxing income than an expenditure basis – and again, most other countries have adopted a partial expenditure basis because of the way they tax retirement incomes.

The document "The Future of Tax" has very little discussion of the possible advantages of adopting much higher Social Security taxes applied to labour incomes as a means of reducing the taxes on capital incomes. This omission seems strange since that there are few good reasons to tax labour incomes and capital incomes at the same rates and few countries actually attempt to do this. By lowering the wedge between the tax on owner-occupied housing and the tax on other capital income, a social security tax could generate significant welfare benefits. Personally I don't know if this would be the case – but the wider theoretical literature strongly suggests that such an outcome is possible. It would be sad if the Tax Working Group did not seriously consider these options, and perhaps commission independent groups to model these possibilities. (There are excellent economists overseas who could do this using well established models.) It is unlikely that such proposals would meet with immediate approval, but by widening the debate to include them the Tax Working Group could possibly stimulate future reform.

Similarly, the document has very little about the Nordic Dual Tax model. This is another way of implementing a tax system in which capital and labour incomes are taxed at different rates. Since the late 1980s Norway, Denmark, Sweden and Finland have all adopted versions of the Nordic dual tax model which explicitly tax capital incomes at a lower rate than labour incomes in order to minimise the distortionary effects of the tax system. In the basic version of the model, capital incomes are taxed at a minimum flat rate and labour incomes are taxed at graduated rates that are at least as high. This tax system stems from a belief that for small open economies the distortionary effects of capital income taxes are much worse than the distortionary effects of labour income taxes. This model is garnering considerable praise. As Slemrod and Bakija (2017) write,

"If the VAT is the world's tax success story of the past half century, then a contender for the success story of the next fifty years is a Scandinavian innovation known as the dual income tax.The argument for the DIT, which is especially relevant for small open economies like the Scandinavian countries, is that a low capital income tax rate would lessen the incentive for domestic wealth owners to invest capital outside the country and to invest in hard to

measure types of capital that aren't include in the tax base.....it may come as a shock that the Nordic countries, with a reputation for highly progressive tax and other policies would abandon a graduated tax schedule for capital income. Apparently, they believe that a highly progressive tax on at least some forms of capital income is an inefficient means of redistributing income. compared to a progressive labour income tax."

These four countries are all considered progressive, all have much lower labour inequality than New Zealand - and yet all have decided to tax labour incomes at higher rates than capital incomes. Surely it is worthwhile signalling that this is a tax philosophy that New Zealand could contemplate to see if it might be something that could be adopted as a means of improving economic efficiency as well as equity.

Other issues received scant attention in the document "The Future of Tax." Why shouldn't New Zealand consider a Hall-Rabushka Flat tax or a Bradford X-tax. These ideas have a sound theoretical basis and are applauded by many of the worlds leading tax experts. (See, for example, Auerbach (2008) or Slemrod and Bakija (2017) and the references therein.) Once again, it is unlikely that they could be introduced overnight. But if they were discussed, people would get used to the ideas and may be prepared to consider them in the future.

There are other long term possibilities for reform. If New Zealand wishes to treat capital income differently to labour income, but does not want to introduce social security taxes or a Nordic Dual Tax System, it could consider introducing a compulsory retirement saving scheme. Surprisingly, because I doubt the Terms of Reference were drawn with the view to adopting a compulsory savings scheme, a compulsory savings scheme is probably the reform option that best meets the Terms of Reference. A compulsory saving scheme is not a tax scheme, as funds placed in the scheme belong to the depositor or his or her estate, not the government. In the long run, income tax rates could be reduced, lowering the distortionary effects of taxes on labour and capital incomes. Coleman (2014c) discusses many of the efficiency and equity consequences of one particular compulsory saving scheme that was designed with the aim of reducing the size of New Zealand Superannuation by partially replacing government superannuation payments with money withdrawn from individual retirement funds. Based on a comprehensive review of the international literature, he argues that a scheme could be designed to meet most equity objectives, for instance by providing low income people with "top-ups". Such schemes are likely to reduce long term wealth inequality by increasing the bequeathable wealth of low income people (Gokhale et al 2001.) The scheme could be grandfathered in to ease transition issues. The particular details of the scheme do not matter, but the possibility of fundamentally altering the way people are taxed and provided with social security could be revolutionary for New Zealand. International practice suggests these ideas can work – for example, it is worth noting that compulsory savings schemes for health care have been successfully operating in Singapore for some time.

