A Better and Larger GST?

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Abstract

This article argues the case for changes to the Goods and Services Tax (GST) as a key part of fundamental tax reform in Australia. A more comprehensive base would bring gains in efficiency and simplicity, with equity goals better met by the income transfer system. Revenue gains of a broader GST base and/or a higher rate could fund tax mix change packages to replace more distorting state stamp duties and fund lower income tax rates. The tax mix change packages would improve efficiency and simplicity, with no substantial changes to aggregate revenue or to equity.

1. Introduction

Reform of the Goods and Services Tax (GST) has been off the political agenda. The GST was explicitly excluded from the terms of reference of the Henry Review (Henry et al. 2010: viii), although a brief chapter D2 noted opportunities for its reform. The current federal government has been explicit on several occasions that changes to the GST are not being considered, and it was not on the agenda for the October 2011 Tax Forum (Australian Government 2011b). Similarly, the current federal opposition has not advocated taxation reform involving changes to the GST.

However, changes to the GST as part of a wider package of tax reform have logic to achieve a more efficient and simpler tax system. These gains are available with a tax mix change package which is constrained to collect approximately the same current aggregate revenue and which results in about the same distribution pattern. The current GST applies only to about 60 per cent of the potential broad consumption tax base, with New Zealand the practical example of a comprehensive base. Removing tax expenditures and broadening the tax base would bring efficiency gains and simplify the GST.

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The revenue gains of a broader base and/or a higher rate GST can be used to reduce other more distorting taxes. Taxes to be removed or reduced include state stamp duties and income taxes. For example, the Henry Review (Henry et al. 2010: 13) estimate the marginal welfare cost of the current GST at eight cents per dollar revenue versus 68 cents for stamp duties on insurance, 44 cents for the corporate income tax, 35 cents for conveyance duty, and 25 cents for income tax on labour. Equity can be restored by recycling the GST revenue gains as higher social security payment rates and lower income tax rates. These tax mix changes have many of the characteristics of the 'A New Tax System' (ANTS) reforms of 2000 in Australia, and of increases to the VAT in the United Kingdom and the GST in New Zealand in 2010. A further potential gain of an expanded GST is to reduce the magnitude of the vertical fiscal imbalance of current Common-wealth–state financial relations.

Introduced in 2000, the current GST applies to about 60 per cent of private final consumption expenditure at a flat rate of 10 per cent. It is a destination base tax with exports exempt and imports taxed. As in other countries, the invoice-credit method is used. In 2010–11, the GST is estimated to collect $48.2 billion, or 13 per cent of all Australian tax revenue. The Australian GST tax rate is below the New Zealand 15 per cent rate and it is well below that of most OECD countries, with an average standard rate of over 18 per cent where the VAT collects 20 per cent or more of all taxation revenue (OECD 2011).

The remainder of this article provides more details of, and the rationale for, a tax reform package involving a broader based and higher rate Australian GST. In order to preserve approximate vertical equity of the status quo, some of the GST revenue gain would be recycled to lower the income tax rate schedule and to increase social security payment rates as more direct and explicit redistributive instruments. Other revenue would reduce, and in some cases replace, relatively more distorting and inefficient state taxes. A key part of the efficiency arguments for a tax mix change from a production and origin base income tax to a con-sumption and destination base GST derives from differences in the elasticities of responses of factor supplies relative to consumption. Arguments to replace payroll tax, especially by many business lobby groups, will be questioned. In addition to the efficiency gains, tax reform involving a more comprehensive GST tax base and removing some state taxes will contribute to simplicity and to lower administration and compliance costs.

2. GST Base Broadening and Rate

Relative to a comprehensive consumption base as illustrated by the New Zealand version, the Australian GST exempts expenditures on basic food, water and sewage, health, education and child care. Other concessions are the input tax treatment of financial intermediation and small firm input taxation, and the ex-emption of some imports. Table 1 from the Treasury tax expenditures statement (Treasury 2011) estimates the revenue lost relative to a comprehensive broad-based consumption base and flat 10 per cent rate for 2010–11 of $18.3 billion. This section reviews arguments for broadening the tax base and for maintaining a flat rate for gains in efficiency and simplicity.

