ProsperAustralia
THIS LAND IS YOUR LAND
FIRST FLOOR 27 HARDWARE LANE MELBOURNE 3000

ABN 61 754 041 519

P. 03 9670 2754
F. 03 9670 3063
office@prosper.org.au
www.prosper.org.au
www.earthsharing.org.au

AFTS Secretariat
The Treasury
Langton Crescent
PARKES ACT 2600
14 October 2008

Dear Sir/Madam,

We enclose our submission to the AFTS review. It has been produced on our behalf by Dr Terry Dwyer BA, BEc, MA, PhD (Harvard), Dip Law., Visiting Fellow, Crawford School of Economics and Government, Australian National University.

As the failure of the Australian taxation regime to tax land values more effectively has contributed significantly to the development of the recent speculative real estate bubble and the weakening of financial institutions which have lent on speculative prices, we thoroughly endorse the submission and commend it to the detailed attention of the Henry review.

Yours sincerely,

Dr Robert McAlpine PhD, BTRP, MRAPI, MRTPI, FAPI (Val)
President

Prosper Australia
Prosperity
without poverty

Prosper Australia
Prosperity
without plunder

Prosper Australia

believes in

personal liberty

economic justice

equal opportunity

Our mission is to replace all existing taxes with a charge on the value of land and natural resources

We will do this by-

Educating society in economics

Seeking support for our mission

Supporting proportional representation in all elections

LAND VALUE TAXATION: SOLVING THE EFFICIENT TAX PROBLEM

Executive Summary

- The Treasury tax paper acknowledges the three factors of production but needs to follow through on the logic of its analysis.
- All taxes resolve themselves into taxes on the incomes of the three factors of production, land, labour and capital.
- All taxes are distorting, save a tax on economic rent. Taxes on capital and labour are both distorting – they suppress factor supplies to the economy.
- Land value taxation has long been endorsed by economists as a perfectly efficient tax. It also has long roots in Australian history.
- A basic argument for land value tax is that it is the one and only tax base that cannot flee in response to a tax. Capital and labour can emigrate - land cannot.
- Nor can a land value tax be shifted as an extra cost to business. Ultimately, a land value tax must be borne by the landholder at the time of introduction.
- Once a land value tax has been established, any purchaser of land discounts the price to allow for the tax and, in that sense, it is not a burden on anyone other than the owner at the time of introduction.
- Land value taxation is not distorting because it is capitalized – it cannot be avoided. A land value tax becomes a burdenless tax and has a zero marginal tax rate.
- Because it is a "lump sum" tax, a land value tax has a marginal tax rate of zero. It does not deter marginal work effort or the net return from saving and investment in productive physical capital.
- The reason for the efficiency of a land value tax is that, in a deep sense, it is not really a tax at all but a part of a market-determined rent which accrues to the Crown on its resources.
- A shift from income and consumption taxes to land value taxation is welfare enhancing. The elimination of deadweight loss can create a social dividend.
- Land values reflect all spatial externalities, for good or ill. Land value taxation is thus a uniquely efficient way of recapturing the benefits that Government services or infrastructure may confer on land values.
- Similarly, financing fixed costs of network spatial infrastructure from land value taxes (such as rates) is superior to seeking full cost recovery by charging users alone. It enables

infrastructure to be made available to users at the economic optimum of short-run marginal costs (SRMC).

- A land value tax can raise can raise large amounts of revenue to replace inefficient taxation of labour and capital.
- A land value tax can embrace all natural resources (site values, mineral and oil lands, fisheries, forests and the electromagnetic spectrum).
- Depletable resources can taxed efficiently on their unimproved value plus a depletion charge based on the change in value caused by extraction.
- A land value tax squeezes out harmful speculation and helps prevent real estate bubbles from forming. This is because it provides a spur to put land to its highest and best use and not to withhold land from the market.
- As well as promoting full employment by ensuring resources are accessible to producers wanting to use them, a land value tax, when replacing a labour tax, reduces unemployment by increasing net wages received by workers and allowing gross wages paid by employers to fall. The labour tax wedge is diminished.
- It appears that a land value tax may also alleviate distortions whereby income and consumption taxes create a bias towards excessive metropolitanization of industry and population. Land value taxation appears favourable to encouraging a natural regional decentralization of industry and population.
- A land value tax also promotes competitive neutrality and prevents monopoly abuses sourced in control of superior natural resources
- Several taxing jurisdictions have historically shown how to improve their economic progress by using land revenues and land taxation to keep other taxes down. Many countries have relied on resource revenues, notably from oil, to be competitive as havens for investment. International tax competition is becoming ever more significant and the need to use a tax base that cannot run, ever more important.
- Where a land tax is used to cut other taxes on mobile bases such as capital or labour, it is even possible that landholders may gain from the tax. Not only do they benefit as workers or capital owners, the reduction of other taxes can entice capital and labour into the jurisdiction, bidding up land values. A “win-win” situation or “free lunch” is possible when an efficient tax replaces less efficient taxes.
- Further, where a land value tax is used to fund a social dividend, there is no deadweight loss associated with the relevant distribution of revenue. A land value tax, rather than a payroll tax, is therefore to be preferred as the means to finance a universal benefit such as child endowment or family payments.

- A land value tax base can be shared between levels of government without complex source rules and leaving each jurisdiction free to set its own tax rate.
- Public support for land value taxation reform may be encouraged by legislating to ensure that the land revenue can only be used to finance public infrastructure and reductions in other taxes. In particular, cuts to company and personal income tax rates and removal of stamp duty on land conveyances should be financed out of a co-operative Federal State land value tax.

LAND VALUE TAXATION

Replacing bad taxes with one good one

To tax and to please, no more than to love and be wise, is not given to man.

Edmund Burke

Edmund Burke's sober reflection is a reminder that in any tax reform there are winners and losers. However, while the reform of an existing tax system is perhaps more difficult than the simple introduction of a new tax, it does have the advantage that, in abolishing or reducing other taxes, one may please more people than those who are offended by the new tax.

It is often said that in economics there is no such thing as a free lunch. This is not always true. Where an economic change allows for greater efficiency and productivity, it is possible to come out ahead, and ensure that the gains of the winners exceed the losses of the losers.

In tax reform it is, therefore, vitally important to ensure that the tax being introduced or increased is more efficient than those which are being reduced or abolished. Not all taxes are equally efficient. Many have long since gone by the wayside - the 18th century Window Tax for example.

The basic principle of an efficient tax is that it should raise the revenue required without distorting the decisions of producers or consumers.

A tax should thus be unavoidable in both the economic and legal senses. Neither a change of actual conduct nor a shuffling of paper should alter tax liabilities. Taxes such as conveyance duties which can be avoided or deferred through economic responses, such as delaying transactions, or legal responses, such as indirect changes of ownership, are therefore not efficient.

A long line of economists of impeccable standing have long supported the merits of land value taxation. In recent years the concept of land value taxation has received some noteworthy endorsements. Not only Adam Smith, John Stuart Mill and others in the past, but more recent economists such as Harry Gunnison Brown, Harold Hotelling, William Vickrey, Milton Friedman and Martin Feldstein, the Chairman of President Reagan's Council of Economic Advisers, have all accepted that a land tax is a theoretically ideal tax.

Adam Smith wrote "Both ground-rents and the ordinary rent of land are a species of revenue which the owner, in many cases, enjoys without any care or attention of his own. Though a part of this revenue should be taken from him in order to defray the expences of the state, no discouragement will thereby be given to any sort of industry. The annual produce of the land and labour of the society, the real wealth and revenue of the great body of the people, might be the same after such a tax as before. Ground-rents, and the ordinary rent of land, are, therefore, perhaps, the species of revenue which can best bear to have a peculiar tax imposed upon them. .... Ground-rents, so far as they exceed the ordinary rent of land, are altogether

owing to the good government of the Sovereign, which, by protecting the industry either of the whole people, or of the inhabitants of some particular place, enables them to pay so much more than its real value for the ground which they build their houses upon. .... Nothing can be more reasonable than that a fund which owes its existence to the good government of the state, should be taxed peculiarly, or that it should contribute something more than the greater part of other funds, towards the support of that government."[1]

Feldstein (1976), p 96 acknowledges a tax on unimproved land values "involves no distortion" and is clearly efficient. He suggests the reason for non-adoption is that such taxation may seem inequitable because it discriminates against individuals holding land.[2] This is an equity rather than an efficiency argument and is not relevant where the tax revenue is used to finance infrastructure which adds value to land. Professor Milton Friedman has stated "taxes would be best placed on the land, and not on improvements."

Professor James Tobin of Yale has stated that "I think in principle it is a good idea to tax unimproved land, and particularly capital gains (windfalls) on it. Theory says that we should try to tax items with zero or low elasticity, and those include sites."

Professor Paul Samuelson of MIT has stated "Pure land rent is in the nature of a 'surplus' which can be taxed heavily without distorting production incentives or efficiency."

On November 7, 1990, thirty prominent United States economists including Nobel Prize winners James Buchanan, Franco Modigliani and Robert Solow wrote to Michael Gorbachev urging that, in moving to a market economy, the Soviet Union raise its revenue from land. Among the signatories were William Vickrey, former President of the American Economic Association, Lowell Harris Professor Emeritus of Economics at Columbia University, Carl Kaysen, Professor of Economics, Massachusetts Institute of Technology, William Baumol, Professor of Economics at Princetown University, Zvi Griliches, Professor of Economics at Harvard University and Richard Musgrave, Professor Emeritus of Political Economy at Harvard University.

