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Should capital income be taxed? And if so, how?

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Abstract

There are three main approaches to taxing capital income, being the income tax, the expenditure tax – which effectively exempts most capital income - or hybrids such as the rate of return allowance (RRA). This paper considers the theoretical arguments for taxing capital income less than fully, and finds that they need to be qualified. A strong case can be made for at least taxing that component of capital return which is above the risk-free rate (e.g., the bond rate). While the RRA favoured by the Mirrlees Committee does this, it is administratively cumbersome and the author proposes a new approach called the Z-tax which uses cash-flow tax principles to arrive at an end result which can be made similar to the RRA.

Keywords: Capital income taxation, expenditure tax, consumption tax, comprehensive income tax, rate of return allowance, Z-tax

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1. INTRODUCTION

There are two broad approaches to taxing capital income, based on two fundamental theories of the efficient taxation of savings. In their starkest form they are 'tax it' or 'don't tax it'. The Haig-Simons *comprehensive income tax* (CIT) used to be the touchstone for income tax reform but is now less widely accepted. The CIT taxes net accretions, which is annual consumption plus change in net assets. While easy to state, it is much more difficult to implement.

In Australia, the CIT saw its high water mark in the Asprey report (1975) and the Draft White Paper (Treasury 1985). The Henry Review (Treasury 2010a, 2010b, 2010c) accepted the CIT only in part and, in the area of superannuation savings, rejected it. The CIT ideally taxes all forms of capital income, including housing imputed income and accruing capital gains. In practice we have never really approached the CIT ideal because of political and practical problems in assessing the real flow of annual income from capital.

Of total net household assets of $8 trillion, 43 per cent[1] is tied up in owner occupied dwellings and pays no tax apart from local rates, despite the benefit of imputed rent and capital gains. Another 15 per cent is invested in real property which, after deductions for expenses such as interest costs, pays negative net tax; adding in investment property brings the real property total to 60 per cent or $5 trillion. Total property assets can be estimated to yield a real annual income of 6 per cent in capital gain, rent and imputed rent or almost $300 billion – 18 per cent of GDP - which is mostly untaxed.[2]

About $2 trillion or 25 per cent of household wealth is in superannuation[3] which also bears virtually no – or negative – tax overall.[4] Ten per cent is in personal use assets such as cars and boats which bear no tax. The only non-corporate assets which pay tax are bank accounts and other financial assets (amounting to 15 per cent of total assets) and some unincorporated business entities.

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[1] ABS 6554.0 - Household Wealth and Wealth Distribution, Australia, 2011–12

[2] This paper focuses on the income tax; land taxes, stamp duty and rates apply to some household assets. The ABS estimates that the return on the stock of residential dwellings accounts for 8 per cent of GDP - roughly $120 billion: cited in Kelly et al (2013, p. 3). This is broadly consistent with my estimate, which includes accruing capital gains of around 3-4 per cent per annum (real). Of course future capital gains may not match the historical experience.

[3] ASFA Superannuation Statistics 2015.

[4] Taxes on super of $9b are more than balanced by deductions to individuals. The overall result is that superannuation tax is concessional compared to a no tax (TEE) benchmark, by about $12 billion per annum (Treasury 2014).

This very concessional taxation of most forms of saving is consistent with an expenditure tax treatment. Hence the current system is actually a hybrid of income and expenditure tax treatments, but leaning heavily towards the latter.

Since the establishment of optimal tax theory, many tax theorists have been attracted to some form of *expenditure tax* (ET). The key feature of such taxes is that they leave capital income lightly taxed or untaxed. The US Presidents' Panel (2005), the Meade report (1978) and the Mirrlees Review (IFS 2011) by the Institute for Fiscal Studies in the UK were all attracted to this approach. Ultimately, the Mirrlees Review preferred a hybrid tax – the RRA - incorporating a deduction for the risk-free part of capital yield, as described later.

The yield to capital conceptually comprises the risk-free component plus the reward to risk or skill. In Australia such excess returns or 'economic rents' have typically comprised over two-thirds the total return on capital.[5] I argue in this paper that at the minimum this part of returns should be taxed.

There may also be substantial administrative advantages in levying an ET, as the ideal CIT is quite difficult to administer, particularly in the presence of inflation. An ET can be implemented using cash-flow principles which automatically adjust for inflation. Also, since large items such as superannuation and owner-occupied housing already receive variants on an ET treatment, it is politically easy to achieve tax neutrality by lightening the tax on other forms of capital. However that is not the preferred approach in this paper, which argues for a tax regime midway between an income and consumption tax outcome, and closer to the former.

I do not deal explicitly here with the 'dual income tax' approach used in some Scandinavian countries, whereby asset income is taxed at a flat rate and wage income on a progressive scale. This approach still uses as its base either the CIT or the RRA, so can best be viewed through the prism of one of these headings.

Part 2 considers the current treatment of capital income, and compares our current revenue yield with that potential available under a theoretically pure CIT.

Part 3 looks at the capital income tax solutions proposed in the Henry Report.

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[5] The historic return to equities in Australia has been around 7 per cent in real terms, comprising an equity risk premium of 5-6 per cent and a risk-free component of 1-2 per cent. Housing real returns have been equally as high as equity returns.

Part 4 considers reasons that an expenditure tax treatment is favoured by many tax theorists, and includes a discussion of what part of capital income is taxed under an ET.

Part 5 considers the arguments for taxing capital income.

Part 6 looks at how a CIT might be made to work.

Part 7 looks at the main non-CIT options; specifically part 7.1 looks at the RRA and its corporate tax analogy, the allowance for corporate equity (ACE); part 7.2 looks at a possible cash-flow version of the RRA, which I call the Z-tax; and part 7.3 considers the ET (both indirect and direct).

Part 8 is the conclusion.

2. CURRENT TAX TREATMENT OF CAPITAL INCOME

Currently there is a number of ways in which capital income is taxed in Australia (Stewart et al 2015; Treasury 2015b). The most substantial assets of most Australians are owner-occupied housing (43%) and superannuation (25%), both of which effectively pay no (or negative) tax.

Owner-occupied housing is taxed using a *pre-paid ET*. This approach is also known as TEE: Tax contributions, Exempt earnings, Exempt final benefits. That is, tax is paid initially on the earnings which finance the purchase of a home but not on the stream of housing services (imputed rent) which flows thereafter. Nor is tax payable on capital gain.

Superannuation is taxed at three points – on contributions, on earnings and very lightly on payout – but the combined tax is less than under the expenditure tax ideal of EET (Exempt contributions, Exempt earnings, Tax final benefits. The EET is a cash-flow consumption (expenditure) tax treatment (here called CFCT). We do not have a measure of the superannuation tax expenditure on an EET basis, but we do have one on the TEE basis which should be broadly similar in net present value terms. That cost is $12 billion according to the Treasury's (2014) experimental estimates of superannuation tax concessions. The figure is derived fairly simply, by taking the TES[6] cost of concessional contributions and subtracting current revenue from fund investment earnings. Hence the net

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[6] Tax expenditure statement, Treasury 2014

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return on super savings is not less than the underlying yield on the assets those savings purchase (this is the touchstone of an expenditure tax).

Although investment in housing is taxed more harshly than owner occupied housing, the tax impact depends on the amount borrowed to finance the asset. If borrowings are high, no or almost no tax is paid (ET outcome); if they are not, the tax can approximate the CIT.

Gearing to purchase investment property is not inherently concessional. The reasons it yields tax advantages are two-fold. One is that deductions are given for full nominal interest costs, even though real (inflation adjusted) interest costs are less. The second is that gearing is used to acquire assets which yield capital gains, on which (a) tax is deferred to realisation and (b) a 50 per cent discount applies.

Gearing is also used to reduce assessable income from some share investments, making the effective real tax rate on geared investments very low (Figure 1).

Figure 1: Real effective tax rates on different assets
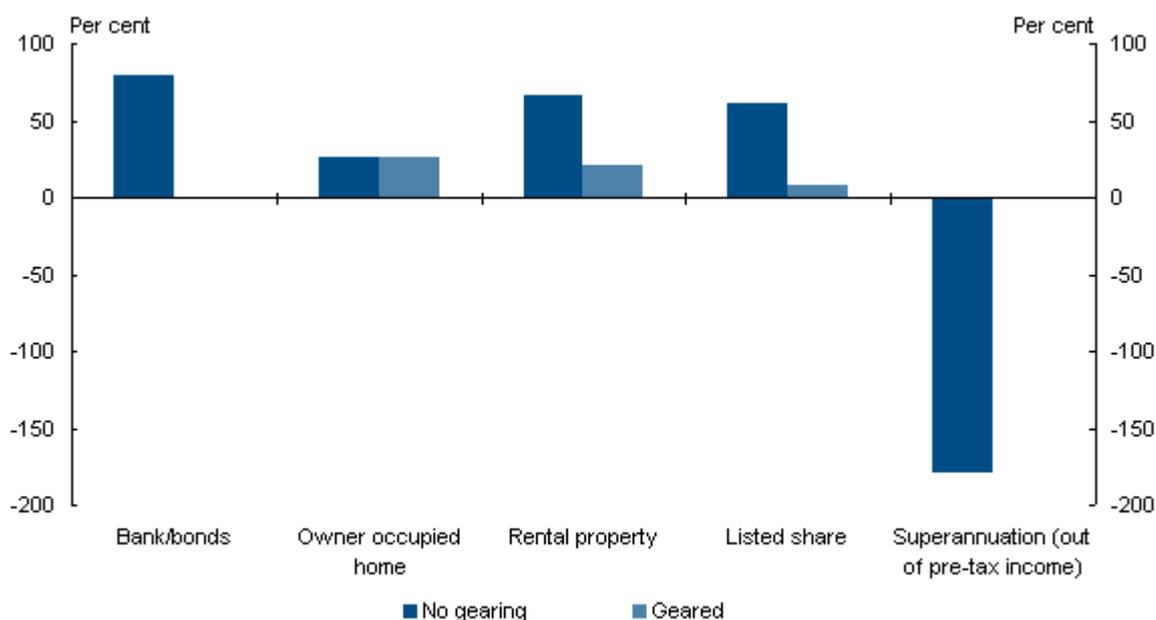
Source: Treasury (2008a Chart 8.4).

Assets yielding capital gains are taxed more lightly than assets yielding only income, due to the capital gains tax (CGT) discount of 50 per cent for individuals, and the deferral of taxation until realisation. The extent of this under-taxation depends on the inflation rate,

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and also rises with the duration the asset is held (Treasury 2010b, Chart A1-16). Taxing capital gains on realisation produces a lock-in effect as it can become very costly to sell the asset if large gains are implicit in its price. Deferral of tax until realisation can be extremely valuable to the taxpayer; in some instances tax is forgiven as assets are passed on at death with an uplifted valuation base (Ingles 2009b).

2.1 HOW MUCH CAPITAL INCOME IS TAXED UNDER THE INCOME TAX?

Total tax receipts of the Australian Government are over $405 billion, or 25 per cent of GDP (Budget 2015). Income tax is $195 billion of this, and company income tax and resource rent tax another $71 billion. It is likely that little or no net additional tax is paid on the distributed income of companies because of the operation of franking credits (these are refundable to low income investors including super funds). Some tax is paid on capital gains but in 2012-13 this was only $6 billion (ATO 2014).[7] Super funds pay some tax ($9 billion) but this is offset by the tax not paid by individuals – contributions being partly exempt.

Investment property declared net income of negative $8 billion in 2010-11, reflecting widespread use of negative gearing (it would be cheaper to simply exempt all earnings from this sector). However some investment property is subject to State land tax.[8] Gross interest pays slightly more than net capital gains (around $7 billion). Net partnership and trust distributions paid some $20 billion but some, perhaps a lot of this item, is really in lieu of wage. Overall, we can say that outside of company tax (part of which paid by foreign shareholders) capital pays very little net tax in Australia; probably less than $60 billion per annum. This compares with a theoretical potential tax yield of around $170 billion,[9] with an implied shortfall around $110 billion.

These figures suggest that we could simply abolish all taxes on capital income outside of company tax, tax superannuation as a wage tax (TEE) and still take in the revenue we now do. We do not however suggest this approach.

There are several reasons why there is so little tax on capital in our current income tax, relative to a CIT. The first that owner-occupied housing is a political untouchable, and such

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[7] Tax receipts are estimated by reference to income declared in the various categories in some cases.

[8] Land tax is not properly regarded as a tax on capital income, as it falls on economic rents and thus depresses the value of the land.

[9] This assumes a 6% real yield on a total asset of $8 billion and an average tax rate of 35%.

housing represents almost half of household assets. Superannuation is similarly difficult to tax on CIT principles. A related structural feature is that capital gains are not taxed as they accrue, but rather can be deferred indefinitely so long as they are not realised. In addition, there are still assets extant which benefit from the pre-1986 capital gains exclusion provision.

The second main reason capital pays little tax is that it is relatively easy through tax planning to make taxation of capital lighter. For example, under current rules, those with sufficient income, approaching retirement age, can tip large sums of money into superannuation[10] and, on turning 60, receive a retirement pension wholly tax free.[11] The underlying earnings in the fund are tax free in pension phase.[12] The Australian Labor Party (ALP) has announced a proposal to modify this. Another option is to split capital income among low tax members of the family using a trust structure. Negative gearing is another option, but there are many others available to sophisticated tax planners.