Table 1: GST tax expenditures

Expenditure type	Treasury item	$ billion 2010–11
Food	H28	5.9
Water, sewage and drainage	H6	0.7
Health	H17–21	3.8
Education	H16	2.6
Child care	H5	0.6
Financial services	H2–3	3.2
Imports	H10–11	1.2
Total		**18.3**

Source: Treasury (2011).

The exemption of basic food was introduced as a part of the political compromise required for parliamentary passage of the ANTS legislation as an equity measure. While it is true based on ABS data on household income and expenditure (ABS 2006) that food expenditure falls as a share of total expenditure as income rises, the fall is small and aggregate expenditure increases with household income. For 2003–04, for households scaled by equivalent income, the bottom quintile spent $97 per week or 20 per cent of their aggregate expenditure on food and non-alcoholic beverages, while the top quintile spent $203 per week or 15 per cent of their income. As argued by Crawford et al. (2010) for the Mirrlees review of United Kingdom taxation and by the Henry Review (Henry et al. 2010: 286) for Australia, exempting food, or setting a concessional tax rate, is a blunt redistributive instrument relative to the progressive income tax and social security systems. Broadening the GST base to include all food would simplify the system, and it would reduce distortions to consumption choices between food and other 'necessities' now subject to the GST, including clothing and energy.

Similar arguments to those for food can be made to broaden the GST base to include expenditure on water, sewage and drainage.

In introducing the GST, the then Coalition government exempted outlays on education, health and child care primarily because these sectors have heavy government involvement via regulations and direct subsidies (Costello 1998: 93–96). Others have added that these activities involve external benefits, and hence a rationale for subsidy and for equity of opportunity (Cnossen 2010). But, it would be an extraordinary coincidence if the 10 per cent GST rate was the appropriate subsidy, and there are better redistributive instruments. Dickson and White (2010) support the inclusion of health and education in the New Zealand GST for the following reasons. First, inclusion avoids distorting decisions by providers of health, education and childcare services to also produce in-house such ancillary services as cleaning, food preparation and business services. Also, the associated legislation to determine what is exempt adds to complexity. Second, there are private providers, and then some for-profit and others not-for-profit, as well as public providers of health, education and childcare services. Inclusion of health, education and child care in the GST base would result in neutrality of funding these services either via government appropriations — and these are complicated in Australia, with both Commonwealth and state appropriations — or charging

fees for services. Third, in terms of simplicity, the current exemption system involves compliance and administration costs to recover GST paid on inputs. Dickson and White argue that it is no more complex to include these services in the GST. Sustaining the external benefit and equity arguments for subsidising health, education and childcare services likely would mean that some of the first-round revenue gains from bringing these services into the GST base would be refunded as larger explicit, better targeted and more transparent subsidies than now.

Financial services, other than insurance, are input taxed because of challenges in measuring value added for the intermediation services provided. The result is an effective consumption tax rate of less than the statutory 10 per cent to households and an effective rate of greater than 10 per cent for business customers who cannot claim GST on their financial services input purchases. In net, Treasury (2011) estimates a tax expenditure as shown in Table 1. Despite proposals for a cash-flow model (initially by Poddar and English 1997, and more recently for Australia by Henry et al. 2010, ch. D1), all countries with a VAT or GST still apply an input tax model to financial services.

Other tax expenditures contributing to a less than comprehensive GST tax base shown in Table 1 are justified primarily because of relatively high administration and compliance costs. These include exemptions for some imported services and for low dollar sum imports by individuals, and the input taxation option for small businesses. There may be opportunities for fine-tuning these arrangements in response to changing circumstances and information. However, changes in the near future are unlikely to have large revenue effects.