These economists wrote that "It is important that the rent of land be retained as a source of government revenue. While the governments of developed nations with market economies collect some of the rent of land in taxes, they do not collect nearly as much as they could, and they therefore make unnecessarily great use of taxes that impede their economies - taxes on such things as incomes, sales and the value of capital. ... The component of land value that arises from community growth and provision of services is the most sensible source of revenue for financing public services that raise the rental value of surrounding land. These services include roads, urban transit networks, parks, and public utility networks for such services as electricity, telephones, water and sewers."[3]

What these American economists urged in 1990, Australia had already invented over a hundred years ago.[4] As Scheftel wrote "To Australasia, the Western world owes, among numerous experiments in social science, the system of taxation on the unimproved value of land."[5]

Tax Incidence Theory

The three factors of production and how they differ

To see why economists have long regarded land taxation as uniquely efficient, one must remember that every good or service, that is, all income, represents the fruits of the three factors of production - land, labour and capital.

By land is meant all natural resources, including the site value of unimproved land and the other free gifts of Nature such as water, minerals or the electromagnetic spectrum.

By capital is meant all man-made means of production, such as buildings, machines and physical infrastructure. As Adam Smith pointed out, and the Treasury's paper for this review acknowledges, all incomes resolve themselves into the rent of land, the profits of capital or the wages of labour. Often, as in the case of a sole trader operating from his own premises, the three types of income will be enjoyed by him without any observed itemisation. Nonetheless, in an economic sense, he is deriving the three forms of income in running his business.

Thus all taxes fall on the returns to land, labour or capital.

Income and consumption are not final tax bases

It is a conceptual mistake to talk of income or consumption taxes as if they were separate tax bases apart from the three original tax bases. A universal flat-rate consumption tax is a tax upon the earnings of land, labour or capital which are not saved. A universal income tax is a threefold tax on the earnings of land, labour and capital. A company tax is a tax on income from land, labour or capital accruing to companies. It is therefore surprising that, having acknowledged the crucial distinction between the three factors of production and having noted the huge contribution resource rents are making to Australia's current revenue surplus, the Treasury slips into talking of "capital income" as if that term comprehends both land income and capital income properly so called.

One of the three factors of production, capital, can be allowed by its owners to run down or they can remove it from Australia.[6] Another, labour, can emigrate or cease to work or stop breeding. Only the first - land - cannot run. This basic feature of land, its immobility, lies at the centre of the classical economic argument for land taxation. If one has to tax, it is far better to aim at a target that cannot move.

Only a tax on economic rent is a true non-distorting lump sum tax

Taxes on capital and labour are both distorting – they suppress factor supplies to the economy. Wherever there is a possible supply response (that is, factor withdrawal) there will be economic distortion. Since neither the supply of labour or capital to an economy is fixed

(supplies of labour and capital depend on migration, fertility, work effort, savings and investment in tangible reproducible goods), every tax on labour or capital is distorting.

Note that this is true also of so-called non-distorting taxes on inelastic goods or services. A tax on a good or service operates as a tax on the factor income used to purchase it. So an apparently "non-distortionary" tax upon a good in inelastic demand (such as water) may well end up like a poll tax on labour income with all the associated distortionary effects. Ultimately, it is inelasticity in supply which counts, not inelasticity of demand.

All taxes are distorting, save a tax on economic rent. Economic rent is the return to land (comprehending all the free gifts of Nature, be they sites, minerals, forest, fisheries or electromagnetic spectra etc).[7] An annual land value tax is a tax on economic rent.

Economists regard a lump sum tax as uniquely efficient. The idea is that the taxpayer has no choice but to pay. Nothing that he does can eliminate the tax liability. Often, in text books, a lump sum tax is portrayed as a *fixed* money sum (e.g. not calculated by reference to income or assets) which the taxpayer has to pay. This is an example of a lump sum tax, but the idea is a little broader than that.

The real idea of a lump sum tax is that the tax liability does not change with the behaviour of the taxpayer. For example, the rates or taxes on my land may change with its value, but *I* cannot change the market valuation of my land. A rate or tax on my unimproved land value is thus an efficient lump sum tax. There is nothing I can do to avoid the tax. There is nothing I can do to alter the amount of the tax. Not even bankruptcy can avoid it. The tax liability is fixed by external forces and can be enforced against the land if I try not to pay.

A land value tax cannot avoided or shifted and is capitalized

It might be said that a land tax can be shifted by selling the land. That is not correct. A person who buys the land knows that there is an annual tax liability which goes with the land. The price the purchaser pays to the seller wishing to avoid the tax will therefore be discounted to take account of the annual tax burden on the land. The tax is said to be capitalized or amortized in a reduced market price for the land.[8]

This is a virtually unique aspect of a pure land tax. Once imposed, it stays with the land it is imposed on and cannot be avoided.

Any attempt to avoid such a tax creates a one-off loss for the seller. The purchaser, by allowing for the tax, does not pay the tax at all - either then or in the future. In that sense, an known, established or anticipated land tax is said to be a "burdenless tax". Everyone who has bought land, has bought it knowing what the tax is and has allowed for it. Every future buyer knows about it and will allow for it. It is therefore no more a burden than buying into a leasehold knowing that one has to pay rent to the head landlord.

The fact that a land value tax is capitalized demonstrates that it is not distorting: it is capitalized precisely speaking because it cannot be avoided and sticks with the land, regardless of the owner.

A land value tax has an effective marginal tax rate of zero

Because a land value tax cannot be avoided it has an effective marginal tax rate of ***zero***. Clearly, also, a land value tax does not affect the marginal returns from working or saving. This means it is uniquely efficient if used as a source for funding universal social payments. The equivalent marginal tax rate[9] in such a case is zero as there is neither an effective tax rate on labour income nor an income-test taper on payments.

A land value tax cannot be shifted to lessees in the long run

If a land tax cannot be shifted or avoided by selling the land, some may ask whether it can be, if not avoided, at least shifted to lessees and tenants. The argument is often put (by business people, not by economists) that a land tax can passed on to the tenant and becomes an extra cost of production. It is said to act thereby as a disincentive to business activity. In particular, attention may be drawn to the common practice, in commercial leases, of requiring the tenant to pay all taxes and charges, including land tax.

Taking a long run point of view, it is important to ask what the value of land represents. The value of land represents the flow of rents it can command. The amount of those rents in the future represents the increased returns, over and above the norm, which capital or labour may earn by using that site.

A tenant is willing to pay rent to a landholder because by using that land he can be more productive than elsewhere. Now suppose that the landholder tries to make the tenant, in the long run, pay extra for the land. By definition, the tenant's labour and capital are no longer earning more than the norm they could get elsewhere. The tenant will, therefore, in the long-run quit and look for other land on which to ply his trade.

It may be argued that he will not leave because other land is also subject to land tax which the tenant will have to pay. But there is always other, less valuable, land. By moving there, he would face a lower land tax liability. Thus, by shifting to lower valued land, the tenant, unlike the landholder, can reduce or eliminate any impact of the landlord's attempt to pass the tax on to him. The tenant can move to avoid the tax, the landholder cannot.

To put it another way, those who assert that a land tax can be passed on to the tenant in the long-run are really saying that landholders are so stupid as not to be extracting the maximum rent they could from the tenants in the first place. Such a proposition has only to be stated to see its falsity.

In the short run, however, there can be a shifting of an increase in a land tax burden to the tenant. Contractual obligations cannot be terminated or varied at will, without explicit

statutory authority (which is sometimes provided in taxing legislation). In the case of a long term fixed lease eg. a thirty year leasehold at a fixed rent of $100,000 a year, the tenant may be forced by contract to bear part of the burden of the land tax. He may, for example, be subletting further to other tenants on short leases. He shares in the burden of the land tax with the landholder just as he shares in the rents to be obtained from the short lessees. In such cases, a long tenant is really like a co-owner of the land.

But other tenants, subject to variable rents by the landholder, have no economic interest in the land. For them to be locked into not only variable rents but increased taxes at the instance of the landholder is to allow a short-run shifting of the tax. In designing a land value tax, it is logical to apportion the unimproved value between owner and long-term lessees who have an interest in the land and apportion the tax liability accordingly, with provision for rent re-negotiation if it sought to pass on the tax. For example, a 99 year lease on a peppercorn is almost worth as much as a freehold and would be taxed as an interest in land accordingly but a 3 year lease with annual rent reviews is of little market value and may be ignored as an interest in land for tax purposes.

Another way of seeing why, in the long run, a land tax cannot be passed on to tenants is to look at the concept of the real cost of production. The reason for taxing land is the same reason for buying it - they aren't printing any more of it. Land is in fixed supply, and its maker is not charging for it. Unlike labour and capital there is no human cost of production involved. Thus land acquires value not from its cost of production but from competition from its scarcity value. *The value of land is determined by the demand for it and by nothing else.*

So rent does not enter into the price of output as a cost of production - it is the other way round, as David Ricardo recognized. The value of the output in excess of the remuneration of capital and labour required to produce it flows to the landholder. Potential users bid against each other only so far as they can generate a surplus over labour and capital costs from using the land.

A demonstration that rent is a price determined by demand, not a real cost of production, occurs when shops are empty in a recession. Landlords have no choice but to cut their rents, whether in the central business district or elsewhere, or leave their premises empty. This phenomenon shows that landlords are not free to simply increase rents - if they could, they would already be doing it.

Short and long run effects of shifting to a land value tax

An abstract discussion of tax theory is not very interesting. It is more interesting to see what happens in practice when land taxes or land revenues are used to keep other taxes down.

Around the turn of the century, New South Wales placed higher reliance on land taxation and moved to site value rating both to free up land for settlement and encourage the rebuilding of urban slums. At Federation Melbourne was a larger city than Sydney. Since Federation, New South Wales has overtaken Victoria in terms of economic activity, population and

general prosperity. Only now, as New South Wales has reduced its reliance on ratepayer funded financing of public works (such as water supply) and services (such as garbage collection) and moved to user charges, has Melbourne started to catch up.