Such concerns recently led the Australia Institute to advocate a 'Buffet tax' for Australia, so that high income earners would pay a minimum tax rate of 35% (Grudnoff 2015a).The ALP 2015 conference passed a motion which urges a Labor government to give consideration to adopting the rule. "Mr Albanese cited a proposal by the Australia Institute think-tank to place a 35 per cent minimum income tax on people earning over $300,000 a year. This would raise $2.5 billion a year. Mr Albanese said such a rule was sorely needed in Australia. He cited statistics that showed 75 people who earned more than $1 million in 2011-12 paid no tax. They had a combined pre-tax income of $195 million, which was reduced to a total of just $82." [13] A Buffett rule would presumably be a form of alternative minimum tax such as is used in the US to backstop their personal income tax. I regard this as a second-best approach to tax reform, as it is in reality an ad-hoc 'patch' on a generally unsatisfactory system.

2.2 EFFECTIVE TAX RATES ON SAVING

Because the taxation of capital is so partial and incomplete, the effective tax rate on various forms of capital varies widely. The various effective tax rates on savings for different marginal rate taxpayers were illustrated in the Tax Discussion Paper as follows (Figure 2).

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[10] By utilising the caps for deductible and undeductible contributions, or the special rules for small business
[11] There is to be a new 15% tax on large accounts earning over $75,000 p.a. if labor policy is implemented.

[12] Nearly 500 self-managed superannuation fund have assets over $10 million each
[13] AFR Jul 24 2015 P Coorey 'Australian Labor Party backs Warren Buffett-inspired 35 per cent tax on the rich'

Figure 2: Nominal effective marginal tax rates by savings vehicles for an individual on 32.5 per cent marginal tax rate (plus 2 per cent Medicare levy)[14]
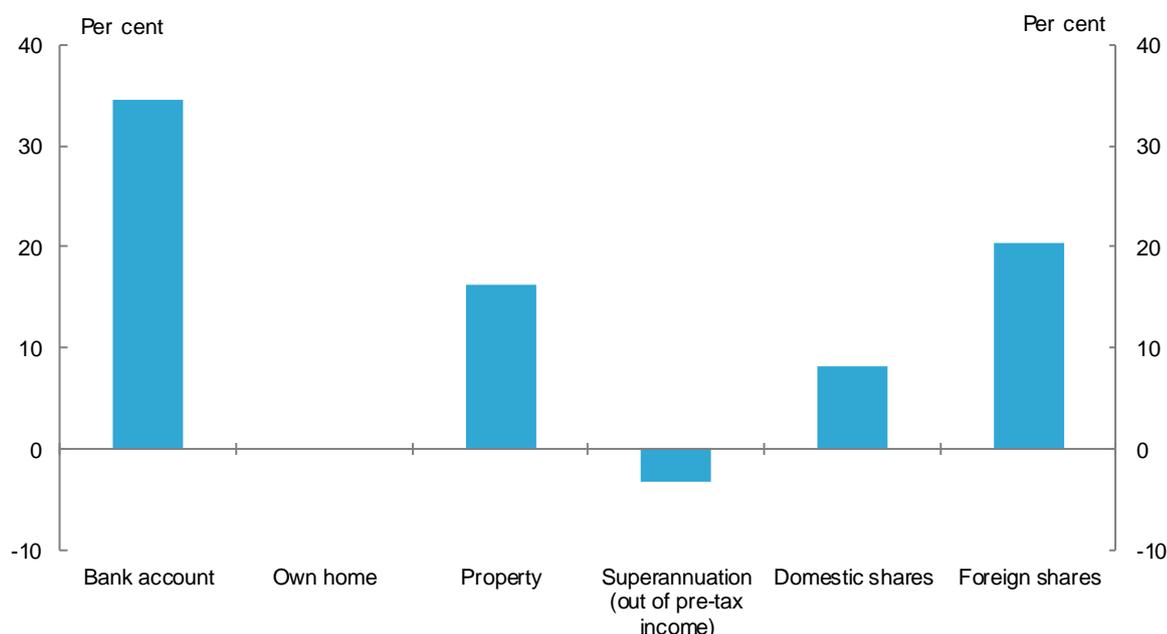
Assumptions: 6 per cent nominal return (except shares, which assumes 6 per cent after company tax); assets are all held for 25 years, and for rental property, 50 per cent of the return is attributable to capital gain and 50 per cent to rental income and superannuation contributions do not exceed the prescribed contribution caps. No assets have been negatively geared. The own home has a nominal effective marginal tax rate of zero, as it is purchased out of after-tax income, but subsequent returns on it are not taxed. Bank accounts, property and shares also use after-tax income but their returns are taxed depending on the vehicle. The nominal effective marginal tax rate for superannuation is negative because contributions to superannuation are made pre-tax and are only taxed at 15 per cent. For example, $100 of pre-tax labour income would result in a super contribution of $85 (after 15 per cent tax) but an individual would only receive $65.50 if they put it into other saving vehicles because of the application of their marginal tax rate (34.5 per cent in this case).

Source: Treasury 2015b Table 4.1

The Henry Review (which included a similar table) noted that a zero effective tax rate represents an expenditure tax treatment, while a rate equal to the statutory tax rate represents a real (i.e. indexed) income tax outcome. In only a few cases is this achieved; e.g. for some low income earners in the superannuation system. Bank accounts are very heavily taxed due to the effect of inflation; if the accounts yield 3.5 per cent and inflation is 2.5 per cent then the real yield is only 1 per cent but tax is paid on the whole of the nominal yield which at a 30 per cent rate reduces it below zero and the effective tax rate is over 100 per cent. This is an important point because it is mainly unsophisticated savers who are

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[14] While the chart looks at nominal effective marginal tax rates the same relativities would apply for real effective marginal tax rates, albeit with higher rates. Real effective tax rates incorporate the effects of inflation.

drawn to bank deposits; the smart money is all into gearing, capital gains and superannuation.

2.3 HOW MUCH REVENUE COULD BE GENERATED BY COMPREHENSIVE TAXATION OF ASSET INCOMES?

The CIT if implemented in its full theoretical form would apply to all forms of capital income whether imputed or otherwise. We earlier estimated that the revenue potential from properly taxing assets is likely to be in the order of $170 billion.

We subtract the cost of current Commonwealth taxes on domestic capital (mainly in the corporate sector) of around $60 billion leaving a theoretical net revenue gain of $110 billion per annum if all capital incomes could be fully taxed. This underlies how far the existing tax system departs from the CIT ideal. If capital could be taxed fully, this could finance a huge reduction in average income tax rates, with cuts in taxes and rises in social security payments being used to offset increased capital income taxes for most households. Because wealth is more unequally distributed than income, it would be very redistributive. However particular attention would have to be payed to the situation of income poor but asset rich households – notably pensioner households – in any such radical CIT proposal. For such households tax could be deferred until sale or death.

I emphasise that this back of the envelope calculation is only to illustrate the point. In practice, it would be very hard to tax some of the elements that make up total household assets. Some assets yield a lot less than a 6 per cent real return, others more.[15] For example the net real yield on superannuation investments is estimated by Treasury to be 4 per cent, as funds hold a mix of high and low-yield (safe) assets and administrative fees reduce the gross yield. Also bank accounts earn very little in real terms, although these only account for 4 per cent of total household assets.

It would be hard to tax personal use assets (such as cars and electrical goods), and these account for around 9 per cent of household assets.[16] On the other hand many geared property investments (including owner housing) yield more than 6 per cent.

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[15] Piketty 2014 estimates an average real return to capital of 5 per cent. The Australian figure is higher than that for the rest of the world. For example returns to equites have a long run real yield of 7%, at the top of the international league table.

[16] But perhaps not that hard. For example, we could use insured value as the tax base for cars, boats, and jewellery and household goods and impute income at 6 per cent. There would however then be an incentive to under-insure.

Another way of measuring the tax foregone on assets is in the Treasury's Tax Expenditure Statement (TES - Treasury 2015a). The TES broadly applies a CIT benchmark although there are variations from a pure CIT benchmark as noted below[17]. This shows very large tax expenditures on superannuation ($34 billion), owner occupied housing (imputed rent is not normally included in the TES) housing capital gains (approx. $35 billion[18]), and other capital gains ($5 billion). However, the Treasury methodology gives a lower total revenue cost of concessions compared to mine, partly because it assumes capital gains taxation on realisation, whereas capital gains should be taxed as they accrue under a theoretically ideal CIT. The TES assumes taxation of nominal rather than real gains.

The Grattan Institute (Kelly et al. 2013)[19] calculates revenue foregone on housing assets as around $36 billion for owner occupiers, comprising $14 billion for CGT exemption, $9 billion for net imputed rent exemption, $7 billion for pension asset test exemption and $5 billion for land tax exemption. For investor housing they calculate a total of $7 billion so their housing total is $43 billion. These figures are broadly comparable with the Treasury's and the same caveats apply.

3. THE HENRY REVIEW SOLUTION

The Henry Review was attracted to the ideal that long term savings should attract an approximate ET treatment. This was on the basis that the income tax produces a 'wedge' between present and future consumption and this wedge increases with time, making it more attractive to consume rather than save. This is inefficient because it infringes intertemporal neutrality. For this reason, the Henry Review recommended the following:

- A tax treatment of superannuation savings that would continue to be quite concessional[20] (however taxation of end benefits was ruled out in the Inquiry's terms of reference);

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[17] The benchmarks used in the 2014 TES are outlined in Treasury 2015a Appendix A.

[18] Approximate because costs need to be deducted from the Treasury's gross figures for imputed rent and capital gain. Also the former element is not regularly included in the Tax Expenditure statement. The capital gains main residence exemption was $20.5b in 2014-15, and the discount component another $25.5b (Treasury 2015a p7), and these would be rising quickly with the general rise in house prices.

[19] Kelly notes that their $2.4 billion figure may under-estimate the cost of negative gearing compared to ATO and Treasury estimates (fn91 p25).

[20] Treasury 2010 b Ch. A2 No costing is provided for the Henry recommendations, but the flat 20% rebate suggested for employee contributions would probably have been cost neutral as would be the flat tax rate on fund earnings and capital gains.

- Retain the current taxation of owner-occupied housing (albeit that some owner occupiers might be impacted by reweighting the land tax system away from stamp duties).
- In consequence, the tax applying to both owner-occupied housing and superannuation would continue to approximate an ET or better.

For other categories of saving, the proposed tax system would reduce disparities in effective tax rates by applying an across-the-board 40 per cent discount to bank account income; rental income (now fully assessed), capital gains (reducing the current 50% discount); and associated expenses including interest (currently fully deductible). Thus bank accounts would be more lightly taxed than at present, and there would be some recognition of the effect of inflation. Geared property investments would be less concessionally treated. Broadly it was felt that income from the savings of Australian residents should continue to be a significant part of the personal income tax base (Treasury 2010 b p62). The broad impact of the Review's recommendations is shown in Figure 3.

Figure 3: Real effective marginal tax rates for selected asset classes

Recommended approach
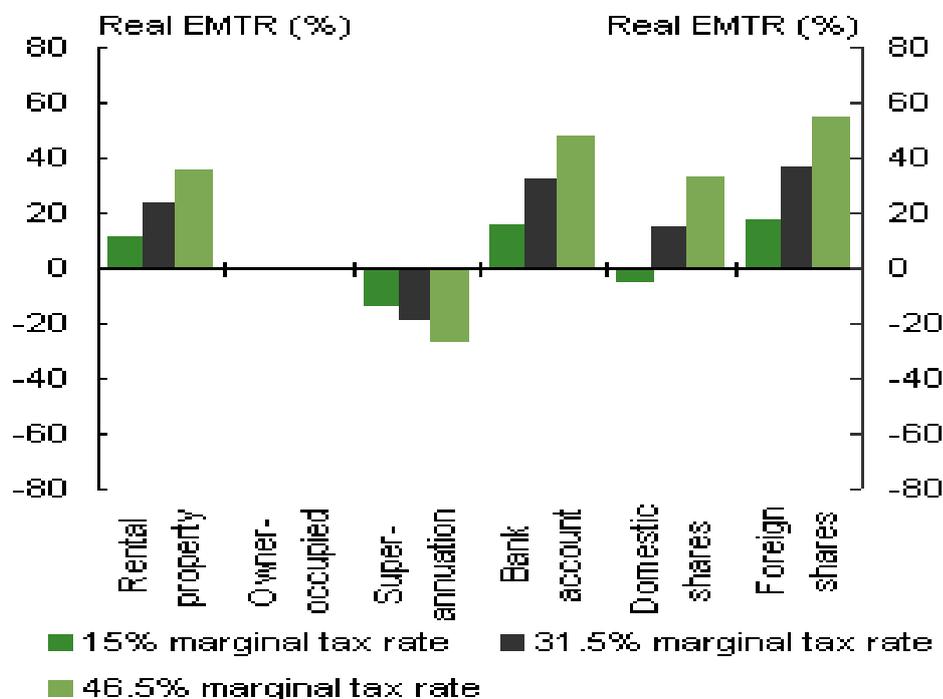
Source: Treasury 2010b, Chart A1-22 p. 73.

Compared to figure 2, figure 3 shows lower tax rates on rental property and bank accounts and a more consistent treatment of superannuation (which however remains highly concessional).The bottom line is that the Henry Review recommendations would have helped to modify the stark differences in the current tax treatment of savings but would have left the current hybrid income/expenditure tax treatment of savings intact. Tax theorists (e.g. Freebairn 2013) recognise that this hybrid treatment is the source of horizontal and vertical inequity and substantial inefficiency.