At least three sets of arguments have been made for a departure from the simplicity of a flat rate of GST tax. First, and evident in the European VAT taxes, is a lower rate, including a zero rate, on 'necessities' for reasons of vertical equity. As discussed above, there is a consensus among economists, and many others, that using a multiple rate GST is a second best instrument to meet society equity objectives relative to the well-developed progressive income tax and social security system (Crawford et al. 2010; Henry et al. 2010, and references therein). Second, departures from a flat rate on all goods and services might be contemplated for those products with external costs or benefits. In general, special taxes are in place to correct for external costs associated with the consumption of alcohol, tobacco and gambling, and on the use of motor vehicles as a user fee for government-provided road infrastructure and for pollution and congestion external costs. Many argue that the current special taxes on these products are in need of reform as a separate and distinct exercise (for example, Henry et al. 2010, chs E3, E5, E6 and E7). Much current public debate is for placing a price on greenhouse gas emissions, and the government in its Clean Energy Future (Australian Government 2011a) proposes a carbon tax from July 2012 with an emissions trading scheme from July 2015. As the use of motor vehicles involves business use as an intermediate input as well as final consumption, specific market failure correction taxes will be better targeted than departures from a flat rate of tax on consumption outlays.

A third argument for different rates of a GST on different goods and services relates to potential distortions to household decisions about leisure and home production. Neither is taxed by a broad-based general consumption or income tax. In theory, higher consumption tax rates on goods and services complementary with the untaxed items, and lower tax rates on substitutes, would provide efficiency gains. As reviewed by Crawford et al. (2010), while correct in theory, the available empirical evidence on the cross-elasticities is far from settled, and the potential efficiency gains of different GST tax rates to correct distortions to leisure and home production decisions are likely to be small relative to the additional costs of administration and compliance.

3. Packages to Reduce Some State Taxes

One set of tax reform package options is to use the revenue gain of a broader base and/or higher rate GST to replace more distorting and inefficient state taxes. The proposals represent a continuation of the philosophy of the ANTS package of 2000, in which about 80 per cent of the GST revenue was used to replace the Wholesale Sales Tax and a number of state indirect taxes, mostly on financial transactions. State taxes for consideration of removal or reduction this round in order of priority are stamp duties on insurance, conveyance duty on the transfer of property, stamp duty on the registration of motor vehicles, and payroll tax. In 2009–10, these taxes collected $3.1 billion, $12.3 billion, $2.1 billion and $16.8 billion, respectively (ABS 2011). Inefficiencies of these taxes in their present form have been articulated in the Henry Review (Henry et al. 2010: 13 and chs E3, E8 and G2) and in preceding state taxation inquiries (including Freebairn 2009; Gabbitas and Eldridge 1998; Harvey et al. 2001; IPART 2008; and others). This section discusses the efficiency and simplicity arguments for replacing each of these state taxes with an enlarged GST or other taxes, and where warranted any implications for the design of the reform package.

Stamp duty at a rate of from 7.5 to 11 per cent (depending on the state) is levied on the gross premium of insurance on buildings and contents, professional and other liabilities, health, and public liability. This is a tax on a tax in addition to the 10 per cent GST levied on the estimated value-added component of the premium. As a result, the effective tax rate of the stamp duty on the component of the gross insurance premium represented by the value added for the financial intermediation services provided is much higher than the statutory rate. There is no market failure argument for a special tax on insurance; in fact, asymmetric information leading to problems of adverse selection and moral hazard points to a subsidy. The relatively high GST plus stamp duty tax wedge on insurance when compared with the GST on other goods and services distorts decisions to under-insure or to not insure. Evidence of such responses and then efficiency losses is provided by Tooth (2007), and by anecdotal information on the high levels of reported non- and under-insurance by people adversely affected by recent natural disasters. Much of the special taxation on insurance is a business input tax which distorts business production decisions and cascades as a tax-on-a-tax in ad hoc levels through to differential higher consumer product prices.

A tax reform package with a higher but uniform GST rate on a wider base to fund the replacement of stamp duties on insurance would remove distortions and high efficiency costs and would simplify taxation.

Conveyance duty on the transfer of property by businesses and households has been assessed as a highly distorting and relatively inefficient tax that should be high on the 'to be removed' list (Henry et al. 2010: 13 and ch. C2 and references therein). The base is the asset value of land plus buildings, and a progressive rate schedule is applied.

In the case of business property, conveyance duty is a tax on a business input. As an additional selective input tax, it distorts the choice of production methods. Also, the higher costs are passed on to distort against the production and consumption of building-intensive products. As a transaction tax, conveyance duty reduces the transfer of buildings from lower value to higher value uses and owners. Replacing conveyance duty on business property would remove a relatively inefficient tax.