Finally, the Tax Working Group should search for ways to make New Zealand's tax system more amenable to change, to ease the way that future generations can choose a set of taxes that suits *their* needs, not the needs of their parents or grandparents. The basic problem is that New Zealand currently finances a large fraction of its government expenditures on a pay-as-you-go basis out of contemporary taxes. In general, pay-as-you-go funded programmes that provide resources to older people result in intergenerational transfers from young people to older people, while pay-as-you-go funded programmes that provide resources to young

people result in intergenerational transfers from old people to young people. Since there is no inherent reasons why the transfers net to zero, changes to pay-as-you-go funded programmes typically result in net intergenerational transfers. These transfers make it difficult to change tax and expenditure programmes, even when change is desired, because the changes have different impacts on different cohorts. Pay-as-you-go funded expenditure programmes make tax and expenditure system inflexible.

The Tax Working Group should consider whether it is feasible to choose a set of taxes that allow some expenditure programmes to be funded on an intergenerationally neutral basis, to allow different cohorts to easily change these schemes as their preferences change. For example, the retirement incomes of successive young cohorts could be funded on a save-as-you-go basis so that different cohorts could pay different amounts of taxes and receive different sized retirement incomes, as they choose. Alternately, part of the education choices of young cohorts could be debt funded, with the debt collectively repaid in middle age through age and cohort specific taxes. In the future some cohorts may want to raise the taxes on high labour or capital incomes to purchase capital assets for an investment fund that protects them from rapid declines in the labour income share or a rapid increase in income inequality significantly deteriorates. Who knows what young people might want to do in the future? Some of these ideas are discussed in Banks and Diamond (2010). If New Zealand used intergenerationally-neutral age-specific or cohort-specific taxes to fund some classes of expenditure programmes, it would become easier to change the tax system in the future. This would reduce the likelihood that future generations of New Zealanders get trapped with a set of taxes that are no longer optimal but which are difficult to change – and, this, as the Tax Working Group should appreciate, is an outcome worth achieving.

Author's Disclaimer

The author currently holds part-time positions in the Economics Department at the University of Otago and the New Zealand Productivity Commission. He teaches courses on economic growth and public finance, including material on taxes and retirement income schemes. The views expressed in this submission are the author's alone and do not reflect the views of his employers.

The views expressed in the submission reflect work published in a series of papers about the New Zealand tax system written over the course of the last decade. These papers are based on the findings from large numerically-solved heterogenous-agent over-lapping generations models of the New Zealand economy that were designed specifically to consider how New Zealand's tax system affects welfare outcomes when the endogenous effect of the tax system on property prices are taken into account. As far as I know, these models are the only models of their type in New Zealand. The models include a realistic depiction of many aspects of New Zealand's tax system, a realistic description of the borrowing constraints facing people wishing to purchase property, a housing ladder describing how people can rent houses or purchase different sized houses, a property rental sector, and a supply function describing the construction of new properties. They model the decisions of people who differ in terms of their income, wealth and age who interact in a common property market. As models, the results depend on a large number of simplifying assumptions that will not be correct. This is the nature of modelling – it is a way of simplifying a problem in a manner that forces people

to be explicit about the assumptions they make and which allows the internally consistent, systematic evaluation of the logical consequences of these assumptions. In this case, the key purpose of the model is to trace how a large number of people might behave if property markets are competitive, property prices depend on decisions people make, and peoples' decisions depend on the budget constraints they face.

It is my belief that while models can be particularly useful because they generate internally consistent reasoning, the outcomes of the models depends on the modelling assumptions. If garbage goes in, garbage comes out, and internally consistent garbage is still garbage. While I am happy to accept that the model assumptions may be misleading and my conclusions may be irrelevant to the real world because of important factors that have been omitted, I also believe that arguments made without the help of models should be required to clearly identify the underlying assumptions on which they rest.

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