Since the Henry Report went halfway in the direction of an ET by proposing to lighten taxes on capital it is not clear why it did not go all the way; the costs cannot have been a lot more and the efficiency gains are well understood.

4. WHY IS AN EXPENDITURE TAX FAVOURED BY MANY TAX THEORISTS?

First, some clarity in understanding different tax regimes. Taxes on saving can be levied at three points – wage earnings, investment earnings, or drawdown (for consumption or expenditure). The options are Tax (T) or Exempt (E). The comprehensive income tax (CIT) is a TTE system. The consumption tax (CT) is an EET system also called a 'post-paid' expenditure tax (ET). This includes indirect consumption taxes of the VAT/GST variety and direct consumption taxes of the cash-flow variety (CFCT). The wage tax is a TEE system, also called a 'pre-paid' ET. In broad terms the present value of tax revenue is the same under either EET or TEE so long as the tax rates applying at the time of saving and spending are broadly similar.

The underlying economics of expenditure taxation is that the return to the saver is equal to the economic yield on the investment the savings finance – i.e. there is no tax on capital income. The case for an expenditure tax (ET) rests on the idea that the tax treatment of savings should be inter-temporally neutral – that is that the reward for saving should reflect the underlying return available to capital investments in the economy. It is supported by economists such as Meade (1978), Mirrlees et al (2011), and Kaldor (1956). A direct ET can be designed to have any desired rate structure; we are not restricted to a proportional tax on consumption. However the proportionate direct ET does exhibit some nice theoretical properties.

This is illustrated by the following example.

4.1 EXAMPLE: AN APPLE OR AN ORANGE, NOW OR IN THE FUTURE

Suppose the cost of an apple and an orange is identical in year 1, and on our modest income these 2 fruits represent our pre-tax opportunity set. The ideal tax system will not distort the choice between the two fruits, and this is achieved under either an income tax or a consumption tax. If the tax rate is 50 per cent we can have either an apple or an orange, and this choice reflects their real costs of production.

Now suppose the production possibilities – investment return - in the economy are such that we can have one apple or one orange this year or two apples (or two oranges) in year 13. This corresponds to a 6 per cent per annum real interest rate. A neutral tax would leave us the possibility of twice the year one consumption in year 13. In essence future consumption is regarded as one of the consumption bundles available to the individual, and the ideal is that the relative attractiveness of these bundles, like the relative attractiveness of apples and oranges, should not be impacted by tax. This is achieved under a 50 per cent consumption tax but not an income tax, which at a 50 per cent rate reduces the year 13 consumption possibility to 70 per cent of the CT outcome: 1.4 apples.

Note that a 50 per cent wage tax, or equivalently an income tax which exempts savings yield[21], has the same outcome as an ET. I can consume one apple in year one, after tax, or save it and consume 2 apples in year 13.

This distortion under a CIT becomes larger over time. In year 25 in the absence of tax we can have 8 apples, the CT reduces this to 4 but the income tax reduces it to 2 apples. In year 37 we can have half of 16 apples under the CT – eight - but only 2.8 apples under the income tax and so on.

The above example illustrates how the CIT drives a wedge between the consumption possibilities offered by the economy (pre-tax) and the consumption opportunities offered to the individual, and this wedge becomes greater the longer the period consumption is deferred. Traditionally this has been referred to as the 'double taxation' of savings under an income tax. In contrast, the ET does not 'double tax' savings.

The Mirrlees Review broadly supported the neutrality principle in relation to consumption or saving, favouring lighter taxation of capital income. It stated that "A tax system that levies tax on the normal return to savings… cannot satisfy the first neutrality criterion. It taxes

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[21] Also termed an income tax with savings yield remission (ITSYR), a term used by the Meade Committee (Meade 1978).

people who choose to consume later in life more heavily that people who choose to consume earlier in life…having different tax rates on consumption according to when it occurs is conceptually rather like having different tax rates on different forms of consumption" (Mirrlees et al. 2011 p. 292) - an approach Mirrlees rejected in the context of the UK VAT.[22]

Over very long periods of time (assuming no disruption to saving or the rate of return) as represented by individuals with infinitely long time horizons (that is who value the welfare of their descendants as much as their own) the distortion becomes extreme. At 100 years we can have 320 apples under the ET but 18 under the income tax – less than 6 per cent of the ET outcome. Figure 4 below shows the increase in the tax wedge with time under an income tax. This was in part the justification for the Henry Review pursuing a de facto ET treatment of long term savings in the superannuation area.

Figure 4: Ratio of consumption possibilities under a CIT compared with an ET; 100 years compounding
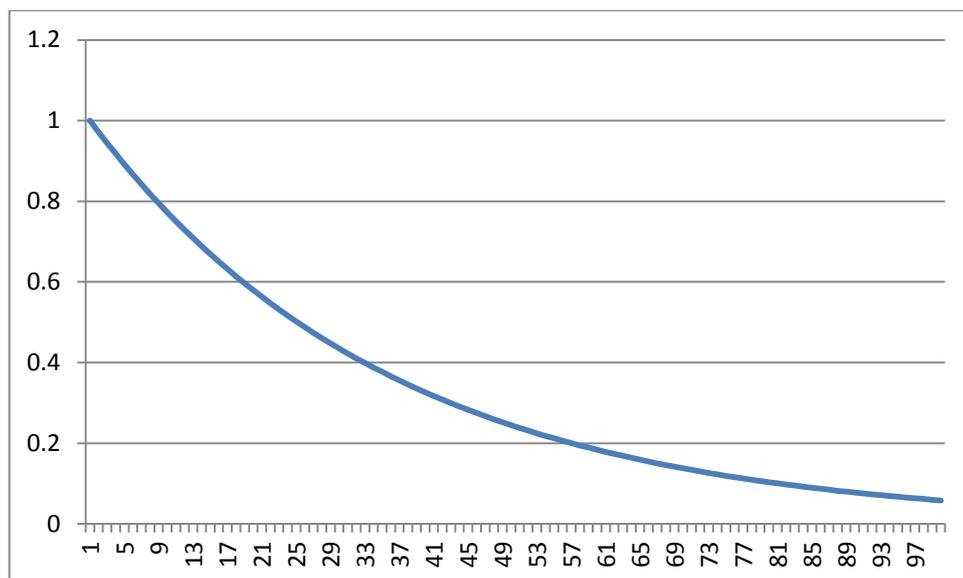
Note: assumes a real interest rate of 6 per cent per annum and a real tax rate of 50 per cent.

A research report for the Mirrlees Review summarised optimal tax research on how we should tax capital. It concluded that there should still be some role for capital income taxation but that does not mean the tax base should be annual income. However it

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[22] Value Added Tax, similar to the Australian Goods and Services Tax (GST)

concluded that marginal tax rates on labour and capital should be related in some way, even if tax on the latter were to be lighter (Banks and Diamond 2010). Ultimately the Mirrlees Report suggested a tax outcome – the RRT - part way between the CIT and the ET but which I will argue is closer to a CIT.

4.2 TAXING EXPENDITURE IS (ALMOST) THE SAME AS EXEMPTING CAPITAL INCOME FROM INCOME TAX

Taxing expenditure (or consumption) is approximately equivalent to exempting capital income from tax. Why is this? Because when monies are saved, tax is deferred; the tax is only payable when savings are consumed and if we discount at the economy's average return on capital the present value of the future tax receipts is equal to the up-front tax that would have been payable if the income were taxed initially. It follows that the real return to saving is the same under a wage tax and an expenditure tax, and that is equal to the average real yield in the economy. (This equivalence assumes a constant marginal tax rate.)

Suppose I earn $100 and invest it for a year at 4 per cent, consuming the proceeds after that year. Under a wage tax at 50% I pay $50 tax in year 1 and it yields $52 in consumption after being invested for a year. Under a CT I invest $100 which yields $104 and I pay $52 tax on consuming this in year 2. $52 discounted at 4 per cent is the same to the tax collecting authority as $50 paid up front. As for me under the CT I forewent $50 consumption in year 1 and consumed $52 in year 2, representing a 4 per cent real return to my foregone consumption.

However, these tax regimes are not fully identical. One difference concerns 'old' capital – that accumulated before the introduction of the ET. This is taxed under some variants of the ET (such as the VAT, or the CFCT if there is no allowance for 'old' capital) but not under the wage tax.

Another difference concerns economic rents. These are returns in excess of the cost of capital. The consensus in the literature (which I question, below) is that the CT exempts the normal return to capital but falls on super-normal returns such as high returns due to skill or luck. The components of capital return which are in the nature of economic rents are thought to comprise at least half or even more of the total return to capital, so if one accepts

this view the consumption tax can be regarded as a compromise or half-way house between the income and wage taxes.

A third difference arises from the fact that the CT rate may not be proportional, as used in the examples up to now, but rather progressive. It is feasible to implement a progressive consumption tax, and such a tax has been recommended in a number of official and other inquiries overseas - e.g. US Treasury (1977) and Meade (1978). If the tax rate is progressive there are 3 possibilities. If the tax rate on final consumption is the same as when income is earned, the neutrality properties described above continue to hold. If the tax rate is higher – implying that the individual became wealthier over his or her lifetime – there is some degree of taxation of capital income. And if the final tax rate is lower – as might apply in cases where saving is used to 'smooth' lifetime consumption, like retirement savings – then there is a net subsidy for capital income. Some theorists believe that such tax averaging is a desirable feature of a CT. Indeed in the view of one expert the pattern of effective tax rates on capital implied by a progressive CT is precisely what is desired of a good tax system.[23]

4.3 THE CASH FLOW CONSUMPTION TAX (CFCT)

One option is to convert the income tax to an ET of the post-paid sort (also called a CT or CFCT). This requires the consumption be measured indirectly by subtracting net new savings from annual income (and adding in net dissaving). The CFCT is discussed more fully under 7.3.2 below. Although the transition to a direct CT has been regarded as horribly complicated, there are approaches being floated which are not really all that difficult.

This form of ET has a number of advantages. It is not affected by inflation. It allows a sort of 'black box' treatment of savings. We don't care what happens inside the box, only about flows into it (rebateable) and out of it (taxable). It allows for a similar (cash flow) treatment of business entities. Issue of depreciation (of business or investment assets) and of stock valuation disappear, except for accounting purposes. It allows for self-averaging of lifetime tax, since tax rates are lower than the CIT when savings are made but higher when they are drawn down.

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[23] "A consistent progressive postpaid consumption tax is not equivalent to a wage tax; it does not foreswear the taxation of any and all the yield on capital. Such a tax instead sits sensibly between the income tax, which double-taxes all savings, willy-nilly, and a pre-paid consumption tax, which avoids ever taxing the yield to capital, come what may. Instead a [CFCT] allows individuals to lower their burden of taxation when they use capital transactions (borrowing, saving, investing) simply to move uneven labor earnings evenly through time, smoothing out their spending. It increases the burden of taxation, in contrast, when the yield on capital… allows one to live a "better" or enhanced lifestyle." McCaffery (2004, p.31). See also McCaffery (2005).

In principle, the CFCT is a simple tax to administer. However there are complications in practice. For example the business side of the tax – the cash flow corporation tax – requires decisions about utilising the R-base, the R+F base or the S-base.[24] There are also issues about international taxation.

Note that lifetime income and lifetime consumption are equal if there are no bequests. Bequests and gifts can be taxed as consumption of the donor if we wish to make the CFCT equivalent to a lifetime income tax (abstracting from the tax deferral issues). However the CFCT is much kinder to consumption later in life compared to the CIT.

4.4 DOES AN ET SUCH AS A CFCT TAX ECONOMIC RENTS?

A major difference between the pre-paid and post-paid CT concerns economic rents – returns in excess of the cost of capital. The consensus in the literature is that the CT exempts the risk-free part of the return to capital but falls on super-normal returns such as high returns due to skill or luck - see Mirrlees (2011, pp. 301-302), Auerbach (2006 pp. 5-6), Gentry and Hubbard (1996). The components of capital return which are in the nature of economic rents[25] are thought to comprise over two-thirds the total return to capital, so on this view the CT can be regarded as a compromise between the income and wage taxes, and closer to the former. But is this view accurate?

There has been considerable analysis of this among US tax economists. According to the US Presidents tax panel,

> *"…it is helpful to distinguish four different components of the return to capital. The first is the 'normal' or risk-free return that represents compensation for deferring consumption. This is sometimes described as the "return to waiting." The second is the expected risk premium for a project with uncertain returns – the return to risk taking. The third component is "economic profit" and represents returns due to entrepreneurial skill, a unique idea, a patent, or other factors. This component is sometimes referred to as "supernormal returns." The last component is the unexpected return from good or bad luck …*

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[24] See the discussion about business taxation in Meade (1978).

[25] These excess returns should not really be termed rents as the normal concept of an economic rent is a return surplus to that required to induce the investment. Excess returns necessary to induce risky investment, for example, are not really of this nature. However I here follow the general usage.

A pure income tax and a "postpaid" consumption tax… differ only in their treatment of the return to waiting. The other components of income are taxed similarly under both systems" (President's Advisory Panel on Federal Tax Reform 2005, p.153).

And elsewhere:

"Hubbard further argues that since both the income tax and the consumption tax hit economic rents, and since both tax the returns to risk-taking in the same manner, the only distinction between their treatments of capital income is the income tax on the safe [risk-free] rate of return. As this safe rate of return is not large, the distinction between the income tax and the consumption tax does not appear to be large, either" (cited in Auerbach 2006, p. 26).