The efficiency effects of conveyance duty on the transfer of owner-occupied housing are different. As a transaction tax, conveyance duty distorts the reallocation of houses among different uses when relative values change with changes in family circumstances, location of employment, and so forth. Because of the very large concessions in the income taxation treatment of housing relative to other investment choice options, including no income tax on imputed rent or on capital gains, there may be a second best argument for additional or special consumption taxation of owner-occupied housing. But, conveyance duty as a transaction tax is low on the list of better options relative to a recurrent tax on imputed income or wealth, or a land tax. Compared with conveyance duty, which is paid only in the event of a sale, the recurrent taxes are levied independent of whether ownership changes or not.

So, where might a higher revenue yielding GST rank as a replacement for stamp duty on the transfer of property? In terms of efficiency, the first best option is a more comprehensive and flat rate land tax levied on the unimproved value of land. Also, over time and recognising asset price adjustments, the equity effects of land tax and conveyance duty are similar. However, since conveyance duty applies to investments in buildings and improvements, as well as the unimproved land asset, a reformed land tax is unlikely to replace all the $16.8 billion of revenue collected by conveyance duty. In the case of owner-occupied housing, other options which would be less distorting than stamp duty, and in particular in reducing distortions to the allocation of property to its most valuable uses and owners, include an annual land or wealth tax, or income tax on imputed rent. In addition to the efficiency gains of replacing conveyance duty with an annual tax on asset values, the asset tax would provide a more stable and predictable stream of tax revenues. If these options are considered too challenging for political acceptance reasons, a higher revenue yielding replacement GST would bring gains in efficiency and revenue stability as a second best reform option.

Stamp duty on the transfer of ownership of motor vehicles distorts the pattern of ownership and age structure of the vehicle stock. However, as noted by

the Henry Review (Henry et al. 2010, chs C2 and G2), reform of this stamp duty would be better considered as part of a much wider reform package involving replacement of the current fuel excise and a number of state taxes on motor vehicles, including stamp duty. Ideally, the reform package would consist of a user charge for government-provided road services, and taxes equal to the marginal external costs of congestion and pollution associated with the use of motor vehicles.

Similarities between a broad-based GST and a broad-based payroll tax mean that removing distortions to the current narrow-based payroll tax is a higher priority reform option than replacing it with a larger revenue-earning GST. In the long run, and tax reform is more about quasi-constitutional change rather than the short run, a broad-based flat rate tax on labour income and a broad-based flat rate tax on consumption expenditure have similar effects on economic behaviour and they have a similar economic incidence of the tax burden (Crawford et al. 2010, and references therein). With labour supply less elastic than labour demand, most of the labour tax is passed back to households as lower market wages than otherwise to ensure full employment. With highly elastic supply functions for most products, most of the GST is passed forward to households as higher prices than otherwise. Both taxes reduce the effective purchasing power per hour of work and impose similar burdens on, and distortions to, the supply of labour. Claims by some business lobby groups (noted in Henry et al. 2010: 294 and IPART 2008) that a payroll tax is a tax on employment focus only on a short run with fixed market wage rates. Also, they do not recognise that a common objective of both taxes is to reallocate some private sector spending and employment to the public sector. Turning to decisions on inter-temporal consumption and saving, comprehensive versions of either a broad-based consumption tax or labour income tax result in neutrality of treatment of the decision options. The GST does not fall on income saved, whereas the payroll tax does not fall on the capital income earned on savings.

However, in the short run, there are differences between a GST and a payroll tax which are important to the time paths of adjustment of the economy and to tax incidence. For example, as imposed in Australia, the payroll tax has an origin base whereas the GST has a destination base. An increase in payroll tax would induce an exchange rate appreciation that is not required with an increase in the GST. Another important transition difference is that an increase in the GST would fall on past savings when they are spent, whereas payroll tax would continue to exempt the income earned on past savings. The GST that falls on past savings when spent has a one-off efficiency gain, but also a one-off adverse redistributive effect on owners of the initial savings.

