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Lower Personal Income Tax Rates

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Current personal income taxation

- Collect $170 b in 2013-14, and 40% of total government taxation revenue.

- Relatively broad base. But, tax expenditures (Treasury, 2016) for both labour income and especially for capital income with a hybrid mess of different tax systems and effective tax rates on different forms of capital income. Individual base (vs household base for means testing most social security payments). Residence base (vs source base for corporate income tax). Nominal income rather than real income.

- Progressive tax rate schedule. But, simplicity confounded by Medicare Levy, LITO, temporary budget repair levy. Principal tax instrument for progressive taxation to meet society vertical equity goals. Because those on higher incomes make more use of exemptions and deductions from a comprehensive Haig-Simons income base, the average effective tax rate is less progressive than the statutory rate schedule.

Context for changed personal income taxation rate schedule

- A broader income base and lower rate package. Labour income base broadening could include: remove fringe benefit tax concessions; shift tax on employer super contributions from current flat 15% rate (and 30% if income >$300,000) to personal rate as now for employee contributions, or personal rate less a 5 to 20% discount; remove current arbitrary work expenses deduction; other. Capital income base broadening could include: reduce capital gains tax concessions; restrict negative gearing; reduce accelerated depreciation provisions; add a tax on imputed rent. A broader base and lower rate reform package would: increase efficiency; add to simplicity; improve horizontal equity (with winners (losers) who make less (more) than average use of deductions); and with minimal effects on vertical equity and revenue.

- Return of fiscal drag. Non-indexation of tax rate schedule since July 2012 means that all income taxpayers face higher average tax rates, and the effect is regressive, and some move into higher marginal tax rate brackets. Carling and Potter (2015) for example estimate that if no indexation to 2018-19, personal income tax will collect another $16.7 b, those on AWE

will have their average tax rate jump from 18.2% to 21.2%, and on half AWE from 6.4% to 8.1%. Most fiscal drag is due to inflation rather than real wage increases. (Similar estimates from Grattan Institute, 2015, Re:think, 2015, and others).

- Tax mix change reform packages which are approximately aggregate revenue neutral:
    - A larger GST, broader base and/or higher rate, with compensation for low incomes and lower income tax rate schedule. The ensuring reduction in effective tax rate on capital income would generate efficiency benefits with smaller distortions to the mix of household saving and investment. A package can be designed to attain current vertical redistribution (of GST + income tax) across broad income and demographic categories.
    - A larger land tax levied on a broad base (namely the existing local government rate base) to replace conveyance duty and current state narrow-base land tax, with ACT reform an example. A net revenue increase reform package to fund lower personal income tax will result in: efficiency gains with land tax replacing some income tax; a one-off reduction of asset prices for land (assuming asset value equals discounted sum of future rental income flows net of land tax, conveyance duty, rates), which might be argued to be an inter-generation redistribution from the mature age (who have benefited from massive house price rises over the past 30 years) to the younger generation with current low owner home wealth; an increase in state government own taxation revenue and reduced VFI.
- Alternatively, others argue for an increase of personal income tax rates to fund promised higher outlays on the aged, health, NDIS, education, defence and foreign aid as part of a package to reduce the structural deficit.

Some Effects of Lower Income Tax Rates

It is useful to consider the effects of lower income tax rates on the labour income, Yl, and capital income, Yk, components of income, Y = Yl + Yk. Partial equilibrium (PE) models, and computable CGE models (CGE) (for example, Treasury work using Cao, et al., 2015, and Centre of Policy Studies, Dixon et al., 2015) can be used. For simplicity, I focus on PE models.

1. **Labour Income**

Figure 1 provides a simple PE model of the long run effects of an income tax on labour income, Yl. The pre-tax world has labour demand D and labour supply S which generates an efficient employment level N and wage rate W. Most econometric studies indicate a more elastic demand of

around -0.5 than of supply, with close to zero for males and about 0.2 for females. Income taxation forces upwards the supply curve to S'. Importantly, the relevant marginal effective tax rate driving changes in employment decisions at the extensive margin (to work or not) and the intensive margin (to work more or less hours), and also decisions to invest in skill acquisition and effort, varies with interaction of (a) the progressive income tax rate schedule and (b) means testing of social security payments, and for employees particularly Family Benefits. For many the EMTR exceeds 50% and for some 70%.