Weisbach, in the same vein, suggests that

"The risk-free return has historically been close to zero… Therefore, an income tax taxes vanishingly little not taxed under a consumption tax. Notwithstanding the long debate over the two tax bases, they are essentially the same. There would be no significant distributional, efficiency, or fairness changes from choosing one base or the other." (Weisbach 2004)

Gentry and Hubbard find that the fact a CT falls on rents has important distributional implications, and show that holdings of assets most easily identified with high excess returns (active businesses) are highly concentrated among high income and high net-worth households (Gentry and Hubbard 1996, p. 4).

However, the argument suggested above that a CT exempts only the risk free return is contentious. Suppose I earn $100 and invest it for a year at 6 per cent, consuming the proceeds after that year. Under a wage tax at 50% I pay $50 tax in year 1 and it yields $53 in consumption after being invested for a year. Under a CT I invest $100 which yields $106 and I pay $53 tax on consuming this in year 2. $53 discounted at 6 per cent is the same to the tax collecting authority as $50 paid up front. As for me under the CT I forewent $50 consumption in year 1 and consumed $53 in year 2, representing a 6 per cent real return to my foregone consumption. My return is the 'normal' 6 per cent rate notwithstanding that the risk-free return is thought to be less than 2 per cent (real).

Hence in this example, I am indifferent to whether I am taxed under the pre-paid or post-paid form of ET.

Now consider the case where economic rents are earned. Suppose in the above example I doubled my money in a year, to $200. On consuming this I pay $100 tax which is much more valuable to the taxing authority than the $50 I might have paid as a wage tax in year 1.

On the other hand my real return from the investment is still 100 per cent as I can consume $100 in year 2 as compared to the $50 consumption I gave up in year 1. So the real return to me has not been impacted by the tax, although clearly my tax burden is much higher. Where then does the windfall to the government come from? It arises from the fact that the government implicitly invests alongside the saver as a silent partner, and shares fully in the gains or losses – including in the outsize gains. However this does not reduce returns to the saver as savings are augmented under the CT.

However if the saver is constrained in his investment choices there can be some tax on rents. "If higher than normal returns are associated with scarce investment opportunities, monopoly rents or a good idea that cannot be replicated, then government under a consumption tax can be an unwanted partner in the business" (Toder and Rueben 2005 p8).

Bradford argues

> *"[T]he general public becomes a proportional shareholder in all enterprises. If the payoff exceeds the normal rate of return (risk adjusted) the general public shares in the good fortune. If the payoff falls short, the general public, having 'invested' via the deduction for investment outlays, shares in the shortfall"* (Bradford 1995, p.12).

Overall however the public, through the tax authority, does no better than the aggregate return to capital in the economy.

The other situation where the investor gets less than a full economic return on his investment is when borrowed monies are involved; in the context of gearing the CT unambiguously falls on economic rents. This can be seen with an example in which the taxpayer borrows funds for the investment.

Suppose I borrow $100 to invest (at 5% interest) under a 50% wage tax, put in $100 of my own money and profit by $200 in year 2, my gross and net return – after interest cost - is 195 per cent. If I borrow $100 at 5% under a CT and consume the $195 profit in year 2, I pay tax of $97.50 and my net rate of return is reduced to 97.5 per cent, half the wage tax outcome. My investment yield was almost all pure profit and I paid full tax on this.[26]

Pure profits due to gearing are widespread. Suppose I buy a house for $1 million and borrow 80 per cent of this at 5.5 per cent nominal, equating to 3 per cent real interest. Historically the expected real yield on housing is over 6 per cent comprising say 3 per cent imputed rent and 3 per cent real capital appreciation (how the 6 per cent is divided is not important, as neither element is taxed). So my real income from the house is $60,000 per annum and my real interest cost is $24,000, leaving me with net profit of $36,000 or 18 per cent (real) on my $200,000 equity. The return falls over time as the gearing reduces, and interest rates are currently low, but you get the picture: property investment has been a great route to asset accumulation in Australia.

The figures for geared investment in housing for rent are nearly as favourable, albeit that some tax may ultimately be paid on the capital gain. Wood et al (2010 Table 8.3) find that the median internal rate of return for non-corporate investors in Victoria over 1998-2006 was around 20%, so the empirical data is consistent with the idea that pure profits are ubiquitous. The consumption tax, if properly levied on housing (to include imputed rent), taxes all these profits.[27]

I return to discuss the RRA below. However, it is worth noting here that Mirrlees argues that the CT and the RRA are equivalent in terms of their treatment of excess returns (Mirrlees 2011, Table 13.3, p. 302). My contention is that they are different. The RRA exempts the risk-free return; by contrast the CT exempts the 'normal' return which is the average yield on investment in the economy. The CT only falls on some super-normal returns, particularly those that result from gearing. The RRA falls much more explicitly on pure profit than does the CT. The strong conclusions of Weisbach and Gentry and Hubbard, cited above, are inconsistent with the clear advantage a CT confers on a long-term saver

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[26] I argued this point originally in 1981, which anticipated the later literature on taxation of rents under a CT. See Ingles 1981, p. 70.

[27] The question arises as to what proportion of capital returns is in the nature of pure profit. Historically stock market yields have been 7 per cent per annum of which some 5-6 per cent is regarded as the 'equity risk premium', suggesting that the risk free yield is in the order of 2 per cent (real) and the pure profit is around two-thirds of the total. The historic yield on housing has been almost as high as the equity yield, and also gearing is used extensively in housing investment, so we can infer that the two-thirds estimate is also applicable to housing.

compared to a CIT, as already documented in the text (the apple example). My tentative conclusion is that around a third of asset returns are assessable under a CT, these being mainly due to gearing.

Prest suggests that "If the alternatives are that one either taxes a particular outlay at the time it takes place (but exempts any yield or disposal proceeds from tax) or exempts the current outlay (but taxes future yield, when spent, and disposal proceeds) it can be argued that one can draw the line between consumption and saving at any point one likes – it simply does not matter" (1979 p247). The US Treasury took a similar view in Blueprints for Basic Tax Reform (US Treasury 1977), arguing that under their proposed CT taxpayers could choose to have assets purchases treated as either tax pre-paid (wage tax or TEE) or post-paid (consumption tax or EET) and the tax authority could be indifferent to this choice as the net present value of tax receipts would be the same under either alternative.

However, I argue that once we account for economic rents, these alternatives do matter. Bill Gates would not be indifferent to a tax of say 30 per cent on his current consumption, or a 30 per cent wage tax when he was 23! And this difference is heightened by any progressivity in the CT rate structure. Any investor enjoying above-normal returns would wish to be taxed under the wage tax, notwithstanding its ex-ante theoretical equivalence to a CT.

Weisbach (2004, p. 18 and p. 21) notes that:

> *One possibility is that many enormous fortunes are returns to skill or labour rather than capital but the tax system mislabels them as returns to capital. For example Bill Gates's fortune is most likely a mix of luck and effort. It did not involve substantial capital investments by Gates and therefore might best be described as mostly return to labour…. An important conclusion from this is that both cash flow taxes and Haig-Simons income taxes [i.e. CIT] tax great fortunes created through inframarginal investments or labor.*[28]

Differences in the treatment of rent are reflected in the value of government revenue under the tax alternatives. In theory TEE and EET have the same NPV – but that assumes a common discount rate. In fact, the NPV of revenue is higher under EET because savings accumulate at the average real return in the economy – in the order of 6% real, whereas

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[28] 'Inframarginal' refers to returns greater than the risk-free return.

governments can discount the value of future revenue at the long term bond rate – in the order of 1-2% real.

Overall it is realistic to suggest that a CT is part way to a tax on economic rents; I here assume that it taxes half of all rents, and these are 2/3 the total return to capital. It follows that an explicit tax on economic rents is closer to a pure CIT than the ET and may in fact be a sensible compromise objective for capital income taxation. Certainly that is the conclusion of the Mirrlees review.

5. THE ARGUMENTS FOR TAXING CAPITAL

The question arises as to whether we really wish to treat equally the consumption opportunities provided by long-term compounding of capital returns. Optimal tax theory has not been definitive on this question (Banks and Diamond 2010) but it does tend to favour neutrality – that is, no taxation of savings - unless a clear opposite argument can be adduced. The Mirrlees Review point to a number of such arguments (Mirrlees 2011, Ch. 13) and end up recommending a variant of the ET which taxes rents, or above-normal returns. However, retirement saving would receive CFCT treatment (EET).

5.1 ELASTICITY OF THE DEMAND FOR SAVING

There is one argument for taxing capital income which I have not seen in the literature. According to the *inverse elasticity rule* for optimal commodity taxation[29] we should tax each set of commodities in inverse proportion to their demand elasticities. This means that if a commodity is demanded inelastically – that is, if higher prices don't reduce demand – we should tax it more heavily. Unfortunately we find this efficiency rule conflicts with an equitable tax system, because the things which are most inelastically demanded are basics like food and petrol. Taxes on petrol, alcohol and cigarettes raise revenue but are all quite regressive. The informational requirements of this approach to taxing inelastic commodities are quite high, and it has never been proposed as a practical tax system.

However, suppose there is one set of commodities – future consumption – which is inelastically demanded but lies more in the preference set of the well-off. In this case one

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[29] Mirrlees (2011, p. 155) notes that "The inverse elasticity rule is valid when there are no substitutability or complementary relationships between commodities. When such relationships are admitted, the efficient tax system is described by the *Ramsey rule.* This rule is more general but has the same overall consequences as the inverse elasticity rule". See also Ramsey (1927).

might be able to construct an 'optimal tax' argument for over-taxing future consumption – otherwise known as saving. The critical issue here is whether saving, or future consumption, is elastic to the net rate of interest. There is a large and divergent literature on this issue, with no clear conclusions emerging but there is a least some ad-hoc evidence that savings are not that elastic. For example, the Australian household savings rate has now risen from lows before the Global Financial Crisis of 2008-09, to around 9-10 per cent despite real interest rates which are not high by historical standards (Finlay and Price 2014).

The Re:think Discussion Paper argued in respect of savings,

> *"Empirical evidence suggests the behavioural response of taxing savings is uncertain and may not be significant [and therefore] the economic cost of taxing income from savings (at least to a point) is not large… An OECD literature review concluded that low-income individuals may respond to tax incentives with new saving. High income individuals are more likely to divert savings to more tax-preferred savings…"* (Treasury 2015b, p. 59).

The Discussion Paper also suggests that "taxing the income from savings more lightly than labour income is a way of striking a balance between these competing considerations. For example it can help address the effects of inflation..." (ibid.).

Attanasio and Wakefield considered the effects on consumption and saving of taxing asset returns for the Mirrlees review. They concluded that "it is unlikely that changes in interest rates (including those brought about by tax changes) will have a big impact on the level of saving. This is consistent with our (controversial) reading of the literature on how people have responded to past changes in the taxation of assets… [although] individuals do seem to respond to changes in relative interest rates by altering the mix of assets they hold" (Attanasio and Wakefield 2010, p677.).

If this conclusion is correct, it seems fair to say that what is important in the taxation of capital is not so much the aggregate weight of such taxation, but rather that the taxes impact neutrally on different assets. Neutrality can be achieved by levelling up as well as by levelling down; while reform proposals have generally favoured the latter approach (and it is, to be fair, politically the most palatable option) the adverse impact of inequality suggests we might really prefer the former.

Attanasio and Wakefield (2010, p. 700) also model tax cuts designed to encourage wealth accumulation and find that the decrease in public savings which results (at the moment, in bigger deficits) largely offsets the increase in private saving.

5.2 DISTRIBUTIONAL AND EFFICIENCY ISSUES FOR LABOUR

The practical effect of more lightly taxing capital income would almost certainly be to worsen the distribution of income and wealth. This is because wealth is much more unevenly distributed than income. In the extreme, with dynasties of long duration, our 100 year example showed that an initial investment of one apple had compounded by 320 times under the CT. The lucky heirs of this patient investor, investing their apples at 6 per cent yield, now receive 20 times the annual income which he started with and they and their heirs can live on this indefinitely with only a modicum of investment acumen.

Arguments against taxing capital income taxation reflect the implicit assumption that wealth is the product of past labour income combined with a propensity for saving, and such behaviour should receive its just reward. In the real world the sources of wealth are many and varied, with bequest, borderline legality and plain dumb luck not inconsequential.

If the suggested "double tax" bias against saving is to be totally removed, then only labour income, or (almost) equivalently consumption, should be taxed. But taxation of labour income also produces a bias, in this case against paid work and towards leisure or informal (household) work. Which bias is more damaging is disputed (e.g., Apps and Rees 2013). In principle "optimal tax" analysis can be used to resolve this issue but the findings of such analysis depend on its underlying assumptions – e.g., about elasticities of response.

There is another issue. Australia already taxes labour incomes quite heavily in the income tax, payroll tax and consumption. If it were felt that the payroll tax and consumption tax were better taxes than the income tax (because they do not impact on savings) it is possible to alter the relative weight of these three taxes. In this light the role of the income tax in the mix is to actually have one component which falls on savings yield.