Comprehensive tax reform could include retaining both the GST and the payroll tax, but broadening the bases of both taxes. The current payroll tax base covers less than half of a comprehensive base, largely because of the small firm exemption. The exemption distorts the choice of business structure and firm size, and the ability to exploit economies of scale and scope. In neither case is there an articulated market failure correction purpose. Of course, as noted above,

the current GST also exempts about 40 per cent of its potential base. Both taxes are major sources of state revenue, and broader bases for each would significantly reduce the extent of vertical fiscal imbalance. Granted the similar long-term economic effects of the two taxes, a reason to retain both is that they have different relative administrative strengths to minimise tax evasion and avoidance.

A tax reform package involving an increase in GST revenue to fund replacement of some less efficient state taxes can be seen as rationalising the system of indirect taxation. An aggregate revenue-neutral package will also have a close to zero net effect on the average cost of living, on the conventional assumption that most of the different indirect taxes are passed forward to households as higher prices. It is certain that there will be some winners and losers from a static, no behaviour response analysis because different households purchase different combinations of goods and services. But, worthwhile reform is a positive sum game, because of reductions in tax distortion costs and because of the saving of operating costs with a simpler system. Whether a reform package will require explicit transfers to compensate remaining losers will depend on empirical estimates of the likely magnitude of losses and the practical feasibility of, and the revenue cost of, compensation.

4. Packages to Reduce Income Tax

Some of the revenue gain from a broader base and/or higher rate GST could be used to fund lower income tax rates. The reform package could be roughly revenue neutral and retain the current pattern of distribution, and at the same time generate efficiency and larger economy benefits. Such a larger indirect tax and smaller direct tax package follows the spirit of the Australian ANTS reforms of 2000 and the tax mix changes in the United Kingdom and New Zealand in 2010.

A simple aggregate model of a small net capital importing trading economy illustrates many of the key efficiency and equity effects of a tax mix change. There are equations for the following: the three sources of household income from labour, capital and social security payments (1); the allocation of current income between consumption and saving (2); a production function drawing on the inputs of labour, capital supplied domestically and foreign capital inflow, and technology (3); and identities for the accumulation of domestic wealth or capital (4), for aggregate current period consumption funded from current income and past savings (5), and for the production capital input provided from domestic and overseas sources (6). Flat rate taxes on comprehensive bases for income and consumption are added as appropriate.

$$Y^r_t = L_t.w(1-ty) + W_{t-1}.r(1-ty) + SS_t \qquad (1)$$

$$= C^d_t + S_t \qquad (2)$$

$$Y_t = f(L_t, K_t, T) \qquad (3)$$

$$W_t = \alpha.W_{t-1}(1+r(1-ty)) + S_t \qquad (4)$$

$$C_t / (1+tc) = C^d_t + (1-\alpha).W_{t-1} \qquad (5)$$

$$K_t = W_{t-1} + KF_t \qquad (6)$$

where, Y^r is the disposable income of residents, Y is gross domestic product, L is labour supplied and w the market wage rate, W is the stock of domestic wealth and of domestic owned capital earning a market rate of return r, SS is social security payments, C^d and S are current disposable income consumed and saved, respectively, K is the capital stock in production, T is technology, α is the share of domestic wealth reinvested with 1 − α spent on current consumption, KF is the stock of foreign owned capital used in Australian production, and ty and tc are the flat rates of tax on income and consumption, respectively. The aggregate revenue neutral tax mix package involves an increase in tc to fund a reduction of ty.

Consider first some design features and restrictions of a package to achieve neutrality of aggregate tax revenue and of equity. The combination of a consumption or destination base and of business price-setting methods closely aligned to the marginal cost for most goods and services results in most of any increase in GST or tc being passed forward to households as higher prices and a higher cost of living. Assessments of the 1985 GST in New Zealand by Stephens (1989), and of the Australian 2000 ANTS package by Treasury (2003) and Valadkhani (2005), provide empirical support for the pass forward tax incidence hypothesis. Restoring the effective purchasing power of households dependent on social security income transfers, SS in (1), requires either an explicit one-off increase of the transfer payments or automatic indexation to an index of the cost of living, normally the CPI.