The progress of Queensland has been more remarkable. By ensuring, whether through coal freights or other quasi-royalty devices, that the Crown extracted rent for its mineral resources, successive Queensland governments were able to keep other taxes, such as stamp duties and financial taxes, below the levels of other States.

The progress of Brisbane compared to Sydney and Melbourne has been truly remarkable. As communications have improved and technology developed, the ability of transactions or labour and capital to move has increased. It was interesting to observe in the short heyday of financial institutions duties how many companies moved their corporate treasuries to Brisbane.[10]

International tax competition means one should tax an immobile base

What has been said for competition within Australia also increasingly applies outside Australia. For example, pressure to reduce stamp duty on share transactions came from Hong Kong. As Australian companies listed overseas and Australians could invest in the shares of overseas companies or use banks overseas, the ability to tax financial transactions became less.

Internationalisation of tax competition means that labour and capital are increasingly free to shift the burden of any tax which it is proposed to be put upon them – their actual and formal elasticities of supply are increasing.[11] The theoretical observation that there are only three factors of production - and two of them can run - becomes of profound political and economic significance for the development of a local economy. For example, what would happen if Australia abolished land rates and tried to finance local government through municipal taxes on bank deposits? It is fairly obviously that offshore internet banking would explode in popularity and Sydney could say goodbye to any pretensions to be an international financial centre.

Given that financial taxes and taxes on financial capital are taxes on the most mobile of economic activities they should rank among the first for tax reduction. In this regard it should be observed that a land value tax is immune to international tax planning and ensures non-residents pay tax. By contrast, non-residents do not pay Australian GST, and they can often use source rules or tax treaties to lower the amount of tax they pay in Australia.

Hong Kong has long enjoyed a tradition of using land revenues through a leasing system of Crown land to keep tax rates low. This goes back to the advice of Lord Aberdeen to Sir Henry Pottinger, the first Governor of Hong Kong. Pottinger was advised that "if, as a result of the establishment of a free port and the introduction of those liberal arrangements by which foreigners would be encouraged to come, a great commercial entrepot were created,

then H M Government would feel justified in securing to the Crown the increased values that the land would then have."[12]

Who ultimately bears a land value tax?

It is worthwhile to consider in more detail who bears a land tax.

A land value tax in isolation

The introduction of a new tax on land in isolation really amounts to an assertion by the Crown of a claim to a larger part of the rent for land. Therefore the market value of land tends to fall. The Crown is taking more of the rent and the private landholder is left with less. The true economic rent of the land, of course, remains unchanged but the private landholder is getting less of it. The fall in market value reflects the value of the reduced private share of rent.

This process of private land values falling in response to the imposition of a land tax points to a set of identifiable losers. From the Government's point of view, if a land tax does lead to a slowdown in land value speculation or even a fall in land values there are some advantages. For example, there is the advantage that the cost of resuming land for public works is reduced. A land value tax thus not only raises revenue, but reduces the cost to the Treasury of necessary resumptions for roads, rail or other public infrastructure.

It can also be shown that an increase in a land value tax increases the cost of holding land out of production. This squeezes out unproductive speculative activity and forces speculators to make land available for development and act as useful re-allocators of idle land. If they do not do so, they cannot meet the land value tax as a holding charge on the land.

This is of some significance for employment and economic activity especially when one considers the amount of false credit which has been staked on an ever-expanding real estate bubble. The 2008 collapse in financial markets can be seen as directly linked to a self-perpetuating cycle where easy credit made the capitalization of future rents ever more valuable and drove up land prices which created more collateral for further borrowing and buying. The process cannot continue forever without a general debauching of the currency through unchecked money supply expansion.

Landlord and tenant

In the long run as noted, the incidence of a land tax is upon the landholder (which includes long lessees on fixed rents). In the short run, an increase in land tax may be passed on to lessees but that will cease to apply once contracts are renegotiated.

A land value tax should not be graduated or be based on use by the landholder

So far the discussion has assumed a simple uniform land value tax with no exemptions based on different uses. If, as is the case, a land tax has a graduated rate scale there is a temptation

to break up parcels. Indeed parcel splitting was the first response of graziers to the Colonial and Federal land taxes which used graduated rates to penalise the larger pastoral holdings.

Parcel splitting led to the first anti-avoidance legislation under the colonial Land and Income Tax Acts.[13] In the modern context, parcel splitting may be seen when Central Business District sites are strata titled or subdivided. Such examples show that it is desirable to have a flat land value tax rate which does not depend on ownership.

The extent of such responses to a graduated rate scale does not, however, undermine the broad arguments in favour of the economic efficiency of land value taxation. Parcel splitting is often not possible and involves costs.

Similarly where a land value tax system exempts certain uses distortions can arise. For example, if agricultural land is exempt, while urban land is not, there could be pressure for rezoning.

Again, however, the distortions here should not be exaggerated. Compared to other taxes, the scope for manipulation of either parcels or land use is relatively limited. Nonetheless, as a broad principle, the aim of a land value tax should be to have a flat rate and limit exemptions only to governmental or other quasi-public functions (for example, legal charities).

When other taxes are cut, a land value tax can even benefit landholders

It is often a complaint of tax reformers that they do not start with a clean slate. But this can be an advantage. *Where there are bad taxes discouraging the productive use of labour and capital, tax reform can deliver bonus dividends. It is possible to have a "win-win" situation.*

A shift from income and consumption taxes to land value taxation can eliminate deadweight losses from taxing labour and capital and can create a social dividend.

Suppose, for example, that Australia cuts its top marginal tax rates on labour and capital income to 20%. Australia then becomes a lower cost jurisdiction for business activity. Expatriates look to return home. More New Zealanders look to come to Australia. Employers look at reduced gross wage costs. As businesses seek to relocate activity in Australia, the demand for Australian land must rise. But what we are describing here is rather like what has happened with Singapore and Hong Kong over the past 40 years.

One can imagine the relocation of Asia-Pacific headquarters from Hong Kong and Singapore to Sydney and Melbourne which would follow from such a bold move. Such an influx would drive up demand for land and drive up rents. Such an induced demand for land could offset the adverse impact of a land value tax on landholders.

Thus a shift from taxes on labour or capital to a land value tax may even, to some extent at least, be in the landholder's best interests. This is over and above any benefit landholders may gain in other capacities - for example, a bank or superannuation fund which is a

landholder may gain benefits in the first place from reduction or abolition of financial taxes or conveyance duties.

Shifting from transfer taxes to land value taxation

An elegantly expressed argument in favour of a shift from transfer taxes on land to a tax on holding land was given by John Stuart Mill, who wrote "All taxes must be condemned which throw obstacles in the way of the sale of land, or other instruments of production. Such sales tend naturally to render the property more productive. A seller, whether moved by necessity or choice, is probably someone who is either without the means, or without the capacity, to make the most advantageous use of the property for productive purposes; while the buyer, on the other hand, is at any rate not needy, and is frequently both inclined and able to improve the property, since, as it is worth more to such a person than to any other, he is likely to offer the highest price for it. All taxes, therefore, and all difficulties and expenses, annexed to such contracts, are decidedly detrimental; especially in the case of land ... too great facilities cannot be given to enable land to pass into the hands, and assume the modes of aggregation or division, most conducive to its productiveness. ... All taxes on the transfer of land and property should be abolished; but as the landlords have no claim to be relieved from any reservation which the state has hitherto made in its own favour from the amount of their rent, an annual impost equivalent to the average produce of these taxes should be distributed over the land generally in the form of a land tax."[14]

Mill's argument means that capital gains taxes and State conveyance duties should both be abolished and the revenue made up from a neutral land value tax.

Which taxes should be cut to produce the best dividends?

Once it is seen that there is a possibility of a "win-win" situation in shifting from other taxes towards a land tax, the next question is which taxes could be the first to be cut. Bearing in mind the basic principle that all taxes fall on land, labour or capital, the answer is that the taxes on the most footloose activities should be cut first.

Labour is less mobile than financial capital which may be moved electronically. Abolition of tax on mobile transactions such as financial transactions should be among the first candidates for abolition. In the case of such footloose activities there is the greatest chance that the revenue lost from abolition of taxes would be compensated for by an offsetting induced increase in other revenue.

For example, capital gains tax is not easily imposed on sales of shares and other intangibles. For that reason, inter alia, overseas investors are exempt in many cases. Extending exemption to all domestic investors, as well as superannuation funds in pension phase, would simplify the tax system and business restructuring of operations. It makes sense to abolish capital gains tax (which operates only on realized transactions) and replace it with a Federal land value tax (which would operate on all landholders), recognizing that most capital gains are really only disguised land value increases. The distortions caused by capital gains

taxation have led to exemptions such as those for non-resident investors and scrip for scrip relief for local investors. Rather than having a capital gains tax which needs major exemptions to function, the formal abolition of a capital gains tax would be a major competitive advantage to Australia in attracting mobile financial capital and retaining domestic investment.

Taxes on labour should also be considered for reduction. If Treasury wants to reduce EMTRs (equivalent marginal tax rates) it makes sense to cut marginal income tax rates and make up the lost revenue through a Federal land value tax (which would have a zero EMTR).

Land values reflect external benefits and a land value tax captures these

Just as using a land value tax to cut other taxes can offset any adverse effect on landholders, so the same is true where land tax revenues are used to provide benefits to land.

This can be seen from the origins of the word "rate." Originally the idea behind a rate was to secure a *pro rata* contribution from landholders towards infrastructure which provided common benefits - such as a dam, a road or a bridge. Rates were often voted for by landholders in their collective interest. Similar phenomena can be observed today when agricultural co-operatives levy their members for rates to contribute to weirs etc.

Since site rents reflect spatial externalities (and most externalities which can be thought of are spatial in nature), a land value tax can both capture the benefit of desirable spatial externalities and compensate for adverse spatial externalities.