There is also an argument that supports a broader tax base, including some part of savings yield, at lower rates. We can reduce inequality by taxing labour income or consumption more progressively, but there are diminishing returns to this approach. The Mirrlees Review cites studies which suggest that the revenue maximising top tax rate is as low as 56 per cent (Mirrlees 2010 p. 109) - presumably the utility maximising top rate is less. This is

not much higher than the 49 per cent rate current in Australia.[30] By taxing capital incomes, we widen the tax base and can lower the necessary tax rates on high incomes for a given amount of redistribution. This "broad base, low rate" philosophy was important in the 1986 tax reforms which saw, inter alia, the introduction of a capital gains tax (prior to which, only short term gains had been taxed).

5.3 CAPITAL INCOME IN THE TAX AND TRANSFER SYSTEM

A core element of Australia's transfer system is the age pension which, like other transfers, is means tested. It is hard to conceive of an integrated tax-transfer system if capital income is exempt. In Australia's tightly means tested transfer (pension) system, means testing in either an income or asset test seems inevitably to include testing of capital income and asset values. There are arguments for making this more comprehensive (as in the extended deeming proposals of the Henry Tax Review; see also Stewart and Ingles 2015).

If capital income were fully taxed, it may be possible to standardise income definitions in the tax and transfer systems thus opening up options for fuller integration. If the income tax base were sufficiently robust, then means testing of the age pension could be implemented using a simple tax surcharge plus source withholding. If housing were included in the capital income tax base, we could dispense with means tested rental assistance schemes and simply gross up social security payments to account for the fact that those with housing assets would have their entitlements scaled back.[31]

Even when the superannuation guarantee is fully phased in, almost four-fifths of the aged will continue to receive a full or a part age pension, so the pension means test is not marginal but central to the system (Ingles 2015b). Ingles and Denniss (2014) proposed that the tax system be used to 'claw back', from those on higher incomes, part of a new universal (national superannuation) pension. Obviously, the efficacy of such a claw back is undermined if the well-off can divert their income into untaxed forms of capital income, such as unrealised capital gains.

The Mirrlees Report grappled with the question of how their theoretically attractive ET system would interact with the UK means tested benefit system, without discovering any easy answer (Mirrlees 2011, p. 345-6). My answer is to come up with a reasonable

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[30] 49% including "temporary budget repair levy".
[31] A number of commentators have suggested that some part of housing wealth be included as part of assessable assets under the asset test for pensions including the Henry Review (2010) and the Shepherd Report (Shepherd 2014a and 2014b).

compromise which satisfies both needs. Before turning to some compromise options in Part 7 below (including the RRA as suggested by Mirrlees, and my own proposal of a Z-tax), I first consider whether and how a CIT could work.

## 6. HOW A COMPREHENSIVE INCOME TAX COULD WORK

It may be possible, in the CIT tradition, to reform the current income tax, expanding the capital gains tax to include a wider range of assets including home ownership, remove the CGT discount for individuals, trusts and superannuation funds and tax imputed income from owner-occupied houses as well as 'lifestyle' assets such as holiday homes and hobby farms.

There are a number of issues that need resolution if a CIT is to be made fully effective. These include taxation of imputed income from housing, better taxation of capital gains (including on owner-occupied housing), and full inflation adjustment to the tax base. The big ticket item is owner-occupied housing. Apart from accruing capital gains, imputed rent would need to be taxed either by deeming or imputing a rate of rental return on the gross value and levying tax on this – in effect a property tax - less (real) interest payments, or more simply by imputing a real return to the net value of the house (i.e., less the mortgage - in effect a tax on housing net wealth). Repairs and maintenance need not be deductible if the imputed yield were reflective of the net rather than the gross expected yield. The other big-ticket item is superannuation; current tax concessions would need to be abolished.

6.1 INFLATION ADJUSTMENT

Inflation adjustment of the CIT base is extremely important. Currently, some income yielding assets are quite highly taxed as part of their yield reflects the inflation rate and there is no allowance for this. This means that the highest effective tax rates apply to relatively unsophisticated savers holding money in bank accounts, term deposits and the like, and the effective tax rate varies with the rate of inflation, as illustrated by Henry.

Figure 5: Real effective tax rate on the return to savings under different inflation rates
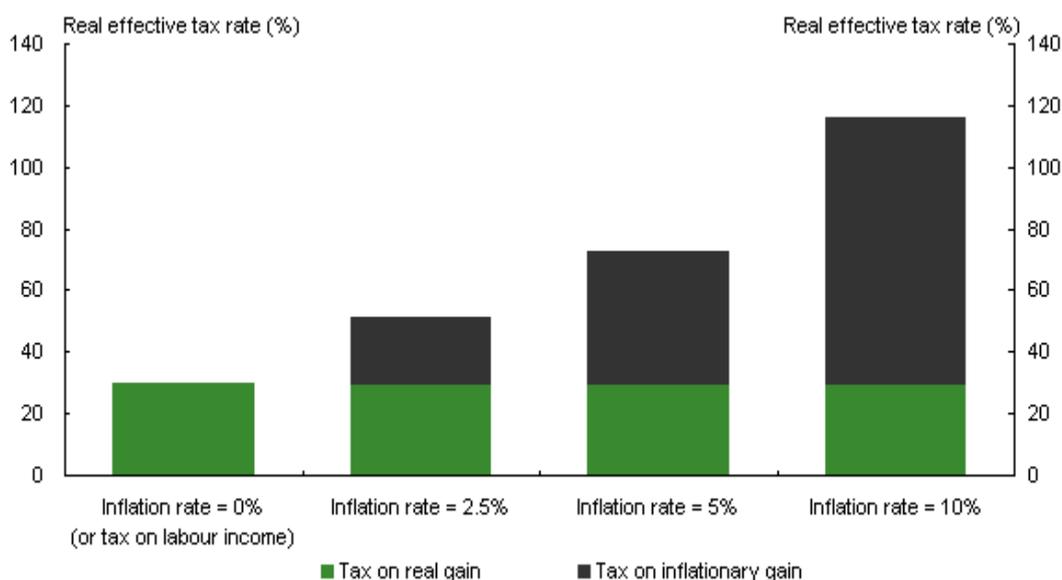
Assumptions: Real return of 3.5 per cent; 30 per cent tax rate on nominal income. Source Treasury (2010b, Chart a1-17)

A full-fledged inflation adjustment is an extremely complex undertaking, as it would need to apply to not only nominal yield but also to uplifting the basis for capital gains tax and also, at the company level, to depreciation, interest costs and stock valuation. No government has undertaken such an exercise. Base indexation should not be confused with indexation of the rate structure, and is arguably much more important. The latter is a simple matter of adjusting the tax steps each year by reference to either a price or a wage index. The former involves adjustments to most measures of capital income, interest costs, business deprecation, and inventories. At one time there was an inflation adjustment in the Australian capital gains tax (starting in 1986) but this was subsequently withdrawn and a simple 50 per cent discount put in its place.

Note that the expenditure tax options discussed in Part 7 below simply exclude bank interest and the like from the tax base. This takes care of the inflation issue.

6.2 CAPITAL GAINS

A realisation-based capital gains tax has inherent structural flaws, including the lock-in effect, which are difficult to fix. As realisation of assets is a choice for the taxpayer, the lock in effect arises when individuals are carrying forward untaxed capital gains which cannot be

realised without reducing their net assets. This makes them reluctant to sell and rebalance their portfolios.

Removing the capital gains tax (CGT) discount, while at first sight desirable, would exacerbate the 'lock-in' effect endemic to a realisation-based CGT, whereby people defer realisation of gains, sometimes until death[32] (at which time the cost base is uplifted by revaluing the asset).

Removing the CGT discount would also result in somewhat harsh treatment of some assets which fail to outperform inflation over time but are nonetheless assessed as having enjoyed price appreciation. Full indexation of gains is one remedy, but seems excessively generous in a context where other assets like bank accounts don't benefit from indexation and as noted above, full indexation of the income tax base is a complex and difficult task.

The current realisation based CGT is also generous in that taxation on realisation confers a significant benefit from tax deferral. Complicated formulae have been proposed to modify realisation tax rates to take account of deferral (the tax rate rises with the length of time the asset is held). This is likely to be difficult to administer and most taxpayers would not understand them.

6.3 TAX ACCRUING CAPITAL GAINS?

Taxing asset gains as they accrue, or on an annual basis, is one solution that would bring the income tax into line with a CIT. Although accrual taxation of capital gains has traditionally been regarded as difficult, as regards both administration and compliance, there is a tendency in the recent academic literature to question this assumption. Its main drawbacks are that it requires annual revaluation of assets and that it calls for taxes to be paid at times when there may be little cash-flow from the taxed asset.

Taxing capital gains on an accrual basis is an approach which tax theorists are now beginning to think is increasingly practical. Accrual taxation solves many of the problems of the realisation CGT, for example the problem of lock-in, and also that of needing to quarantine negative gearing losses (see e.g. Burman and White 2010). With accrual taxation such losses are properly deductible from normal income in each year. With a realisation basis gearing is concessional since costs (like interest) are immediately deductible whereas the tax bill is deferred until the indefinite future.

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[32] Evans et al. (2015) see about half the hoped for revenue gains being lost due to lock in.

Burman restricts his recommendation for accrual taxation to easily valued assets such as shares and does not propose to extend it to e.g., investment property. However if some assets are subject to accrual taxation and others to taxation on realisation, the latter class of assets is advantaged unless an equalisation formula is adopted. Such formulae are complicated.

The issue with real property is whether it can be readily revalued on an annual basis. My view is that this is not all that difficult, as widely available price indexes could be used to annually revalue in between proper professional valuation updates at say 10-yearly intervals. A more serious obstacle is that owners of illiquid assets may not have the cash on hand to pay the tax bill as it comes due. A possible remedy is that the government could defer the bill until realisation, with interest being charged at the governments normal cost of funds (the bond rate, or a bit more).

Other capital gains such as on shares would be taxed on an accrual basis with annual re-valuations; this is relatively simple for publicly traded shares but a much more difficult proposition for closely held private companies.

The bottom line is that accrual taxation needs to be seriously considered as one option for better taxing capital incomes, and in principle it could be extended to real property as well as readily valued assets such as shares. The major class of assets not amenable to annual valuation is unlisted business assets, which could continue to be subject to a realisation basis. Ideally, this could be accompanied by an equalisation adjustment to account for the benefit of tax deferral. The resulting system would be somewhat cumbersome, but not impossibly so. It might however be difficult for the public to understand (and accept).

6.4 WHAT SHOULD HAPPEN WITH NEGATIVE GEARING?

There is nothing inherently concessional about negative gearing, as the Treasury (2015b) notes.[33] The concessions arises from two different sources; first that full nominal interest costs are deductible, whereas ideally only real interest costs should be, and second that only realised gains on the asset are assessable for capital gains tax, and at a concessional rate.

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[33] In the view of Re:think, Tax Discussion Paper (Treasury 2015b) negative gearing is not concessional but the capital gains discount is.

If these two issues were addressed there would be no need to do anything about negative gearing. If they are not addressed then there may be a case for disallowing negative gearing and forcing property investors to carry forward losses so that they can only be claimed against later taxable gains. Even if the current concession benefits renters, it does so in an indiscriminate manner (with the largest subsidy for the richest tenants) and there is a case for targeting the assistance better. If, for example, we gained $3 billion from eliminating negative gearing[34] we could redirect these monies to helping low income renters through existing schemes of rental assistance, which are widely acknowledged to be inadequate. While rents might rise slightly this would be more than balanced, for low income earners, by the extra assistance. But rent assistance is a second-best policy to the CIT approach of taxing all property incomes more comprehensively and returning the revenue to households by general income tax cuts and rises in base rates of welfare payments.

6.5 A DEEMED INCOME RETURN

Alternatively, it is possible to deem income from investments and to subject the deemed income to tax at marginal rates. This could be done in the same manner as the income deeming provisions in Australia's current social security means tests. Deeming involves imputing an annual rate of return to an asset class, and adding this imputed income to normal income when calculating tax liability. Actual income from property is not taxed.

This principle could be extended more widely in the manner currently adopted by the Dutch (Cnossen and Bovenberg 2000), and previously favoured by an official review in New Zealand as an alternative to a conventional capital gains tax (Burman and White 2010). With income from capital being deemed, actual income from capital need not be measured.

In Ingles 2015a I argue that this is workable but has the big downside that it advantages skilled or lucky investors while disadvantaging those of the opposite persuasion. That has not stopped us using these approaches in the welfare system, however. In that paper I suggest that an alternative wealth tax could be used to backstop the income tax by acting as an alternative minimum tax on capital incomes; this might be a lightly fairer system but is still less than ideal.

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[34] Grudnoff (2015b) has one such proposal, but its raise less revenue than full abolition.

Because of these problems it may be preferable to implement a CIT – if that were the goal - through the 'back door', by having a tax on economic rents and only deeming income to the extent of the risk-free return.[35]

In general the ET options discussed in the paper are superior to options involving 'patching' the income tax base, like accrual taxation. However they require supplementation by deeming or an AWT if it is desired to approximate a CIT outcome.

6.6 CONCLUSION ON THE CIT

It would be theoretically possible to reform the current income tax to bring it back towards a CIT., This would require:

- No discounts on capital gains, and payment of CGT on death

- Housing capital gains to be included

- Full indexation of gains (accompanied by full indexation of the base for other capital income)

- Either tax on accrual or a complex 'equalisation' adjustment to tax paid on realisation to take account of the benefits of deferral.

- Superannuation contributions and earnings to be taxes as normal income

- In addition there would need to be taxation of imputed income from assets which yield benefits in-kind, notably housing.