In the case of income tax payers, at a general level the increase of the GST, an increase of tc in (4), funds reductions in the income tax rates falling on labour and capital income, ty of (1). More specifically, for Australia's progressive income tax rate schedule, taxpayers with taxable incomes above the tax-free threshold can have their effective purchasing power restored with a one-off increase in the tax-free threshold and reductions of non-zero marginal tax rates. Overall, a more progressive and smaller revenue-raising income tax offsets the larger flat rate consumption tax. Such a well-designed aggregate revenue-neutral tax mix change package will leave broad groups of households classified by different levels of income on average with the same effective purchasing power. However, within each group there will be subgroups of winners and losers because of different propensities to spend, and in the case of base broadening because of different mixes of goods and services purchased.

The static and dynamic efficiency arguments for a tax mix change are cast in the context of Australia as a small open economy. The New Zealand Tax Working Group (2010) cogently argued the case for a shift from income taxation with its origin or production base to a consumption tax with its destination base. This analysis provided the framework for the New Zealand tax mix change of 2010 involving an increase in its GST from 12.5 per cent to 15 per cent and reductions in income taxation (described in Gemmell 2010). Using related arguments, the Henry Review (Henry et al. 2010, including ch. 5) argued for shifting the income tax burden from the relatively more elastic in supply capital to the less elastic in supply labour, building on optimal tax theory (initially developed by

Ramsey 1927 and explained in texts such as Stiglitz 2000). Also, the efficiency gains of an increase in consumption tax to fund a lower income tax follow from estimates that the marginal social cost of another dollar of corporate income or personal income tax is several times the marginal social cost of another dollar of GST (Henry et al. 2010: 13).

In the case of tax distortions to labour market decisions, at both the intensive and the extensive margins, a tax mix change package which approximately is aggregate revenue neutral and distribution neutral has minimal effects (Crawford et al. 2010). In the context of our model above, the direct plus indirect tax wedge, WD, between the labour cost paid by an employer and the effective after tax purchasing power for the employee is given by

$$WD = ty + (1 - ty)\, tc \tag{7}$$

To retain distribution neutrality, the tax mix change package reduces the income tax rate ty to increase nominal disposable income to offset the effects of the increase in the GST rate tc on the higher nominal outlay cost of consumption so that (7) remains unchanged. That is, there will be no change in the incentive and reward per hour worked.

The income tax rate reduction component of a tax mix change reduces the effective rate of taxation of capital income. Strictly, the reduction applies to the components of the capital income for the risk-free time value of waiting and the inflation premium, but not to the above-normal return associated with monopoly power, entrepreneurial activity and luck. A reduction of ty affects decisions on the levels of domestic saving in (2) and, more importantly, the foreign capital inflow (6), and then the capital stock for production in (3). The opposing substitution and income direction of effects of a higher after tax return on domestic savings mean that the net effect is ambiguous. As a result, econometric estimates of the effects of lower income tax rates and of higher interest rates on the intertemporal pattern of consumption and saving vary in sign and often are not significantly different from zero.

The more likely and significant effect of a tax mix change for Australia is on the level of foreign capital inflow as described in the Henry Review (Henry et al. 2010, ch. B1), the Tax Working Group (2010) and others. Consider initially the simplified case where Australia is a small open economy facing a perfectly elastic supply of capital at a required after Australian tax return of r*. A fall in the Australian tax rate on foreign capital encourages an increase in capital inflow into Australia to capture the higher after tax returns. The capital inflow grows until the resulting increase in the capital stock K, both in (6) and in the production function (3), drives the Australian pre-tax marginal return on capital down to offset the capital income tax rate reduction. In equilibrium, and this may take some time, with a larger capital stock in production, K in (3), aggregate production is greater. Importantly, the productivity of a relatively inelastic in supply labour working with more capital and with more technology embodied in that capital increases. Higher productivity leads to higher real wages, and the increase in real wages distributes efficiency gains of the tax mix change across most households.

For several sets of reasons, the foregoing simplified model overestimates the magnitude of efficiency gains and increase in the size of the economy in real Australia. First, most forms of capital income already receive income tax concessions. Tax concessions include the exemption of imputed rent and capital gains on owner-occupied homes; a half rate on other capital gains, and then only realised rather than accrued gains are taxed; low flat rates on superannuation; and differences between the corporate and personal income tax rates (Freebairn 2010). On the other hand, because there is no explicit correction for inflation with the nominal income tax system, the real rate can exceed the statutory rate on some capital income, and in particular interest. For non-resident investors, the relevant income tax rates are the flat corporate income tax rate and the flat withholding rates on debt interest and dividends distributed. Then, reductions in the statutory income tax rate will result in smaller reductions in the effective income tax rate. As argued by the Henry Review (Henry et al. 2010, ch. B1), lower income tax rates to encourage a larger inflow of foreign savings and investment should involve more specifically a lower corporate tax rate, or the consideration of different tax systems such as the allowance for corporate equity model, or a dual income tax model with a low flat rate on capital income.