Figure 1 Effects of tax on YI
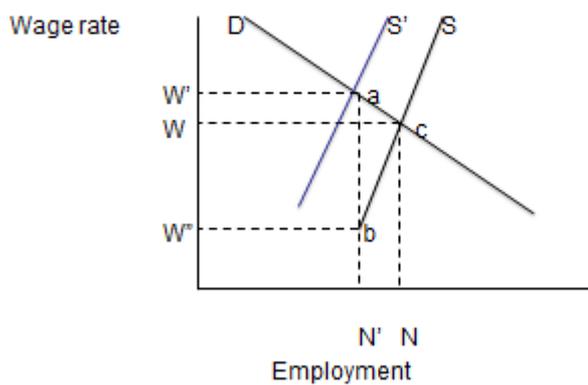
The income tax on labour, T, shifts supply upwards from S to S' = S + T. It has the following effects

- Market wage rises a little to W',
- Most of the tax is borne by employee as lower take-home pay of W", because demand more elastic than supply,
- Employment falls a little from N to N', and
- Deadweight cost of area abc. The efficiency cost is greater: the more elastic demand; the more elastic supply; and it increases with the square of the marginal tax rate.

Available estimates of the marginal excess burden of higher labour taxes per dollar of extra tax revenue include: CGE model by Treasury, 2015, assuming a flat tax rate on a representative household of 16.7%, ES of 0.2, Ed of 0.4, for 21 cents; PE model by Cambell and Bond, 1997, an average of 19 to 24 cents per dollar of extra revenue, and wide variations across different individuals with different supply elasticities and EMTRs. Arguably, the Treasury estimate is low, with many part-

time employees (about 30% of workforce) facing much higher EMTRs and with higher supply elasticites.

Short run adjustments add sticky wage responses and changes in unemployment. In general this means a tax increase has smaller effects on the wage and employment in the short run.

2. Capital Income

Changes in the taxation of resident capital income (assuming no changes in Australian taxation of corporations and withholding taxes affecting Australian source capital income on investments by non-residents) might affect Australian aggregate saving and aggregate investment. The saving effect may be small because of (a) offsetting substitution and income effects conform with available estimates of low values for the elasticity of savings (with a review in Daley, Coates and Wood, 2015, Figure 2.4) and (b) the muted effect of lower income tax rates on the average effective tax rate on aggregate saving because of the hybrid tax treatment of different savings (discussed below). To the extent a lower tax burden on domestic saving induces an increase in domestic saving, together with a less than infinite elastic supply of non-resident savings function to Australian investors, lower income taxation would result in some substitution of increased domestic saving for foreign funds, a fall in the required pre-tax return on Australian investments, and an increase in investment.

A far more important effect of lower income tax rates for Australian saving and investment will flow from effects of reduced taxation distortions to the mix of saving and investment across owner occupied homes, other property, financial deposits, shares, superannuation, unincorporated business, and investments off-shore. Important to understanding these effects is the current system of taxation of capital income. It is a hybrid of different tax treatments of the different options, and the resulting very different effective tax rates.

Table 1 provides a summary of the hybrid of different tax systems applied to capital income earned on different resident savings options. Using modified versions of the Table 1 framework, Henry, et al., 2009, Chart A1-19, Re:think, 2015, Table 4.1, Daley et al., 2015, Figure 2.3, and others provide estimates of the very different resulting effective tax rates for households with different incomes and marginal tax rates. The most important household wealth item, owner occupied housing, about 43% of average household wealth, faces an effective consumption tax treatment and zero tax on capital income.[1] At the other extreme, the earnings on savings invested in financial institutions and the dividend income component of shares face a nominal income tax treatment at the personal rate

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[1] In addition, owner occupied homes, unlike other household wealth, are exempt in the means test for the Age Pension.

(and a much higher real income tax rate even at today's low inflation). Capital income on investments in other property, unincorporated businesses and employee contributions to superannuation face an effective capital income tax rate less than the statutory tax rate. For employer contributions to superannuation, including the 9.5% Superannuation Guarantee, the concession relative to an income tax benchmark is small for those on low incomes, and a large concession for those on high incomes (and for some a lower effective rate than for own homes).