While all these things are do-able, the result would be a fairly cumbersome and complex system. More fundamentally, our system looks the way it is today because the politics of a reform that would tax capital income more heavily are extremely difficult.

As noted earlier, the maximum revenue potential of a full CIT or a deeming or AWT system is around $170 billion; that is, three times the revenue currently received from the income tax. However it is unlikely, politically, that we would ever approach this figure as any achievable regime is likely to fall well short of the revenue theoretically available.

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[35] This is the subject of a forthcoming paper by the author.

7. COMPROMISE OPTIONS: PART-WAY TOWARDS AN EXPENDITURE TAX

I now turn to discuss potential tax reform options apart from the CIT. I first consider a rate of return allowance (RRA) and then discuss a cash flow alternative that I call the Z-tax. Finally, I turn to different expenditure tax (ET) options. There are two possibilities for tax systems sitting part-way between an expenditure tax and an income tax

1. Tax income using Mirrlees' preferred approach of a rate of return allowance (RRA); this approach can hang off the existing tax treatment of capital, thus facilitating the transition. This tax is consistent with the current corporate tax regime modified by allowing for the cost of equity capital; that is an ACE (Allowance for Corporate Equity, also recommended by Mirrlees). Both the ACE and the cash-flow corporation tax fall on excess returns (super profits) while leaving the normal return to equity untaxed. They can thus make redundant other forms of super-profit tax such as the Minerals Resource Rent Tax.[36]

2. Tax using a hybrid of the CFCT and the RRA; I call this the Z tax.

Because the RRA falls on economic rents which I suggest comprises two-thirds of the total returns from capital, the RRA is really a hybrid of a CIT and an ET. However it is a neutral hybrid – which I call a 'vertical hybrid' - as opposed to the existing CIT/ET 'horizontal hybrid' which is distinctly non-neutral.

I then turn to consider two possibilities for an ET:

1. Replace the income tax and GST with an economy-wide GST/VAT.[37] One way to maintain tax progressivity there would be to make weekly cash payments to individuals based on their family size (and perhaps income), which makes this a form of guaranteed minimum income (GMI). In the Hall-Rabushka (flat tax[38]) version of this the VAT is split into its components with labour income being taxed to individuals with a substantial personal exemption; this exemption obviates the need for a GMI. The Bradford X-tax is similar, but has several rates applying to labour income.[39] Like, the 'flat tax', this is basically a progressive VAT.

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[36] MRRT. The current government has abolished this, although there is still a petroleum super-profit tax.

[37] The Henry Review proposed another version of consumption tax based on cash flows. Economically the taxes are identical but it may be hard to have exempt categories under the Henry proposal; progressivity would need to be pursued through other avenues as outlined in the text.

[38] 'Flat tax' is a misnomer. This tax is really a two-rate (progressive) CT.

[39] Hall (2011) has now modified his view and proposes a multi-rate version of the 'flat' tax.

2. Tax expenditure directly using the cash-flow approach suggested by e.g. the UK Meade Committee in 1978 and the US Treasury (1977); this tax falls on excess returns from capital but exempts the normal return. This approach is consistent with a cash-flow corporation tax.

I disregard a third possibility, which is an ET on a tax pre-paid approach (TEE), as such a tax entirely omits economic rents. However, this might be a useful option for taxing superannuation in Australia, given the very concessional tax treatment now applying and the ease of transition to such a system (Ingles and Stewart 2015).

7.1 RATE-OF-RETURN ALLOWANCE (RRA) AND ALLOWANCE FOR CORPORATE EQUITY (ACE)

An RRA tax system explicitly targets economic rents by taxing income normally but providing an allowance for the risk-free return, usually set at or around the medium-term bond rate. This rate is then applied to the asset acquisition cost and returns below the normal rate are not taxed. It was the approach preferred by Mirrlees Committee in the UK in its comprehensive tax review for the Institute for Fiscal Studies.

The Mirrlees Committee stated:

"The RRA would be calculated by applying a risk-free nominal interest rate to a cumulated stock of savings held in particular assets. No explicit indexation is required — the stock of savings just corresponds to past purchases of these assets, net of past sales. Nominal income plus any nominal capital gains realized in the current year, in excess of the RRA, would then be taxed at the individual's marginal income tax rate. In cases where the RRA exceeds the return on these assets realized in a particular year, the difference would be carried forward to set against nominal returns in later years, marked up by the same nominal interest rate used to determine the RRA. Other than specifying this nominal interest rate, no more information is required to operate this system than is needed to tax capital gains on these assets under a conventional income tax. In most circumstances, the normal rate of return can be well approximated by a nominal interest rate on medium-term government bonds. A similar approach is used to tax dividends and capital gains on company shares in Norway.

"As well as reducing the distortion in favour of current consumption over saving under a standard income tax, this RRA approach to the personal taxation of income from capital has important practical advantages. The taxation of capital gains raises major problems for a conventional income tax: taxing gains on realization rather than on accrual creates a lock-in effect, encouraging people to delay the sale of assets whose value has risen, and taxing purely nominal gains makes effective tax rates highly sensitive to inflation. Piecemeal attempts to deal with the latter problem by taxing nominal capital gains at preferential rates invite tax avoidance, favouring the conversion of earned income into more lightly taxed capital gains where this is possible. ...

"The RRA approach addresses all of them. It also operates coherently with corporate taxation, an important ingredient of any well-designed system of savings taxation… the RRA in the personal income tax is a natural counterpart to the allowance for corporate equity, our preferred scheme for corporate taxation" (Mirrlees et al. 2012, p. 671-673).

The RRA system "can be shown to have a number of appealing neutrality properties with respect to investment allocation, choice of funding between injection of new equity or retained earnings and the timing of realisation of shares. The step-up of the basis for calculating the RRA is crucial to these properties" (Christiansen 2004).

Under this tax system savings are made net of tax, but then tax is charged only on returns above the normal rate (TtE). For assets such as interest-bearing accounts where no supernormal returns can be earned, an earnings tax (TEE) is equivalent (Mirrlees 2010, p. 330). For retirement saving, maintaining the current UK EET is suggested, on the (erroneous) basis that this is economically equivalent to the RRA.[40] For owner-occupied housing RRA taxation is preferred but the political difficulties are noted. For rental housing Mirrlees advocated the RRA system as bringing the tax regimes for rental and owner-occupied housing much closer together (Mirrlees 2011, p. 402).

There are administrative complexities in the RRA system, notably "the record-keeping requirements, the relative complexity or unfamiliarity of the calculations required, and the treatment of 'losses' – or, more properly, returns below the normal rate. On the other hand, one of the attractions of the RRA is that the transition to it is likely to be easier, both

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[40] An equivalence which I question in the text; see also Figure 6.

technically and politically, than the transition that would be required to move us to a cash flow consumption tax" (Mirrlees 2010, p.333). It is also easier to manage issues around individuals moving abroad than under the CFCT (Mirrlees 2011, p. 489).

With the RRA the deferral advantages of a realisation-based capital gains tax (CGT) wash out and there would be no reason to offer a CGT discount, so this could be abolished. Mirrlees notes that "the labour earnings tax, expenditure tax and RRA approaches all achieve equal treatment of capital gains and cash income, and do not require indexation for inflation. Hence they avoid distortions to the form and timing of saving… above normal returns are taxed and the net present value of tax paid is unaffected by the form or timing of the returns" (Mirrlees 2011, p. 303).

The RRA system at the individual level is consistent with the "allowance for corporate equity" (ACE) tax proposed at the corporate level, which was also recommended by the Mirrlees Report. Mirrlees argues that the ACE "can be thought of in two ways: either as a counterpart to allowing the interest cost of debt finance to be tax deductible, or as a series of deferred tax allowances which compensate for the absence of the up-front 100% allowance for equity-financed investment expenditure provided by the cash-flow taxes… The effect is again to remove the normal return on equity financed investment from the corporate tax base" (Mirrlees 2010, p. 421).[41]

The ACE has two semi-magical properties which make it more similar to the cash flow corporation tax than at first appears. One is that it automatically compensates for depreciation allowances in the tax schedule which do not accurately reflect the economic life of the asset (this is a big problem with the conventional corporate income tax);[42] the other property is that it does not need to be indexed to deal with inflation so long as the opportunity cost of capital is computed using a nominal, not real, interest rate.[43]

In the UK context Mirrlees found that moving to an ACE would be quite costly. This would not necessarily be the situation in Australia as we already have dividend imputation which

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[41] The ACE has rarely been enacted in practice, although the Mirrlees Review states in footnote 14 "Versions of this tax base were used in Croatia between 1994 and 2001, and introduced in Belgium in 2008" (Mirrlees 2010, p. 421).

[42] Mirrlees (2010, p. 422): "the present value of the stream of tax payments under the ACE tax base does not depend on the details of the depreciation schedule used" and in fn. 16 "This useful property of the ACE tax base was demonstrated in IFS Capital Taxes Group (1991) building on earlier work by Boadway and Bruce (1984)."

[43] Mirrlees (2010, p. 423): "Provided the ACE allowance is calculated by applying a nominal interest rate to the unindexed equity base, allowing nominal interest payments to also be deductible then provides the appropriate tax relief for the cost of debt finance in the presence of inflation" and in fn. 17 "This convenient result was shown by Bond and Devereux (2003), building on earlier work by Fane (1987)."

might disappear under an ACE system, so the net cost of the transition might be low or even negative.[44]

The ACE is an attractive tax which may be a more feasible intermediate step in corporation tax reform than the cash-flow corporation tax with its many issues for international tax harmonisation. There would be a case for adopting the ACE quite independently of any moves to reform the personal income tax in the direction of the RRA. But if the RRA is adopted either the ACE or the cash-flow corporate tax become virtually mandatory.

The RRA is a more direct method of taxing economic rents at the individual level than the CFCT, given the caveats on the extent to which the CFCT does in fact tax rents. But the RRA shares with the CFCT the difficulty that the ideal tax treatment of owner-occupied housing might be politically unacceptable. The RRA ideally treats housing imputed rent as a flow of income, and taxes capital gains; however no tax is applied if the total yield from these 2 sources does not exceed the rate of return 'allowed" by the RRA (Mirrlees 2011, p. 400). As with the CFCT, the inability to tax housing properly becomes less economically costly under the RRA. But this is because the general taxation of capital becomes lighter.

The revenue potential of a comprehensive RRA is about twice that of the current income tax – that is, around $120 billion per annum, based on my (tentative) estimate that economic rents are two thirds of the total return to capital. Mirrlees observes that as a practical reform proposal, the RRA has potential advantages over the pure expenditure tax approach recommended in the Meade Report (1978): "The RRA collects tax revenue up front and provides tax relief only as returns are realized, making the transition to it comparatively straightforward. It also mitigates the risk of loss of revenue occurring as a result of those who did the saving avoiding future tax liability by moving abroad before they draw down their savings. In the context of increased international migration, this is an important consideration" (Mirrlees et al. 2012). These sorts of considerations led Mirrlees to favour a RRT over a CFCT, but they also appear to favour the ZT.

7.2 THE Z-TAX

The Z-tax is my proposal for a form of cash flow tax which is meant to be easy to administer and has a number of advantages over the CFCT or the RRA. It is in fact a hybrid of these 2 schemes. It comes in 3 different forms depending on the objective being sought.

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[44] Mirrlees recommended an imputation system. This is not intrinsic to the ACE.

The idea is simple. Unlimited EET accounts would be permitted but instead of paying a tax rebate for contributions to such accounts, a tax credit would be attached to the account (calculated at the taxpayers' marginal rate) and the credit would be up scaled each year. In the ZT-RRA the uplift factor is an interest rate related to the government bond rate (at the moment interest on say the 10-year bond is a bit over 2.7%). The tax credit would be adjusted each year according to net inflows into the account. It is then an offset to tax otherwise payable when savings are drawn down. The outcome can be described as TEt.

Note that the Z-tax parameters are flexible. If the tax rebates are increased annually by only the inflation rate, the tax becomes a form of indexed income tax (ZT-IT or ZT-ind) which however provides for lifetime income tax averaging and rollover and deferral of capital gains (with deemed realisation at time of death). Thus the treatment of capital income moves closer to an ET the longer savings are held. This may not be a bad thing – certainly it is consistent with the views of the Henry Report on capital income taxation.[45]

Alternatively if the interest rate on the tax credits is raised to be similar to average real return on savings the tax base becomes similar to the EET (ZT-ET) except that there is a tax on returns above the normal rate and a subsidy on returns that fall below the normal rate. (If there were unused tax credits left in the account at the time of final dispersal or death the ATO would pay these out.) This becomes a more egalitarian tax system than the ET, albeit that its economic properties are similar.

Conceptually we have:

- A wage tax (pre-paid ET), plus
- A cash flow tax (post-paid ET) where the weight of tax is calibrated to
    (a) reflect the prior pre-payment of wage tax
    (b) reflect the tax's aim – i.e., to tax income, or rents, or super-profits

In effect under the ZT-RRA the revenue authority owns a share of all investments in the ZT account and shares in the proceeds in proportion to the tax rate – just as in the case of the CFCT. In return the authority gives the taxpayer a notional government bond of the same

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[45] It would also be possible to have a formula to offset the benefits of tax deferral, such that the ZT became more like an accruals based income tax. It is not clear why you would do this, however, given the points raised in the text about the distortions arising from the income tax. However if you really want an income tax this is an interesting option, albeit that the formula would be complicated as discussed under the section on income taxation and capital gains.

initial value as its investment share, redeemable only on realisation of the investment. This notional bond, together with its uplift factor, is what creates a neutral savings tax regime.