A lower statutory income tax rate reduces the variance of effective tax rates on different saving and investment options. This results in a less distorted and more productive composition of different saving and investment portfolios.

Although Australia is a small open economy, for various reasons the supply of capital is less than perfectly elastic (de Mooij and Ederveen 2008; Gravelle 2010). In practice, most investors, institutions as well as households, have portfolio biases in favour of their own country. The reasons are thought to include better knowledge of and confidence in the policies, laws and regulations of one's home country, less actual and perceived risk, through to parochialism. For a given income tax rate reduction, the lower the elasticity of supply of capital for Australian investors the smaller the increase in foreign capital inflow, and the smaller the increase in real wages. Also, the less elastic the supply of foreign capital, the larger the optimal tax rate on capital income.

Acceptance of the foregoing realities about the actual hybrid system of income taxation of capital and a less than perfectly elastic supply of foreign savings reduce the magnitude of the benefits of a tax mix change from income to consumption. But, they do not alter the direction of effect found with the simple model. There is a growing body of empirical evidence for OECD countries supporting the hypothesis that lower income tax rates on individuals and companies increase economic growth (Arnold 2008; Bleaney et al. 2001; Johansson et al. 2010).

A contentious way in which a tax mix change could provide a one-off gain in efficiency is its increased taxation of savings made in previous periods when they are spent. This is the second right-hand term of (5). In effect, past savings funded from after income tax disposable income are a form of sunk cost decisions, and the payment of a consumption tax on them when spent in the future has lump sum properties. Political reality and concerns for equity across generations likely will require some compensation. The compensation funds then are not available to reduce income tax rates affecting decisions to reduce efficiency costs.

An important issue with an indirect for a direct tax mix change package is its implications for macroeconomic stability and policy. The increase in consumption taxation raises the average cost of living and consumer price indices. Recycling the indirect tax revenue windfall to households through increases in social security payments and lower income taxes would increase disposable incomes to restore the initial purchasing power capacity. It is important also that the one-off increase in consumer prices not be incorporated into wage increases or into increases in interest rates. This would involve double compensation, and it would add a risk of initiating an undesired wages–prices inflation episode. The experiences of tax mix changes in Australia in 2000, New Zealand in 1985 and 2010, and the United Kingdom in 2010 show that benign macroeconomic outcomes are achievable with appropriate explanation and some policy support.

5. Package to Reduce Vertical Fiscal Imbalance (VFI)

Under the current assignment of taxation and expenditure responsibilities by level of government, the states (and territories) depend on transfers from the Commonwealth for about half of their revenue. The actual share varies from a low of 40 per cent for the Australian Capital Territory to 70 per cent for the Northern Territory. The most important transfer is the GST, which is distributed as an untied grant to each state. VFI often is considered a cause of inefficiency and loss of public accountability, but this need not concur with reality. As noted by Bird and Smart (2010) and the Henry Review (Henry et al. 2010, ch. G2), VFI could be reduced by a number of options, such as reassignment of expenditure responsibilities, giving states access to the income tax, and increasing the revenue raised from current state land and payroll taxes with broader bases and/or higher tax rates, as well as by reforms which increase the GST revenue. This section considers the potential advantage of a reduction in VFI resulting from a reformed GST yielding additional revenue over and above replaced state taxes.

It seems inevitable that the assignment of responsibility for different expenditures and taxation by level of government will be imbalanced with the result of VFI. As noted by Bird and Smart (2010), VFI is a feature of all countries with federal government structures, and it has been an enduring feature of Australia since federation. But, the details and magnitudes vary widely by country and over time.