Table 1 Hybrid Taxation of Different Resident Capital Incomes

(Tax system has three components: tax on deposits, tax on earnings, tax on withdrawals. T denotes progressive personal rate, t <T concession rate, and E exempt)

Savings Option	Share	Tax System	Some Details
Owner occupied home	43%	TEE	Imputed rent and capital gains exempt
Other property	15%	TtE	Nominal rent less expenses; 0.5 rate on realised capital gains
Financial Deposit	8%	TTE	
Shares-income distributed -retained earnings	2%	TTE TXE	Imputation system X includes company tax plus 0.5 of personal rate on realised capital gains
Unincorporated business	6%	TtE	Concessions for depreciation, capital gains, house expenditure, income splitting
Superannuation-employer contr. -employee contr.	15%	ttE TtE	Flat 15% on most deposits. For both, flat 15% on earnings and 10% on capital gains for earnings during accumulation, and 0% during retirement

Source: Author, and ABS, 6554, Table 9, for shares

The system of hybrid tax treatment of different forms of household capital income has important implications for the effects of lower personal income tax rates:

- The concessions mean a relatively low average tax burden on aggregate household saving. The reduced average dulls the effect of a lower personal tax rate on the aggregate level of household saving; and

- Potential large efficiency gains from lower income tax rates stem from a more neutral pattern of effective tax rates on the choice of the mix of different saving and investment options.

To illustrate the directions of effects of lower personal income tax rates on the mix of different household saving and investment choices consider in Figure 2 the simplified special case of a given aggregate investment pool, $Q^{\wedge}$, allocated between a low (and in this case zero) capital income tax option, $Q1$ for owner occupied homes, and a high income taxed option, $Q2$ for deposits with a bank. Each option has a downward sloping demand curve, $Qi = f(ri)$, where ri is the rate of return. In the absence of capital income taxation, the aggregate saving is split at $Q*$ with equal rates of return. In the absence of market failures, $Q*$ is an efficient allocation.

Figure 2 Effects of different tax rates on different Yk options

Funds allocated to home and deposit
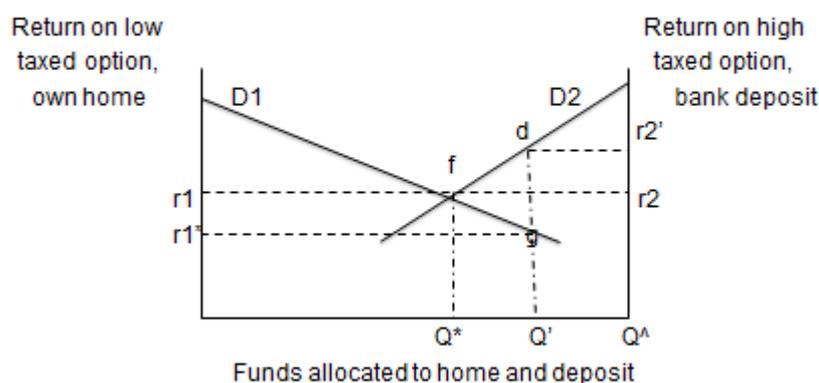
Imposition of a tax on capital income of the bank deposit, but not on the own home, shifts the allocation of funds from $Q*$ to Q'. This change is easiest seen as a result of a downward shift of the D2 curve to $D2' = D2 – T$. A more accurate and detailed model would recognise also cross elasticity of demand effects and shifts in both of the D1 and D2 curves, that is $Di = f(ri, rj)$. At the new equilibrium allocation of funds, the different effective tax burden on the options:

- reallocates funds from the higher taxed to lower taxed options, the shift from $Q*$ to Q'
- raises the pre-tax required return on the taxed option, the shift from $r2$ to $r2'$
- lowers the pre-tax required return on the non-taxed option, the shift from $r1$ to $r1'$

- generates an efficiency loss of area fdg. The efficiency cost is larger the more elastic the option demand curves and it increases more than proportionately with the tax rate differential.

To my knowledge, there are no available estimates for Australia of the efficiency costs of income tax distortions to the mix of saving and investment distortions. Treasury modelling, including Cao et al. (2015) essentially assume away the issue. In particular, only an aggregate of household saving is modelled, so that distortions to the mix of options are not modelled. Further, this restriction seems to explain the Treasury modelling result reported by the Treasurer (2016) of a negligible benefit in a larger GST for smaller income tax reform package. Dixon et al. (2015) with their fiscal CGE model have the important building blocks with portfolios of financial saving and investment decisions across the different options, but without the details of different tax wedges on the different portfolio options using the ideas of Table 1.

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