Note that bank accounts etc. are not expected to earn more than the bond rate and income from them can be exempted. Hence they can be left outside the ZT-RRA and ZT-ET accounts.

Like the CFCT the ZT does not require us to measure capital gains or annual income from capital. The tax authority can treat the ZT account as a 'black box', with the only concern being when monies are paid in or out. This makes for a very simple tax system. However the tax authority needs to keep an annual track of the total value of investments in the box so that tax credits can be paid proportionately to drawdowns; this would also help with compliance.

Moving to a CFCT by allowing taxpayers to access unlimited EET accounts, as advocated in a number of US suggestions for tax reform, poses challenges in the Australian context. Foremost is the issue of government revenue. Allowing taxpayers to take a tax deduction for net savings would defer tax revenue to the future, when the EET accounts are drawn down. Few governments can afford such deferral (although I note it is very beneficial in the context of an ageing population). On the contrary governments are keen to bring revenues forward.

In modelling the possible application of ZT to retirement incomes, it became clear that over a 40 year period the outcome under ZT-IT (indexed) was very similar to the outcome under RRA. ZT-RRA was slightly more generous than RRA (Figure 6). This shows the benefit that accrues to savers from tax deferral under the ZT. As expected, the returns under EET, TEE and ZT-ET all converge. The last assumes a real net rate of return of 4% in the superannuation system.

Figure 6: Net Retirement lump sums under various tax options
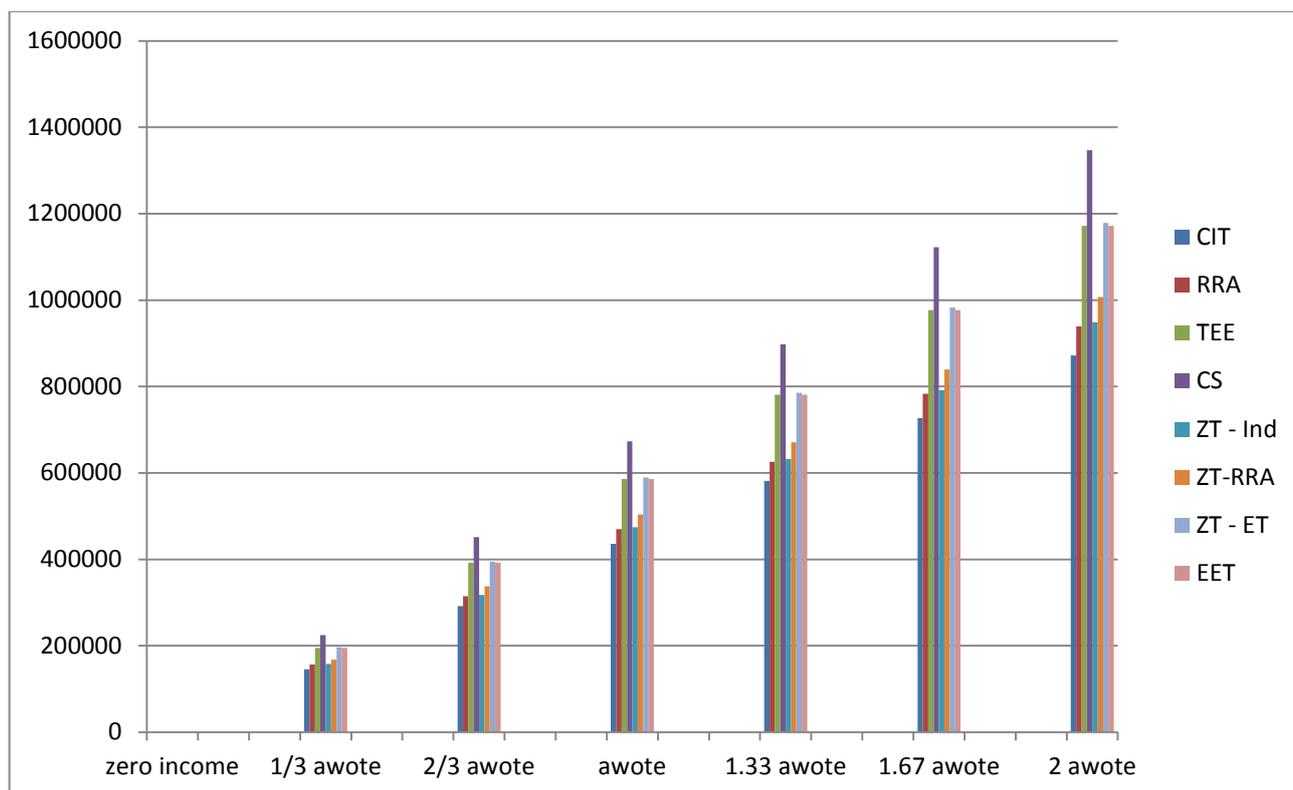
Source: Modelling by author. CS refers to the current retirement tax system. In all cash flow tax systems including ZT the tax rate is 35%. The income tax rate is 35% flat above a threshold of 1/3 AWOTE.

Transition to a ZT in the superannuation system is equally as simple as transition to TEE. It would involve

- Immediate full taxation of contributions, this tax to be paid by funds

- A retrospective tax rebate of say 35% to be given to existing accounts, to be carried forward at the chosen uplift rate

- Cease taxing fund earnings

- New contributions to attract additional tax rebates calculated as if the saving were deductible (i.e., equal to the tax paid by funds) [46] - these are added to the prior tax rebate

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[46] In one method the offset would be paid in proportion to its share of grossed up total assets in the account – i.e., inclusive of the tax credit, which is treated akin to the franking tax credit for dividend distributions. In the modelling for a saver on AWOTE in year 1 (Figure 6) the gross contribution is $7,296 but tax is paid (by the fund) of $2,554 (35%)

- On payout the tax rebates are added to the cash payout on a proportional basis and tax paid on the grossed up amount, netting out the tax rebate.

Note that the various forms of ZT allow flexibility for governments of different political views to take differing views on how heavily to tax savings, between the extremes of uplift factors of inflation only, or uplift of the full expected return on assets (which amounts to nil tax on asset returns). Only this last option is fully inter-temporally neutral, but deviations from full neutrality are likely to be far less costly that the current hybrid ET/IT.

Compared to RRA the Z-tax is much simpler. Compared to EET, the Z-tax is slightly more complicated but brings forward revenue very strongly. It also falls more explicitly on economic rents, hence raises more revenue. It works better than EET when taxpayers move to an overseas domicile, and on death (as tax owing will be much less).

As noted above bank accounts can be left outside the ZT accounts. However there needs to be provision to leave cash inside such accounts in the event of rollovers. These accounts offer full and automatic rollover relief but in some cases cash will be in the account pending purchase of the new asset.

In each year the tax rebate is updated as:

1. tax rebate brought forward from prior year plus uplift rate

2. additional tax rebates attributable to net new savings, or negative tax rebate attributable to net dissaving

3. Borrowings and repayments have no tax effect. The ZT system is only interested in net payments into and from the box.

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leaving a net contribution of $4,743. A tax credit of $2554 is put in the account – note that this is 53.8% of the net contribution, not 35%. The net contributions accumulate free of tax at 4% real, creating a lump sum of $589,318 in year 41. The tax credits accumulate at the ZT rate (being say 1.5% real in the case of the ZT-RRA) and amount to $185,301 in year 41. We gross up the lump sum and tax credit (total $774,619) and apply tax of 35% (assuming full drawdown) = $271,116. We deduct the tax credit leaving tax payable $85,816; net lump sum = $503,502. For annual payouts, the same maths applies but in proportion.

Alternatively we can use a simplified calculation, where the tax credit is 35% of the net of tax contribution of $4743. In this calculation the accumulated tax credit comes to $120,464; tax payable on the lump sum is $205,071 less accumulated tax credit equals $84607 and net lump sum is $501,311 (the correct result, slight differences due to rounding). This simpler approach with no grossing up is the method used in the text, but the first method more accurately describes the ZT conceptually.

The tax credit brought forward is a rolling amount and does not require recourse to historical records, quite unlike the calculation of basis for the capital gains tax.

7.2.1 Tax treatment of borrowings

If the Z-tax is used to tax superannuation we need have little regard to borrowings, which are generally not allowed and which appear likely to be phased out to the extent that they are currently possible. However if the Z-tax is to become the general treatment of capital income it is essential that borrowings be treated appropriately. In fact the treatment turns out to be very simple – borrowings are simply disregarded.

We consider two possibilities. First, (Case 1) borrowing takes place inside the ZT "box". This borrowing does not increase the tax rebate given for investment in the box and repayments of principal and interest are disregarded – although obviously they reduce the sums available for payout at a later date.

Consider the example where $100 borrowing finances a $100 investment. Plod achieves 4% real, Gates achieves 100% real. Borrowing cost is 4% real. Tax rate is 50%. In Case 1 there is no flow of equity into the box, hence the tax rebate carried forward is zero. Plod pays the lender back $104 after 1 year and is left with zero gain and zero tax. Gates pays back $104 and is left with $96 which on payout attracts a tax liability of $48, leaving $48. Tax takes half the economic profit, as intended.

Case 2 involves borrowing outside the box, which then finances an equity injection into the box. The $100 injected attracts a tax rebate of $50 which is worth $52 after 1 year.[47] Plod draws down $104, his tax bill ($52) and rebate are precisely offset so no tax payable. His net $104 goes back to the lender, leaving a net return of nil. Gates has $200 after 1 year, his tax bill is $100-52= 48, leaving $152; he repays the lender $104 leaving $48 which again is half the economic profit from the investment.

7.2.2 Tax treatment of housing

It is highly desirable that housing be bought into the purview of the Z-tax system, as the current TEE treatment fails to pick up economic rents and the historical total return to housing is quite high in Australia - certainly comparable to the 7%-plus historic real returns from equity investments. With gearing it is even higher.

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[47] I here assume a 4% real uplift factor – e.g. ZT-ET. I use this factor in the modelling for superannuation lump sums.

With a voluntary transition to a ZT one way to push people into the new system is to tax existing forms of wealth more heavily. I have elsewhere suggested some form of annual wealth tax which would act as an alternative minimum tax on capital income and fall, inter alia, on owner occupied housing (Ingles 2015a). Z-tax accounts could be exempted from the annual wealth tax in order to push people towards this form of saving.

It is essential that imputed rent be included in the ZT base. For example 3% of the property value might be deemed to be imputed rent and added to the taxpayer's taxable income each year. This might be taxed in other ways, e.g., a 1% property tax as a proxy for taxing the imputed rent implies a 3% real yield and a 33% marginal tax rate.

7.2.3 Business tax implications

Small business would have the same option to enter into the Z-tax box system as savers. We would not need to account for depreciation; interest, capital gains etc. but rather we need only monitor net flows into and out of the box. The latter would be taxable income split, as appropriate, between the owners of the small business. For small business there might not be a separate business income tax.

For large business the situation is more complicated. The cash-flow treatment of personal savings is consistent with a cash flow tax at the business level on the classical system (i.e. no imputation). The business tax could be a simple S-base – i.e. based on net flows to or from shareholders or a modified S-base using the ZT. However there might not be a voluntary transition to the new tax. The cash flow business tax acts as a capital levy on 'old' business capital and also as a tax on pure profits (rents).

Such rents arise from the oligopolistic structure of the Australian economy. They also arise in the mining sector. The first iteration of the MRRT was in fact a form of ZT (costs were uplifted at the bond rate) but with the crucial qualification that it was retrospective – i.e., it did not provide an adequate credit for pre-existing capital. This became politically explosive. Ideally the business CFCT could eventually replace mineral royalties levied by the States, which are very inefficient and costly taxes.

7.3 AN EXPENDITURE TAX

The Henry Review notes that there are two forms of ET; the pre-paid (TEE) and the post-paid (EET). Under the pre-paid approach returns from saving are simply exempted; both

components of the reward for saving are tax free. This is the approach used in the current tax treatment of housing (this is effectively a wage tax). Stewart notes, "The current Australian tax treatment approximates a consumption tax treatment of housing" (2012 p287).

Under the post-paid approach savings are deducted from assessable income in the year they are made but added back in in the year that they are liquidated and consumed. We don't have to measure expenditure directly; rather we rely on the accounting identity that expenditure equals income less net saving. This allows for a simple cash flow tax treatment which means that inflation does not need to be taken into account, quite unlike the CIT which ideally involves complex inflation adjustments.

As noted earlier the CT does not fully tax pure profit, notwithstanding the contrary view in some of the literature, and may only tax around a third of the total return to capital. This is true of both the direct and the indirect options.

7.3.1 The indirect consumption tax option

This involves replacing the income tax and GST with an economy wide indirect consumption tax, possibly along the lines of the simplified GST suggested by the Henry Review (Treasury 2010c, p.279). The main difference between the Henry Review proposal and the current GST is that the invoice method would not be used; rather businesses would simply total up their receipts and expenses and pay tax on the difference (called the subtraction method). Because it is hard to separate out receipts and expenses for particular items such as foodstuffs it is difficult to have specific exemptions under this tax. But this is not a drawback as exemptions do not make a lot of sense so long as distributional objectives can be achieved directly (e.g. through the rate structure of the income tax and through cash payments[48]), and this is quite feasible.