The ability of land to capture external benefits has long been observed. Sir Winston Churchill, for example, declared -

"A portion, in some cases the whole, of every benefit which is laboriously acquired by the community is represented in the land value, and finds its way automatically into the landlord's pocket. If there is a rise in wages, rents are able to move forward, because the workers can afford to pay a little more. If the opening of a new railway or a new tramway, or the institution of an improved service of workmen's trains, or a lowering of fares, or a new invention, or any other public convenience affords a benefit to the workers in any particular district, it becomes easier for them to live, and therefore the landlord and the ground landlord, one on top of the other, are able to charge them more for the privilege of living there.

Some years ago in London there was a toll-bar on a bridge across the Thames, and all the working people who lived on the south side of the river had to pay a daily toll of one penny for going and returning from their work. The spectacle of these poor people thus mulcted of so large a proportion of their earnings appealed to the public conscience; an agitation was set on foot, municipal authorities were roused, and at the cost to the ratepayers the bridge was freed and the toll removed. All those people who used the bridge were saved six pence a week. Within a very short period from that time, the rents on the south side of the river were found to have advanced by about six pence a week, or the amount of the toll which had been remitted.

And a friend of mine was telling me the other day that, in the parish of Southwark, about £350 a year, roughly speaking, was given away in doles of bread by charitable people in connection with one of the churches. And, as a consequence of this, the competition for small houses, but more particularly for single roomed tenements, is, we are told, so great that rents are considerably higher than in the neighbouring district."[15]

An example of how infrastructure provision benefits landholders emerged in discussion on the Very Fast Train (VFT) linking Sydney - Canberra - Melbourne. The promoters argued that the VFT would be economic if account could be taken of its beneficial effect on land values due to improved communications. The private sector promoters argued there should be some means for them to recapture the benefits they were creating for landholders.

Where the Commonwealth or a State provides infrastructure such as roads, railways, water, sewerage, etc and funds it through a land tax on site values it is really acting in the same way as an improving landlord. A land tax used to service land through the provision of beneficial infrastructure need not adversely affect landholders - quite the reverse. Indeed, as Brennan (1971) observes, the original vision of Canberra was that the land values created would pay for the cost of the new Federal capital without enriching passive speculators. In the long run, taxes would not be necessary to pay for public works, the city would pay for itself in increased land rents accruing to the Commonwealth as landowner.

Adam Smith observed that it is often desirable that the sovereign undertake works which, while of the greatest public benefit, are not sufficiently worthwhile for any individual. This is commonly the case with land and infrastructure. With divided ownership no one landholder finds it sufficiently in his interest alone to pay for the costs for major infrastructure.

The concept that a land tax need not represent a burden if the tax is used to provide benefits to land or landholders has led modern economists to construct mathematical examples of a "Henry George Theorem".[16] Under certain theoretical assumptions, if tax revenue from a land tax is spent on benefits only available in the jurisdiction where the tax is raised, the private price of land need not fall at all. This is because, by providing local benefits, the tax induces such a sufficient offsetting demand for the land from capital and labour outside the jurisdiction that rents are bid up in response.

The theoretical insight provided by the "Henry George Theorem" points to a genuine "free lunch" or "win-win" scenario. The practical relevance of such scenarios can be seen in the United States where local municipalities have wide taxing and spending powers in relation to education. In jurisdictions where property taxes are high but educational services are of higher quality, property values are not adversely affected by the imposition of local property taxes - people want to move in to get the benefits of good education for their children.

It should be noted that the "Henry George Theorem" also applies to funding fixed costs of network spatial infrastructure. It is far more efficient to charge the fixed capital costs of such

infrastructure against land rates than try to drive user charges above short run marginal cost to cover an "access deficit".[17]

Land value taxation deters harmful speculation and real estate bubbles

The interaction between land values and the financial system has become a matter of large public interest. The public and central bankers desire easy credit to keep employment and industry thriving. Leaving to one side any concerns over inflation in terms of money's purchasing power over goods and services, easy credit also means land rents can be borrowed against and capitalized at higher values. What was intended as an expansionary monetary policy for encouraging production of goods and services with full employment becomes an inflation of asset prices (really, land prices) into a bubble where speculative hopes of "capital gain" overwhelm any hard ideas of putting land to its most productive use. Such a state of affairs is never stable and a crash inevitably comes. Unfortunately, the crash also means labour and capital are thrown out of productive employment as a general credit withdrawal undermines business.

One of the merits of land value taxation is that it squeezes out harmful speculation. It makes sure that landbuyers do their sums. They are forced to look carefully at current and projected land use to be sure they can meet the holding charge which a land value tax represents. Thus a land value tax tends to prevent speculative real estate bubbles from forming. A land value tax forces landholders to use the land or lose it. By forcing landholders to monitor continually their plans for land use, it encourages them to make land available to the market and to allow labour and capital to make use of it. This naturally encourages full employment.

Further where the revenue from a land value tax is used to reduce marginal tax rates on labour income, it reduces unemployment by reducing the tax wedge between gross wages paid by the employer (which affects hiring decisions) and net wages received by the employee (which affects labour supply decisions).

Land value taxation may promote healthy decentralization

A potentially intriguing and unexplored aspect of land value taxation which has received little attention is its potential for improving spatial neutrality with respect to investment location decisions. Under an income or consumption tax, the tax burden does not vary with one's access to community resources. If he succeeds, a manufacturer who starts a factory in Sydney or Melbourne will pay the same taxes as one who starts in Orange or Shepparton. Yet the advantages of locating close to large markets and sources of labour supply are evident. While land values in remoter areas are lower to reflect the disadvantage of locating away from labour and markets, land values in remote areas cannot become negative.[18] It is therefore a matter for inquiry as to whether income and consumption taxes have unrecognized effects on spatial activity.

If that is found to be true, the substitution of a land value tax for income or consumption taxes would promote a natural decentralization and ease the burden on over-large cities. It may appear that Sydney and Melbourne are not large because so many people necessarily *want* to live there: they are large because people *have* to live there if they must find employment.

Land value taxation promotes free and fair competition

Kirzner (1978) observed that monopoly and anti-competitive behaviour can only occur where there is selective access to superior natural resources. Access to land, whether as sites, minerals or electromagnetic spectrum, can create incumbency advantages. A system of land tenure based on "first come, first served" means that future generations cannot by definition have access to what turn out to be superior resources on the same terms as the first generation. This has implications for competition policy. How can one expect a competitive market when some market participants start with superior access to natural resources needed for production? For example, a retailer with a large number of superior sites can engage in thinly disguised predatory pricing to defeat new entrants at the margin, see Dwyer and Larkin (1993).

One of the hidden virtues of land value taxation is that, just as it squeezes out harmful speculation, it also squeezes out monopoly advantages. By charging on the current market value of natural resources, it exerts a gentle pressure on oligopolists or monopolist not to withhold sites from production or under-utilize them with a view to gaining advantage in downstream product markets. The tax reflects not the return the oligopolist or monopolist actually gets from his sites but what he could get. If he seeks to enjoy "the best of monopoly profits, a quiet life" and to rely on the infra-marginal fat in his imputed rents to under-cut competition he will find himself still left with the same tax liability on his land or site values. This is simply another instance of how land value taxation pushes resources towards their highest and best use and discourages uneconomic withholding of resources. What the tax does invisibly, and with increasing effectiveness as it is raised, is to ensure that each member of the community has access to resources on equal terms – a *sine qua non* of an effective competition policy.[19]

Land value taxation and infrastructure charges

Australia has abandoned to a large extent the concept of ratepayer-funded network infrastructure, for example, for water and electricity. But it has been a huge economic mistake to copy an inefficient American model of regulated utilities, dress it up as incentive regulation via the UK adoption of replacement cost (which the Americans sensibly abandoned in the 1940s) and throw away the Australian rating system (which was superior to both the US and UK models).

Attempts to cover the fixed costs of infrastructure through user charges alone are economically inefficient. The adoption of replacement cost valuations in the form of depreciated optimised replacement cost and the allowing by regulators of a rate of return to

private investors on such notional costs (which no one pretends were ever borne) has created a whole new infrastructure industry based on tax farming. Consumers have been forced to pay a rate of return on assets which in many cases they had previously paid for. Infrastructure charges in excess of short run marginal cost should really be considered as being in the nature of taxes. While it may suit State treasuries to pretend that electricity and water charges do not include large tax elements, what cannot avoid being seen is the deterrent effect of such charges on the long-term location of industry.

As Hotelling (1938) and Vickey (1977) argued, land value taxes and rates are an ideal method of covering fixed costs of infrastructure so that users can be charged the economically efficient short run marginal cost (SRMC).

The Industry Commission inquiry into the water industry illustrates how Australian policymakers "lost the plot", see Industry Commission (1992). The Industry Commission report went through both a draft and final report stage. Paradoxically the draft report had a better discussion of the economics of water pricing than the final report. As noted in one footnote, a shift from site rating for water charges to per litre charges can result in no benefit to business at all. If, as is inevitable, reduced land based water rates are ultimately swallowed up by increased private rental charges, a trading business may gain no benefit in a shift from site value rating to per kilolitre charges.

Thus it has been observed that "A shift away from land value rating systems may, in some cases, amount to windfall gains for land holders, through the capitalisation of abolished rates, financed by the imposition of higher costs on both domestic and business users, for water and sewerage services. For example, the Industry Commission argued for imposing user charges for water supply instead of land rates. It then conceded that "Of course, commercial land prices would tend to rise if this tax on business users were eliminated".[20] In other words, the actual production of goods and services, as opposed to landholding, would gain nothing. "Business and consumers would not gain: they would be subjected to new user charges and no reduction in rents."[21]

What the Industry Commission overlooked was that site value rating operates as a lump sum access charge (which it recommended) in the first place. It is reasonable that landholders pay in proportion to the site value. The value, for example, of a city block which was denied access to water, sewerage, electricity etc would be far less than the value it has when there is access available to those services. It is not unreasonable that infrastructure access charges reflect such a value-adding benefit.