Many, including Bird and Smart (2010) and the Henry Review (Henry et al. 2010, ch. G2), argue that VFI is not necessarily a cause of, or indicator of, inefficiency and lack of transparency and political responsibility for fiscal policy if each level of government faces a so-called hard budget constraint. The essence of a hard budget constraint is that if a state is to increase or decrease its expenditure, say $100 million more or less on health or education, it has to make a corresponding increase or decrease in tax revenues by changing the tax base and/or tax rate of taxes which it controls, say $100 million more or less from land or payroll tax. Among other things, a hard budget constraint requires that expenditure decisions funded with transfers from the Commonwealth are treated as infra-marginal transfers, states have control over their own tax revenues via the ability to change the bases and/or rates, and the states are responsible from

their own expenditure and taxation decisions to correct both forecast and un-anticipated budget mismatches.

Consider the likely effects on VFI, and then on state level budget decisions, of the following type of package. A higher revenue yielding GST, associated with a broader base and/or higher rate, (a) funds lower income tax rates, resulting in approximate aggregate taxation revenue neutrality for the Commonwealth and taxpayers and approximate vertical equity neutrality for taxpayers described in the preceding section; and (b) funds a larger GST revenue transfer to the states as untied grants matched by a fall in SPP transfers, resulting in approximate aggregate spending neutrality for the Commonwealth and of income for the states. If the GST revenue is explained as, and generally perceived as, a state tax collected for administrative reasons by the Australian Taxation Office, such a package could be deemed to reduce VFI. However, granted the restrictions of a common rate across the states, and the current requirements for legislative approval by the Commonwealth and the states to change the base and rates, it is not a source of revenue which individual states can easily change as required by a hard budget constraint. The main potential efficiency gain of such a reform package would come from reducing the relative importance of Commonwealth transfers to the states from SPP as a tied expenditure transfer. The realisation of efficiency gains would require further argument that some of the tied funds were for marginal rather than inframarginal expenditure decisions, and that the scope for wasteful blame game and rent seeking behaviours between the levels of government would be reduced.

Even if such a reform package was sold as, and generally perceived as, a reduction in VFI, it seems difficult to argue that lowering VFI from current levels of around 50 per cent to, say, 40 per cent would lead to large gains in transparency, falls in the blame game and rent seeking, and other efficiency improvements.

6. Conclusions

This article has argued for a package of tax reforms involving changes to the GST. A more comprehensive tax base for the GST, along the lines of that in New Zealand, would remove distortions to consumption and some production decisions. Revenue gains of a broader base and/or a higher rate of GST would be recycled to fund reductions in other more distorting and less efficient taxes, including state stamp duties and income tax. Some gains in simplicity and operating costs would follow. The overall package can be designed to be approximately revenue neutral and to have a similar pattern of vertical distribution of the overall tax burden to the current system.

Removing current tax expenditures for food, water, health, education and child care for a comprehensive consumption tax along the lines of the New Zealand GST would expand the current base by up to 40 per cent. However, in the case of education, health and child care, some of the revenue gains likely will be required as increased subsidies or other government payments to offset the higher prices. The more comprehensive GST tax base would lower further the efficiency costs of what already is the least distorting tax base after the taxes on economic rents.

A complementary part of what effectively is a tax mix change package is to use the revenue gain to reduce other more distorting indirect taxes and to reduce income taxation, which also has larger efficiency costs. At the same time, the recycled revenue can achieve aggregate tax revenue neutrality and compensate the majority of households for the increase in the average cost of living. To maintain equity, some funds would be reallocated to higher social security payments. Other more distorting indirect taxes to be replaced start with state stamp duties on insurance premiums. Some of the extra GST revenue could be part of a broader revenue neutral package to replace conveyance duty on the transfer of property with changes to and increases in land taxation, and possibly a new annual charge on owner-occupied homes. A tax mix change of more GST and less income tax would be along the lines of the ANTS reform of 2000.

Tax reform packages involving changes in the GST and changes to state stamp duties necessarily affect Commonwealth–state financial relations. Clearly, this adds another dimension to, and additional challenges to the negotiation of, the package. However, this article contests claims that a tax mix change package which collects more GST revenue would substantively reduce vertical fiscal imbalance, and then the associated efficiency costs of lack of transparency, the blame game and a soft budget constraint.

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