To maintain tax progressivity under an expanded indirect consumption tax there might be cash payments to all individuals based on their family size, which makes this a form of guaranteed minimum income. Ingles (2010) discusses options combining greater weight of consumption taxation with a more comprehensive income tax in the context of a delivery of

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[48] This is the strong view of the Mirrlees Report. "But indirect taxes should not be considered in isolation from the rest of the tax and welfare system. Where the government is able to levy a progressive income tax and pay welfare benefits that vary according to people's needs and characteristics, this will generally prove a much more effective means of meeting its equity objectives" (Mirrlees 2010, p. 156) . And "As we demonstrate in Chapter 9, it is possible to introduce a uniform VAT in the UK while changing the direct tax and benefit system to produce an outcome with similar distributional (and work incentive) features to those that are achieved with extensive zero-rating". (p. 157)

a guaranteed minimum income. Ingles shows that a guaranteed minimum income is feasible, but it would require a degree of political courage which it is hard to envisage becoming a reality. However a partial guaranteed minimum income as part of a large indirect consumption tax is quite feasible.

In the Hall-Rabushka (flat tax) version of this the income tax is abolished and replaced by a very large VAT split into its components with labour income being taxed to individuals at a single rate and a substantial personal exemption. 'Flat tax' is actually a misnomer as the large personal exemption makes this a progressive VAT. Hall has since suggested that there might more appropriately be several tax rates to achieve a greater degree of progressivity (Hall 2011). This would make his proposal similar to the Bradford X-tax, which has several rates applying to labour income (Auerbach 2006). A variant of the X-tax featured in the US President's Advisory Panel (2005, Ch. 7).

All these proposals share the general feature of expenditure taxation, that capital income is lightly taxed with the normal return to capital being largely exempt. Moreover housing continues to receive tax pre-paid treatment.

7.3.2 The cash-flow consumption tax (CFCT)

Expenditure can be taxed directly using the cash-flow approach; this tax can have any desired rate structure as it is levied on individuals. Like other forms of post-paid consumption tax it effectively exempts the normal return to capital, although this is subject to the caveat that tax rates are similar at the time of saving and dissaving.

The disadvantage of this approach is that the cash-flow consumption tax (CFCT) is a relatively untried creation and gives rise to a number of transitional and administrative issues. However a number of proposals have been put forward which appear to address such issues. For example, taxpayers could be given the option of special (registered) investment accounts of the EET variety. This is the same as the treatment that is commonly offered to retirement savings accounts in other parts of the world; the main difference would be that such accounts would not be limited in amount nor to retirement savings.

A nice feature of this idea is that what happens within the EET account need not be monitored by the taxing authority (except perhaps for compliance purposes); the authority can treat them as a 'black box' in which the only official interest is when monies flow in or out. In this approach the income tax treatment of capital income would eventually fall into

disuse as most people would take advantage of the new special accounts. The big disadvantage of this policy is that it would have large up-front costs to revenue, as revenue is deferred for possibly very long periods. This disadvantage is overcome under the ZT.

One of the drawbacks of the CFCT is the political difficulty of applying it to housing. Under the CFCT expenditure on a house would be deductible to the extent it was financed out of owner equity, but imputed income flows (housing services) would be taxable each year as consumption, and sale of a house would give rise to a further tax bill unless the proceeds were rolled over into another registered investment. The net impact is that some part of the economic rents from housing investment would be taxed whereas at the moment the total yield is tax free.

Taxing imputed rent as consumption is also a feature of the RRA. For example, we might tax 3% of the capital value annually as imputed rent, this being reflective of the net rental returns after allowing for likely or average costs. Alternatively we could use direct estimates of net rental value.

To address political concerns CFCT proponents have normally suggested that housing be treated under a tax-pre-paid or TEE approach – that is, with purchase not being deductible and imputed rent and sale not assessable: that is, exactly the same as it is now. But while TEE and EET have been regarded as equivalents we have shown that this is not so. The problem with TEE is that there is no taxation of economic rents from housing investments, and we know that these are substantial.[49]

This CFCT approach is consistent with a cash-flow corporation tax (i.e. a tax on above-normal profits) with immediate expensing (deduction) of all investment.[50] The early example

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[49] Interestingly, and for the same sort of reasons, the Mirrlees Review considered options for taxing housing services on a tax post-paid basis under the UK VAT, which they called a 'housing services tax'(Mirrlees 2011 p. 384). This would be levied as a simple flat percentage of the rental yield of each property, whether it is rented or owner-occupied, to make the tax equivalent to the VAT rate of 17.5 per cent. Under such a tax inputs into housing construction would not be taxed (anomalously, such inputs are not now taxed in the UK; they are in Australia under the GST). This converts the VAT on housing from a pre-paid to a post-paid one, which picks up economic rents. This is an important option because some of indirect tax reforms discussed above could be made more progressive with this approach. Like the Henry Review, Mirrlees recommended a separate tax on land values, designed to tax land rents.

[50] The R-base corporation tax considered by Meade (1978) would abolish deductions for both depreciation and interest payments and replace them with a deduction for investment expenditure when it is incurred. This approach eliminates the tax bias in favour of debt by treating debt and equity financed investments identically, and thus removes the need for dividend imputation. Because of this it could be implemented at relatively little net cost in Australia. The Meade Committee looked at variations of the Brown tax which could also be used to tax financial corporations. The Committee considered an 'R+F' base which would treat new borrowing as a taxable cash inflow, while repayments of both interest and principle would be treated as deductible cash outflows. This tax base can be applied to the financial sector, unlike the R-base. Preserving deductibility of nominal interest payments against the tax base, in common with corporate income taxes in most countries, may help to avoid difficulties in international tax treaties.

of such a tax is the so-called Brown tax, in honour of its inventor E C Brown. Variants of the Brown tax have been used to tax natural resource rents in Australia and overseas (and in the doomed MRRT).

The nice feature of cash flow corporation taxes is that they are held to be relatively simple to administer (see e.g., Edward 2003) and are held to be economically neutral, insofar as the risk-free return to investment is untaxed. The biggest obstacle to such a tax in Australia is that it would be relatively novel and might have difficulties with 'creditability' against foreign tax regimes. This is hugely important since if Australian taxes are not creditable against, say, US corporation tax then double taxation can result with associated disincentives for US corporates to invest in Australia (McLure and Zodrow 2007, p.11). However, if the corporation tax regime continues to be of the income tax type it might be hard to levy a CFCT at the individual level – the two sorts of tax do not mesh well.

The biggest issues in moving to a CFCT are the transition issues. These have been dealt with extensively in reports such as Meade and US Treasury (US Treasury (1974). Many experts believe that the issues are solvable but they do create a significant political obstacle and may be hard for the public to understand. Other issues concern the situation where someone has saved under a CFCT and then moves domicile to another country.

One way to move to a CFCT is on a voluntary basis. Existing regimes of capital income taxation would continue for existing savings. However taxpayers would be offered the option of an unlimited EET account for superannuation and other savings.[51] But there is a problem in Australia; as explained above, and unlike in most OECD countries, superannuation is here taxed more concessionally than EET. So to induce rollover to EET the current taxation of superannuation needs to be tightened. There are good reasons to do this in any case (Ingles 2015b, Ingles and Stewart 2015). Alternatively the new treatment could apply to new accounts and new monies after the changeover date.

The revenue potential of the CFCT is similar to that of the current income tax – that is, around $60 billion per annum, since on my estimate it reaps about a third of the potential CIT tax yield in present value terms. However the CFCT has relatively low current revenue

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[51] These accounts implement CFCT using the EET treatment – exempt contributions, exempt earnings, tax payments. In the US this option is offered for 401k accounts. In the United States, a 401(k) plan is the tax-qualified, defined-contribution pension account defined in subsection 401(k) of the Internal Revenue Code. Under the plan, retirement savings contributions are provided (and sometimes matched) by an employer, deducted from the employee's paycheck before taxation (therefore tax-deferred until withdrawn after retirement or as otherwise permitted), and limited to a maximum pre-tax annual contribution of $18,000 as of 2015. My proposal – like some other US tax reform proposals - would remove restrictions on the size and usage of such accounts.

as tax is deferred until consumption, an obstacle which is overcome by the ZT-ET. The transition mechanism is crucial in working out how much current revenue can be gained.

8. CONCLUSION

This paper has surveyed the range of approaches to taxing capital income, along a spectrum from a comprehensive income tax (CIT) through various hybrid schemes that partially tax capital income, to variants of an expenditure tax. It has also canvassed the arguments for and against taxing capital income.

Ultimately, I argue that some taxation of capital incomes is necessary and appropriate for achievement of a 'just' society, and is likely to make the overall tax system more efficient by reducing the tax wedge on labour incomes. However the appropriate degree of taxation of capital income need not be dictated by the norms of the CIT. It may be, for example, that our goals are best achieved with the degree of wealth taxation inherent in a consumption tax of the post-paid sort, which possibly taxes half of economic rents, or the RRA, which taxes them explicitly. But it is clear that we should not allow the personal tax system to slip gradually into a simple wage tax (allied with a declining tax on corporate incomes), which is where systems such as the US and UK with their heavy reliance on the payroll tax are currently headed.

The CFCT is an elegant solution to many of the problems that bedevil the CIT. The X-tax or flat tax is similarly elegant. The problem with these taxes is that they exempt most of the return to capital, and I have argued in this paper that we should attempt to tax this, at least in part. There is a case for combining an ET with an annual wealth tax as one means of getting closer to an appropriate taxation of capital incomes. Alternatively, it might be felt that full taxation of economic rents, as is possible under a RRA, might be sufficient taxation of these incomes.

The RRA is a less elegant solution to problems in the CIT than the ET options, but it may have a place as an intermediate tax regime if it were felt that the ET was too radical a change. Its corporate counterpart, the ACE, may have a similar role as a first step towards a full-fledged cash flow corporation tax. Because the RRA taxes most of the return to capital there is less need to combine it with an AWT or deeming regime, provided that housing is included in its base. Including housing is less onerous under a RRA than a CIT,

because the risk-free return is not included. But the political difficulties should not be underestimated.

The Z-tax overcomes problems with the RRA and the CFCT, and can be designed to replicate the outcomes under either of these, but its practicality is merely a conjecture at this stage. It needs more development to make it a workable option.

The CFCT or the ZT-ET combines nicely with an annual wealth tax or a deeming regime. As noted earlier these taxes capture some part of the excess return from investments, and the wealth tax can be designed to capture the normal returns. The overall result can be made very close to a CIT outcome – perhaps closer to the CIT ideal than the CIT itself. But that is another paper.

Wealth is not created in a vacuum; it arises because we stand on the shoulders of many others and is enhanced and sustained not only by our own efforts but by the whole of society. Wealth is a much a social as a private creation, and society can and should have a view about how much we allow it to be concentrated. In particular we should be wary of the siren calls of those concerned only about economic efficiency. Exempting capital income from tax would be more efficient, but would we like the results? We already see its destructive effects in the gross inequities of the housing market, as young home buyers are increasingly shut out of this very tax-favoured investment. We should be seeking to redress those sorts of problems through the tax and transfer system to the extent that is possible.

In conclusion, if the taxation of capital were transformed into one of the 'vertical hybrid' tax systems suggested here, as opposed to the current 'horizontal hybrid', the potential efficiency of the income tax system starts to approach the efficiency of taxes such as the GST once one takes account of the distortions created by compensation measures. This creates new options in tax design. Of the various options discussed here, those which fully tax economic rents (e.g., the RRA) seem most appealing, and the cash-flow variants (i.e., the ZT) appear to hold out the promise of an administratively more workable system.

GLOSSARY OF TERMS

ACE	Allowance for Corporate Equity. This is the corporate analogy of the RRA, and works in the same way by allowing corporations to earn the risk-free rate of return on equity tax free. As with the cash-flow corporation tax it taxes economic rents.
AWT	Annual Wealth Tax
CFCT	Cash Flow Consumption Tax – this measures annual consumption by adding net savings or dis-savings to other income.
CIT	Comprehensive Income Tax, also known as the Haig-Simons income tax
CT	Consumption Tax – this can be direct, as in the CFCT, or indirect as in the GST or VAT.
ET	Expenditure Tax, which I use as a generic name for that class of taxes which tax capital income more lightly than the CIT. These include CTs and wage taxes.
EET	In the context of superannuation savings this means Exempt contributions, Exempt earnings and Tax withdrawals. This is equivalent to CFCT treatment
Pre-paid ET	This levies tax up-front by taxing wages only. It is equivalent to TEE.
Post-paid ET	This levies tax when income is consumed, and is equivalent to EET.
GMI	Guaranteed Minimum Income
GST	Goods and Services Tax. This is the Australian name for the VAT.
IT	Income Tax
ITSYR	Income Tax with Savings Yield Remission – Meade's term for a wage tax
RRA	Rate of Return Allowance. This is a method to modify the income tax so as to exempt the risk-free rate of return, which can be proxied by the government bond rate.
TEE	Tax contributions, Exempt earnings and Exempt withdrawals. This is equivalent to a wage tax.
VAT	Value Added Tax. This is form of consumption tax which is normally levied indirectly (i.e. on firms) but can be made into a direct tax on individuals using a system such as Hall-Rabushka's or the Bradford X-tax.
X-tax	This is a form of VAT where wages are deducted from the tax base for firms and taxed progressively at the individual level.
Z-tax	This is the authors' proposal for an ET levied on a cash-flow basis but utilising Tet

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