What businesses need in order to be nationally and internationally competitive is the lowest possible marginal cost of production. Low costs per kilolitre of water, per kilowatt of electricity etc are important in securing low costs of production. To the extent that network infrastructure can be funded from fixed access charges, then volume usage charges can be kept low. Charges for volume should only reflect incremental cost.

Site value rating overcomes a common "freeloader" difficulty faced by private providers of infrastructure. For example, when a private gas company (AGL) planned to extend its reticulation infrastructure into an area, it surveyed householders and asked whether they wish to have gas available. It is in the interests of every householder to say yes, whether or not they intend to connect. If the gas pipeline is laid, the value of their site is increased without any requirement to pay unless and until they choose to connect. This "freeloader" behaviour is not possible when faced by an infrastructure provider which has rating powers. The infrastructure provider is not deterred from providing infrastructure on the basis that its investment may be under-utilised.

Land value taxation theory in summary

At first instance a land value tax in isolation appears to be a severe burden on landholders. In practice, however, a tax need not be felt as a tax nor be a burden under two conditions.

- First a tax may already have been factored in, as when a buyer purchases land knowing what the tax is.
- Second, even when the tax is first imposed it may not be a burden if its proceeds are used:
    1. either to cut other taxes which are a deterrent to business locating in the area or;
    2. to provide infrastructure which makes the land more accessible or productive.

This theoretical insight points to solutions for gaining voter and business acceptance of increasing land value taxation, namely, *to ensure that the revenue raised is used to eliminate worse taxes or provide needed infrastructure.*

Land value taxation - practical issues

Revenue adequacy

There is no doubt that land value taxation can raise large amounts of revenue, see Dwyer (2003) *The taxable capacity of Australian land and resources*, reproduced as Appendix E. Not only the experience of the Australian colonies and States but also the experience of other countries such as Hong Kong and oil-rich countries bears this out.

A land value tax can include all forms of resource rents. It can be levied on site values, fishing, forestry and mineral rights as well as on rights to the electromagnetic spectrum and native title rights, wherever these have economic value.

Where resources are depletable, the distortions caused by *per unit* or *ad valorem* royalties can be avoided by levying a land value tax together with a charge on the change in land value attributable to extraction of the resource, see Gaffney (1967) and Dwyer (1980).

The Rate Scale

A land value tax should be imposed at a uniform rate. It should have no regard to the status of the owner nor his use of the land. Any restrictions on use will already be reflected in the land value.

Federal-State fiscal relations

There are no constitutional problems in the Commonwealth levying a comprehensive land value tax. It did so from 1910 to 1952.

The late Sir Joe Bjelke-Petersen used to say that the only good tax was a Federal tax. That, however, was on the assumption that the States would get a decent share of the revenue. Such a philosophy, however, sows the seeds of its own destruction as "he who pays the piper calls the tune".

However, it possible for the land value tax base to be shared between Commonwealth, State, local and semi-government rating authorities as follows. A common valuation and collection body (e.g. based on the ATO and land registries and Valuers-General) could be used. Each body could then set its rate for the land within its jurisdiction. The Commonwealth could set one rate across the country, New South Wales could set its rate, Victoria its rate and so on down to the rates set by the local town council or water board in its own rating area. For each rating or tax district, the co-operative collection body could calculate precisely the amount levied for each of the relevant jurisdictions, send itemized bills to ratepayers and share the revenue accordingly.

There would be no need for the relevant bodies to "harmonize" rates or source rules, as there is in sharing income tax or GST revenue. All that happens when rates differed across States or districts is that the extent of land value tax capitalization varied. Thus, each taxing or rating jurisdiction would retain its own fiscal autonomy without the need for Federal grants and the ensuing loss of taxpayer accountability.

The virtues of land value taxation may partly account for some unpopularity

The prime virtue of a land tax, namely that it cannot be shifted or avoided, is the very reason that it tends to be strongly resisted. No one likes taxes, especially taxes they cannot avoid. Every taxpayer prefers to enjoy the illusion that he can play the game so as to make others pay. Thus one Canadian Chancellor of the Exchequer is said to have remarked that "In his experience of taxation, and it was considerable, the only truly popular tax was the tax on the other fellow." An unavoidable tax is an unpopular tax. Yet it is the unavoidable tax that is the best tax.

It is perhaps for reasons of visibility that governments have often preferred indirect to direct taxes so that the illusion can be maintained. However, such a policy is ultimately foolish. The game of shifting or avoiding taxes consumes large resources and drives away business

and investment. That ultimately leaves all the players poorer. A direct and unavoidable tax such as land tax is to be preferred in the end.

Unless taxpayers can see the revenue from a land tax is reducing other burdens upon them or being used to bring them benefits in the form of reduced taxes or improved infrastructure there is likely to be resistance to land value taxation reform. It is also important, because of the potential impact on market land values during transition periods, for change to be gradual and sensitive to variations in tax liabilities.

Once it is realised that the revenue from such a tax can be used to cut other taxes or improve the productive capacity of the economy by providing useful public works it can be seen that a "free lunch" can be enjoyed. Good economics can be turned into good politics if the taxpayers' attention can be turned and focused on the bonus dividends available from sensible tax reform.

Making a land value tax convenient for taxpayers

Adam Smith observed that every tax should be levied in the manner most convenient to taxpayers. A failure to adhere to this principle can engender unnecessary resistance to even the best of taxes. Income tax would never have risen to the dominance it now possesses in the economy without the introduction of the PAYE system during World War II. If, for example, land tax were increased and payable in annual bills issued on 31 December with payments due at the same time when most householders and businesses were meeting their Christmas spending bills, the inconvenience would be considerable.

Any move to reform land tax should be accompanied by a modernisation of collection arrangements. There should be quarterly, monthly, or even PAYE remittances or withholding options. In the case of unsatisfactory payers the Revenue could be allowed to impose mandatory garnishees or PAYE obligations on taxpayers. To further encourage quarterly or monthly remittances, discounts could be offered on the annual liability assessment. It is always better to offer a taxpayer a concession for doing something rather than impose a penalty for doing something else.

One of the merits of land tax over transactions taxes such as stamp duties is the Commonwealth and States' revenue bases will become more stable and less subject to boom and bust cycles in real estate markets.

Should there be exemptions?

In general terms, exemptions from any land value tax should be limited. Exemptions for particular commercial uses such as agricultural uses can create economic distortions and even work against those they were intended to benefit. For example, exempt agricultural land near an urban area can become subject to heavy speculative bidding which drives out *bona fide* farmers.

In principle, leaving aside transitional problems, one would have a preference for limiting exemptions to land held for public or quasi-public functions. There seems little objection to land tax exemption for land actually used for charitable purposes (but not for land held in investment portfolios).

The legal definition of charity requires public benefit and, in a pluralistic society, benefits to the public need not be provided only by governments. Indeed it is desirable that there be competing bodies finding the best way of serving public purposes.

Depletable resources

Mines and oil fields raise special valuation issues. They are an example of a land asset which is diminished in value through use. The traditional approach has been for the Crown to demand a royalty per ton or barrel extracted as a form of rent. This approach can be criticised because royalties inevitably distort the best extraction techniques. Theoretically it would be desirable to subject mines and oil fields to the general land tax on their unimproved value and convert the royalties to a depletion charge based on changes on the value of the mine or oil field due to extraction taking place in that year. Such a combination of the annual land value tax and a depletion charge can avoid the problem that royalties create, of discouraging mining of low grade ores.

Heritage properties

Historic buildings raise some issues. One criticism of a land tax sometimes voiced is that by forcing land to be put to best economic use, it encourages demolition of historic buildings for taller sky-scrapers. However, this is not an argument in favour of a blanket exemption from land tax for land with historic buildings. If there are preservation orders or restrictions on the use of the land, such restrictions will be reflected in the valuation which should be substantially reduced by the restriction on potential use.

Conclusion

The simple land tax has long been endorsed by economists as an ideal tax, from 18th century French physiocrats, through Adam Smith, John Stuart Mill, Henry George and modern economists such as Milton Friedman, William Vickrey and Martin Feldstein, the Chairman of President Reagan's Council of Economic Advisers. It has also been endorsed by statesmen such as Sir Winston Churchill, Sir John Quick, Sir Samuel Griffith, Sir George Grey and Senator George Pearce.

Land tax has deep roots in Australia's history. Given its economic virtues and the established precedents available for the implementation of the tax, it has the strongest claims for consideration as a means of relieving the burden of other, more disruptive, taxes.

Their reliance on land revenues, whether from royalties or site value rating, have helped New South Wales and Queensland overtake Victoria in economic development during this century. By reserving to the Crown lease rentals from land, Hong Kong has been able to maintain an

internationally competitive tax rate on labour and capital and has advanced since World War II to the status of the world's third financial centre.

In effect, the argument for greater reliance on land value taxation is that the Sovereign should behave in the same way as an improving landlord. The improving landlord ploughs back his rents into improving the amenity of his sites so that their value is bid up by people wanting to locate there. There is no reason why public finance cannot operate on similar business principles.

Ultimately no country or state can impose arbitrary or irrational taxation. In a world of increasing mobility of people, ideas and capital, bad tax policies have adverse consequences sooner than they used to. No amount of anti avoidance legislation can ever protect fundamentally avoidable taxes. If legal avoidance is suppressed, economic avoidance then takes place. Real transactions move out of the country. Faced with open borders, Australia should look to the one tax base that is permanent, immobile and easily assessed.

APPENDIX A

Land value taxation in relations to the Review's terms of reference

To assist the Review in relating the theory of taxation and of land value taxation to its objectives, the following comments are offered in relation to the terms of reference.

1. The tax system serves an important role in funding the quality public services that benefit individual members of the community as well as the economy more broadly. Through its design it can have an important impact on the growth rate and allocation of resources in the economy.

Comment

This statement is certainly true. Taxes on capital impede capital formation and lower real wages. Taxes on labour create a tax wedge, increase unemployment and poverty and discourage work effort. A land value tax does not have any of these effects.

2. Raising revenue should be done so as to do least harm to economic efficiency, provide equity (horizontal, vertical and inter-generational), and minimise complexity for taxpayers and the community.

Comment

As noted above, a land value tax is uniquely efficient. Not only does it do no harm to economic efficiency, but actually promotes it, by penalising harmful and inefficient land speculation and promoting competition. In terms of fundamental equity, land values reflect the good government of the Sovereign and there is nothing incongruous in the proposition that those who hold the land of the country should pay for its running expenses. In terms of the income-tax concepts of horizontal and vertical equity, limited as they are, land value taxation performs well. The distribution of land ownership tends to be more highly progressive than the distribution of income. As for intergenerational equity, land value taxation prevents land being locked up on a "first-come first-served" basis which sees future generations locked out of land markets. As for complexity, land value taxation is the simplest of all taxes, being as simple as local government rates.

3. The comprehensive review of Australia's tax system will examine and make recommendations to create a tax structure that will position Australia to deal with the demographic, social, economic and environmental challenges of the 21st century and enhance Australia's economic and social outcomes. The review will consider:

3.1. The appropriate balance between taxation of the returns from work, investment and savings, consumption (excluding the GST) and the role to be played by environmental taxes;

Comment

A land value tax has a zero effective marginal tax rate (since it is capitalized). It therefore does not discourage work, investment, savings or consumption. It naturally allows for spatially-based environmental externalities.

3.2. Improvements to the tax and transfer payment system for individuals and working families, including those for retirees;

Comment

Because a land value tax has a zero effective marginal tax rate and does not affect labour effort, it does not contribute to the problem of churning in the tax and transfer systems.

3.3. Enhancing the taxation of savings, assets and investments, including the role and structure of company taxation;

Comment

Where a land value tax is used to cut taxes on saving and investment in physical capital formation, it reduces deadweight losses and creates an efficiency dividend. Just as Hong Kong has used land revenues to maintain competitive tax rates on companies and individuals' capital and labour, so Australia can use its land value tax base to reduce marginal income tax rates on individuals and companies, without giving up – and, indeed, improving – its ability to tax resource rents.

3.4. Enhancing the taxation arrangements on consumption (including excise taxes), property (including housing), and other forms of taxation collected primarily by the States;

Comment

A consumption tax is an income-tax which exempts savings and is levied indifferently on land, labour and capital incomes. In that regard, the GST is simply another income-tax surcharge and the Treasury's calculations of effective marginal tax rates should show it as such (which they do not, yet no one can pretend that abolition of income tax and its replacement by GST would result in zero MTRs). A land value tax would eliminate the distortions associated with consumption taxes and would allow the States to replace inefficient conveyance duties and disguised inefficient electricity and water taxes.

3.5. Simplifying the tax system, including consideration of appropriate administrative arrangements across the Australian Federation; and

Comment

Unlike income and consumption taxes, a land value tax is inherently territorial in nature and can be shared by layers of government with each preserving its own autonomy in relation to the rate of tax. Because land is immobile, there are no source or residence tax problems to deal with. All levels of government could share a common valuation and collection agency, reducing the need for taxpayers to deal with separate bureaucracies.

3.6. The interrelationships between these systems as well as the proposed emissions trading system (ETS).

Comment

Without making any judgement on the science of climate change and the value of computer modelling, it may be noted that a direct carbon tax may be more efficient than an emissions trading system. The price would be stable and all revenue would go to the Treasury with no revenue being shared with speculators or other participants in the emissions trading market. If, nonetheless, an emissions trading system is introduced, emission permits should be treated as land rights and included in a land value tax. As with other assets, there should be no capital gains tax (which would impede the operation of an emissions market) and the annual tax on the value of the emission right should be the only tax.

4. The review should make coherent recommendations to enhance overall economic, social and environmental wellbeing, with a particular focus on ensuring there are appropriate incentives for:

4.1. workforce participation and skill formation;

Comment

A land value tax is neutral with respect to workforce participation. By contrast, the present tax transfer system creates biases between different types of families as to their workforce participation and subsidises others to stay out of the workforce.

4.2. individuals to save and provide for their future, including access to affordable housing;

Comment

A land value tax impedes the formation of real estate bubbles and tends to keep housing affordable. It steers savings in the direction of real physical capital formation and away from land speculation. If used to defray fixed infrastructure costs, through loans amortised against rates, a land value tax reduces the cost to young marrieds of serviced land.

4.3. investment and the promotion of efficient resource allocation to enhance productivity and international competitiveness; and

Comment

By replacing taxes on capital and labour, a land value tax improves resource allocation and productivity. By providing the revenue to enable reductions in marginal tax rates on the labour and capital incomes of companies and individuals, it can enable Australia to compete internationally for global investment against offshore financial centres. Indeed, given Australia's large resource endowment per capita, there is no reason why it should not be a fiscal paradise for labour and capital which competes vigorously with low-tax jurisdictions.

4.4. reducing tax system complexity and compliance costs.

Comment

A land value tax can finance the abolition of complex taxes such as capital gains tax. A land value tax is inherently simple, transparent and public. It requires no obnoxious or vexatious inquisitions by tax officers into the private affairs of individuals.

5. The review will reflect the government's policy not to increase the rate or broaden the base of the goods and services tax (GST); preserve tax-free superannuation payments for the over 60s; and the announced aspirational personal income tax goals;

Comment

A land value tax is consistent with these goals. It may be noted that Fisher Labour government was elected on a policy of land value taxation. The late Clyde Cameron has written on how the Labour Party has failed to fully appreciate the importance of land value taxation to its traditional aspirations of empowering the working people of Australia.

6. The review's recommendations should not presume a smaller general government sector and should be consistent with the Government's tax to GDP commitments;

7. The review should take into account the relationships of the tax system with the transfer payments system and other social support payments, rules and concessions, with a view to improving incentives to work, reducing complexity and maintaining cohesion;

Comment

Because a land value tax has a zero marginal tax rate and does not tax labour income, it can enable reductions in marginal income-tax rates on labour which would reduce equivalent marginal tax rates and improved incentives to work. A large part of the incoherence in the tax-transfer system arises from the failure to recognize intra-family and inter-family voluntary income redistribution for both tax and Social Security purposes.

8. The review should take into account recent international trends to lower headline rates of tax and apply them across a broader base, as well as domestic and global economic and social developments and their impact on the Australian economy.

Comment

Australia should not follow international trends slavishly. It should start to set trends, as it did in the early 1900s. A land value tax could enable Australia to be the first developed country to cut income-tax rates substantially and start competing against the developing countries which are overtaking the OECD club.

9. The review will also incorporate consideration of all relevant tax expenditures.

APPENDIX B

Annotated Commentary on "Architecture of Australia's Tax and Transfer System"

The following commentary deals with matters raised in the Treasury tax paper in more detail and illustrates how the Treasury recognition of the three factors of production needs to be pursued to its logical conclusion, namely, that land value taxation should be preferred to taxes on labour and capital.

Page xi

A complex and inefficient tax-transfer system imposes costs on society and those more vulnerable in society will bear a disproportionate share of these costs.

Comment

The tax- transfer systems were discussed in the EPAC 1988 paper and it was demonstrated that they could only be disentangled by dollar for dollar income tests and appropriate family-based tax free thresholds.

Page xi

Given Australia is a small, open and developed country operating in an increasingly globalised world with freer flows of ideas, investment and labour, there is increasing pressure for Australia's tax-transfer system to remain internationally competitive.

Comment

Given that Australia is a small open economy, international competitiveness requires that taxes be removed from labour and capital and revenue recovered instead from the resource rents of land and other natural resources. The possibility of doing so was demonstrated in Dwyer (2003) "The taxable capacity of Australian land and resources" (see Appendix E).

Page xi

The demographic challenge of an ageing population is also profound. As our population ages the proportion of people in the workforce will fall. This has significant implications for economic growth and our future standards of living.

Comment

The demographic challenge of an ageing population has been exacerbated by a system of income and indirect taxation, which penalises a specialized market/non-market household division of labour most associated with child rearing and larger families. It is not surprising that over-taxed labour does not breed when land prices and utility bills are skyrocketing due to government reliance on indirect taxes or quasi-taxes instead of rates or ad valorem land

taxes. For many couples, having children on a single income is just not economically possible yet demographic stability depends on some families choosing to have more than 2 children and indeed specializing in that activity. The tax-transfer system penalizes child rearing by intact families and favours child rearing by sole parents.

Page xii

The boost to national incomes from the significant increase in the terms of trade due to the resources boom, together with Australia's strong fiscal position, provides a platform on which to base a reform agenda.

Comment

Both resource revenues and land revenues should be used to abolish inefficient and inequitable income and capital gains taxes and indirect taxes. Australia should become super competitive by abolishing all taxes on labour and capital. With one of the richest resource endowments per capita in the world, there is simply no excuse for Australia's inefficient tax system.

Page xiv

There are many taxes in Australia, all of which are ultimately borne by individuals on the earnings from only three factors of production: labour, capital and land (including natural resources)…. All taxes affect choices by encouraging individuals to shift from higher taxed to lower taxed goods and services or activities, and by lowering their available income.

Comment

The paper is correct in identifying that all taxes must be paid out of the earnings of land, labour or capital. It is not however correct to state that "All taxes affect choices by encouraging individuals to shift from higher taxed to lower taxed goods and services or activities, and by lowering their available income." It has been well accepted by economists for generations that taxes on land values do not distort relative prices and, once having been capitalized, do not adversely affect private incomes. Land value taxation is therefore uniquely efficient. This has been acknowledged by Professors Feldstein, Samuelson, Friedman and a host of others going back to the Physiocrats.

Page xv

By OECD standards Australia is a low tax country — the eighth lowest. Australia is also a low expenditure country — the third lowest in the OECD.

Comment

OECD "standards" are irrelevant and not standards to be aspired to in any case. The performance of OECD economies since the 1970s has largely been one of demographic

stagnation and relative decline compared to economies such as those of Asia and the Middle East. Australia should not seek to emulate the economic decline of Europe.

Further, the remark is seriously misleading because it fails to recognize that, in Australia, compulsory superannuation, statutory third party for motor accidents and compulsory workers' compensation insurance do what public sector tax-transfer programs do in many OECD countries, mainly in Europe. Australia's tax rates therefore should be much lower as less is provided in return.

Page xvi

Australia and New Zealand are the only OECD countries that do not levy a social security tax and have a dividend imputation system.

By OECD standards, Australia's:

- company tax rate is now above the average;
- reliance on broad-based consumption taxes (such as the GST) is lower than average;
- reliance on revenue from taxes on property is greater;
- top personal income tax rate is average, but the absence of social security tax means we have a higher tax burden on capital income;
- taxes on fuel are low; and
- tax-transfer system is highly redistributive.

Comment

Australia should not introduce a social security tax. Such taxes are simply extra taxes on labour and discriminate against those incurring the costs of raising the next generation who become conscripted as taxpayers to support those in the previous generation who have neither saved nor incurred the expenses of child rearing.

Australia should retain and improve the dividend imputation system. There should be no restriction on the flow-through of imputation credits through companies, trusts or partnerships to underlying individuals. Removing or restricting imputation would radically increase the taxation burden on capital. The objective should be to reduce taxes on capital income by sharply distinguishing land from capital and financing the reduction of capital taxation through increased taxation of land values via an ad valorem holding charge.

It is not correct to regard rates or land value taxes as taxes on "property" – meaning either property generally or buildings. As John Stuart Mill observed, land value taxes are really a

reservation of land rent in favour of the public. Once capitalized, they effectively mean that land is to that extent no longer privately owned. The European and American usage of the term "property taxes" includes taxes on reproducible capital which should be sharply distinguished from the general Australian system of taxing unimproved land values, which is economically superior.

Taxes on fuel are not low in Australia. Indeed they should be abolished. The current high taxation of fuel in a sparsely populated and large continent creates far greater competitive disadvantage from Australia than it does for small European economy like Belgium.

The tax transfer system should be highly redistributive if it is to avoid the costs of churning. The guiding principle should be that no one who pays tax should receive cash transfers and that no one who receives cash transfers should be paying tax. It is fundamentally illogical to tax a person and then give him some or more money back. It is not only illogical: it is also unjust, demeaning, socially demoralising and economically inefficient. It creates a market in rent seeking and tax dodging. (Note that inefficient churning is not involved where land revenues are distributed to citizens since land value taxation has a zero MTR. Churning is an issue in attempting redistribution through taxes on labour and capital incomes.)

Page xvii

Most countries have a tax system based on a mix of taxes on labour income, capital income and consumption.

Australia's tax mix is slightly skewed towards direct taxes on labour income. This accounts for around 40 per cent of revenue. Taxes on capital income account for about 33 per cent, while taxes on consumption account for 27 per cent.

Compared with other OECD countries, Australia has a low share of tax revenue from labour income and the greatest reliance on tax revenue from capital. In part, this reflects the relatively greater contribution of corporate income taxes to total tax revenue.

Comment

The classification of tax revenue as being from "labour income, capital income and consumption" is not analytically useful and is inconsistent with the correct classification of taxes is falling on land capital or labour. It would be more informative to allocate the consumption tax burden against land, capital or labour incomes and to split the mis-labelled "tax revenue from capital" into its land and capital income components. The high corporate tax collections reflect resource rents from the mining boom as well as imputed or explicit land rents enjoyed by other companies.

Page xviii

This 'churn' imposes costs on individuals as well as the administration of the system.

Comment

The graph demonstrates that churning could be largely avoided by converting family payments into income tax allowances. A lot of the churning represents taking tax from the income earner and paying it into the bank account of the non-earner in the family. This could be avoided if families were allowed to opt for splitting the income between the parents and the children, reducing their involvement with both the tax and social security systems in favour of greater self-reliance. People with property income or who are self-employed have opportunities to do this which are denied to wage and salary earners.

Page xix

There are ongoing challenges to our ability to tax residents on their foreign source income and non-residents on their income from investing in Australia.

Comment

It is foolish to seek to tax residents on foreign source income and non-residents on income from investing in Australia. A territorial tax system is far easier to administer. Land value taxation is naturally territorially based, does not require international assistance from enforcement and prevents non-residents using OECD tax treaties to reduce Australia's tax revenue in favour of the Treasuries of an investor's country of residence. Land values cannot be shifted offshore by residents nor thinly capitalized by non-residents. By reducing company and capital taxation through a shift to land value taxation, the Commonwealth could dramatically ease its insoluble problems of international tax enforcement in a globalising economy.

Page xix

Improving technology is making it administratively feasible to replace some taxes with direct user charges.

Comment

The shift to direct user charges such as toll roads is economically inefficient, because it ignores the externalities roads confer on land values. Beneficiary charges rather than user charges is the rule in terms of economic efficiency. Rate-based financing of network infrastructure such as roads, water, gas, electricity and telecommunications networks is inherently more efficient than seeking full cost recovery from users alone. It should also be noted that many user charges have been inflated by extraordinary revaluations of assets previously paid for by users or taxpayers. Such Government-sanctioned "double charging" for old infrastructure represents an added cost burden on Australian industry and a serious disguised tax impediment to Australia's international competitiveness as well being a source of wage push demands to match the rising cost of essential services.

Page xxi

There are limited opportunities for the States to introduce new taxes, so often they have looked to narrowly-based taxes to realise some gain from a rapidly growing area of their economy.

The fiscal relationship between the Australian government and the States is characterised by 'vertical fiscal imbalance'. The States' own revenue sources are insufficient to fund their expenditure responsibilities, but the Australian government's revenue sources are greater than is necessary for its responsibilities.

Comment

It is simply not true that the States do not have adequate revenue sources. They and the Commonwealth share the greatest potential non-distorting revenue source of all – the ability to tap land and resource rents through land value taxation. It matters not how many taxes one can levy – one, single, good, productive and efficient tax is worth far more than a thousand bad new ones.

Vertical fiscal imbalance corrupts accountability and should be removed. It can be removed by Commonwealth, State and local and semi-government authorities imposing taxes at rates selected by each on a common base of unimproved land value. For example, the Commonwealth could levy a national rate at w%, a State at x%, a local government at y% and a semi-government water authority at z%. The resulting rates could be collected monthly or quarterly by one joint collection agency and distributed to the respective authorities. Unlike payroll taxes or stamp duties, such a revenue sharing arrangement requires minimal intergovernmental co-operation, does not raise jurisdictional cross-border enforcement issues and leaves each government free to decide its own revenue and spending priorities without being beholden to another.

Page 3

All taxes and all transfers affect behaviour in some way. They change how much money people have and the incentives they face.

Comment

It is trite economics to observe that land value taxation (comprehending all taxes on land and resource rents) does not – in contrast to taxes on labour or capital - drive a tax wedge between costs of production and prices to consumers. Nor does it even represent a loss of income to new factor owners where the tax has been capitalized in the lower price received by former factor owners.

Page 4

… the Council of Australian Governments (COAG) noted the need to … increase workforce participation … this demographic challenge is profound.

Comment

Unless there is some new economic doctrine of "Arbeit macht frei" it may be observed that increasing labour force participation is not an economic end in itself. Indeed, economic progress manifests itself in reduction of required work effort.

One may also ask how the demographic challenge be met if every woman who would like to raise children is press-ganged into the paid workforce? You will simply be purchasing greater output from this generation of labour at the expense of a smaller future workforce – and enter into the declining state described by classical economic writers (as Europe already has).

Page 4

Given Australia is a small, open and developed country operating in an increasingly globalised world with freer flows of ideas, investment and labour, there is increasing pressure for Australia's tax-transfer system to remain internationally competitive. This is particularly important for the taxation of investment income because of the ease with which investment can be switched between alternative activities and locations, and the capacity to shift profit between jurisdictions. Of course, tax is not the only determinant of international investment decisions (a skilled workforce and high quality infrastructure are also significant), but it is nonetheless important.

Comment

"Investment" in land is not capital formation but the acquisition of a Nature-given asset. Real investment is the creation of reproducible capital goods, not the mere acquisition of existing assets. Taxation of land values, unlike taxation of Man-created capital income, does not drive investment away. Land cannot be shifted in response to a land value tax and the exiting "investor" has to accept the capitalization of the tax.

Incidentally, the Treasury is deluding itself if it thinks Australia's infrastructure is of "high quality" when –

- *the Sydney Airport sale has blocked Badgerys Creek (while Hong Kong and Singapore have upgraded their airports),*
- *every city is under water restrictions,*
- *there have been gas and electricity supply interruptions which would not have been tolerated 30 years ago, and*
- *major highways such as the Pacific Highway are still not dual carriageway.*

Page 9

Chart 2.1

Comment

Land tax and rates are not taxes on national savings. It is wrong to confuse land with capital accumulation created through saving. Land is Nature-given, not created by "saving". Land value taxes (including rates and resource rent charges) are not taxes on national savings - they are transfers of land rent from individuals to the Crown, as John Stuart Mill recognized. (From the individual investor's point of view, a land value tax is no tax on his savings in any case if it is a known tax which has been capitalized in the purchase price.)

Pages 10-11

This reflects ambiguity in distinguishing when a payment to government represents a separate tax or part of a broader tax and whether a payment is a tax rather than a fee for service. …

A core characteristic of a tax is that there is no clear and direct link between the payment of the tax and the provision of goods and services to the taxpayer. The funds that the government raises from taxes may be used to provide goods or services to the community as a whole, and this may provide a benefit to the taxpayer, but the payment will still be considered a tax if there is no direct relationship between the amount of the payment and the benefit to the taxpayer. Where a government agency recovers the costs of supplying a product or service to an individual, the revenue is classified as non-tax revenue. Only if the fees charged exceed the agency costs are the payments (or part of the payments) classified as a tax.

Comment

"User charges" in excess of short run marginal cost exacted by monopoly infrastructure providers (be they privately or publicly-owned) are really taxes, collected either by tax farmers who have bought assets from Governments with a franchise to tax or collected by State corporations and paid to Treasuries as "dividends". These quasi taxes are disguised by spurious asset valuations or valuations which ignore previous user contributions for the infrastructure, see Larkin and Dwyer (1994) and Dwyer and Lim (1999b) and (2001b).

Further, Ramsey pricing represents an "off-Budget" tax-transfer system whereby some users subsidize others by being charged prices in excess of short run marginal cost. Indeed, if fixed costs are not covered by fixed access charges levied on connected sites, all users may be taxed by being charged more than short run marginal cost and may be seen to subsidize the landholders whose land is increased in value by the presence of the infrastructure.

Finally, while it is true that compulsory or semi-compulsory self-provision for things such as health insurance, superannuation , workers' compensation or motor vehicle third party does not represent taxation, it does substitute for what is done by taxes in other OECD countries. Therefore it is misleading and deceptive to say Australia is a low tax country when comparing it to countries where such things are done through the tax system. In making such comparisons, either –

- *the costs of Australia's mandatory self-provided social programmes should be included; or*
- *earmarked European social security taxes should be excluded.*

That Australia's compulsory superannuation system is equivalent to a European social security system is shown by the fact that Australia has entered into a treaty regarding double superannuation coverage affecting employees who work in Australia and Germany. Double coverage will be eliminated under a new supplementary Social Security Agreement which comes into effect on 1 October 2008. "Generally, seconded workers from Germany will continue to contribute to and be covered by the German social security system and will not be subject to Australia's Superannuation Guarantee. Similarly, Australian workers seconded to Germany will remain subject to Australia's Superannuation Guarantee and contributions will not be required into the German social security system," said Senator Sherry. (Source: Minister for Families, Housing, Community Services and Indigenous Affairs and Minister for Superannuation and Corporate Law joint media release, 24 September 2008).

Page 17

Assessable income does not generally include income from gifts or hobbies. Returns from owner-occupied housing, such as capital gains, are not taxable and no deduction is allowed for related expenses.

Comment

Australia's 1915 Income Tax Assessment Act did include taxation of imputed rent. A Federal land value tax, levied like rates jointly with the States and local givernment, could tap accruing land incomes and curb residential land speculation without triggering the "lock in" effects of transaction based taxes such as CGT or stamp duties.

Page 24

Equity investments in Australia by non-residents are primarily subject to Australian tax through company income tax. Unfranked dividends, unless they constitute conduit foreign income, are subject to a final withholding tax upon distribution to the non-resident.

Final withholding taxes are also levied on interest, royalties and certain distributions to non-residents from Australian managed investment trusts. These taxes are generally levied on a gross basis (that is, on the gross income without allowing deductions) at a flat rate that varies depending on the type of income and whether a tax treaty applies.

Comment

The OECD pattern of low rate withholding taxes on passive incomes received by non-residents allows Australian natural resource revenues to be garnered by overseas investors and treasuries. How much does Australia really benefit from a mining boom when so much of its resources have come to be owned by overseas investors? By contrast, a land value tax

bypasses the OECD tax treaty straightjacket and allows Australia to collect the full rental value of its land and other natural resources. A land value tax also neatly sidesteps the need to worry about transfer pricing in iron ore or coal contracts etc. The value of the mining right can be valued and taxed directly – and where the value is provided by self-assessment the Crown can buy out the owner at his own assessment of value with no problem of unjust acquisition.

Further, as a tax on land rent cannot be shifted and is capitalized, a land value tax can increase Australia's take from foreign "investment" without discouraging genuine foreign investment in physical capital formation.

Page 27

In addition to income tax, the Australian government raises revenue from the extraction of certain oil and gas natural resources through specific resource taxes and royalties. Petroleum resource rent tax (PRRT) is a profits-based tax that applies to oil and gas production in Australian territorial waters outside the coastal limit (except the North West Shelf exploration permit area and the Joint Petroleum Development Area in the Timor Sea). PRRT applies at a rate of 40 per cent of the profits of a petroleum project, after deducting exploration, development and operating costs. Costs that are carried forward as an offset against income in a future period are uplifted at designated rates depending on the type of expense — the long term bond rate (LTBR) plus 15 per cent for exploration expenditure and the LTBR plus 5 per cent for development and operating expenditures. Exploration in certain frontier areas is currently eligible for an initial 150 per cent uplift.

The Australian government collects crude oil excise from the production of liquid hydrocarbons from the North West Shelf production area, onshore fields and coastal waters. Crude oil excise is levied on a per barrel basis. The first 30 million barrels of cumulative production from a field is exempt. There is also an annual exemption for each field of 3.1 million barrels once the 30 million barrel limit is reached. Excise is levied on an increasing rate scale tied to the level of production. The top rate for fields currently subject to crude oil excise is 30 per cent of the gross value of production. The excise scales that apply to production from each field are determined by the date of discovery and/or the commencement of production.

The Australian government collects revenue from the extraction of oil and gas resources through several royalties it shares with Western Australia (see Table 2.4). The Australian government also collects royalties on uranium mining in the Northern Territory, which are shared between the Northern Territory Government and the Aboriginal Benefits Trust Account.

Comment

These methods of seeking to capture resource rents for the Crown as ultimate owner are less efficient than bringing mineral and other resources into a comprehensive ad valorem land

value tax where the value of the mine was subject to an annual tax. In the case of depletable resources, such as mines and oil wells, it is true that annual ad valorem taxation can create an incentive to premature extraction. However, this distortion is arguably less than the incentive to pad operator costs under a cashflow based RRT regime and, in any case, can be removed by imposing a depletion charge based on that part of the annual difference in mine value attributable to extracted resources (as opposed to changes to prices etc). See Dwyer (1980) "A History of the Theory of Land-Value Taxation" pp 249-255.

Page 29

Chart 2.7

Comment

The chart naturally suggests the value of merging rates, land taxes and stamp duties on land conveyances into one tax base of unimproved land value (including site and resource values) and sharing the revenue through joint Federal, State and local government collection. John Stuart Mill long ago urged merging duties on conveyances into an annual land tax to avoid the problems of a transaction-based tax.

Page 30

Stamp duty on conveyances

Each State levies stamp duties on the transfer of property. The duty is usually paid by the purchaser based on the sale price of the property (or its market value if higher). Table 2.18 shows the rates and thresholds which apply in each State for the purchase of residential property. Different rates and thresholds may apply to the purchase of different types of property. There are programs in each of the States that provide concessions for first home buyers and other groups.

Land tax

All States except for the Northern Territory levy land tax on the total holding of unimproved land value, excluding principal residences. Land used for primary production is exempt or deductible in all States. Other exemptions include caravan parks and aged care facilities in some States. Most jurisdictions also have tax-free thresholds. Land tax rates are generally progressive. In assessing the value of land, the States either take the value at a specified time in the year or an average of the value over the previous three years.

Local government rates

Local government rates are a tax charged by local councils on the value of property (the ACT does not have local councils and rates in the ACT are charged by the ACT Government) (Table 2.20). Most types of land are subject to rates, though the rate that is charged can vary by the land type, for example residential or commercial use. The valuation method for rates also varies considerably across councils, with unimproved value, capital improved value (that

is, the total value of the property) or rental value used as alternate benchmarks. Councils have some autonomy in setting rates, although in NSW (and for the next three years, the Northern Territory) the State government restricts the rate of annual increases. The average rate varies significantly across jurisdictions, with councils in areas of lower land value tending to charge higher rates. This may reflect the fact that if land values in one area are lower than in a neighbouring area, the rate must be higher to provide the same level of service.

Comment

All these taxes seek to tap the same base – land values. The exemptions for principal residences or primary production have distorted the base and economic behavior (eg land speculation in primary production land paying no tax while being held for residential redevelopment). The taxes should be consolidated and simplified along with the Federal CGT on real estate by having joint Federal/ State/local government/semi-government valuation and taxing agencies. The collection agency could then collect a uniform Federal rate plus applicable uniform, flat rate, State and local government rates within their territorial areas. Stamp duty and CGT on real estate could then be abolished. So could access charges for municipal services such as water supply and user charges on water volumes transported reduced to short run marginal cost.

Pages 31-32

Non-tax resource revenue

A variety of resource royalties and payment arrangements are used by the States to price the use of natural resources. Table 2.5 provides a summary of some features of state mineral royalty arrangements. These include specific royalties levied as a constant amount per physical unit of production, *ad valorem* royalties levied as a constant percentage of the value of production, or profit based royalties levied on the profit derived on sale. At a more detailed level, the arrangements are very complex, covering over 60 different royalty arrangements. The details of each of these royalty arrangements (including applicable rates) are outlined in Table 2.19.

…..

There are various arrangements for charging for non-mineral natural assets. These include:

- a forestry royalty for trees accessed from public land (state forests), (see Section 8.5 for an explanation);
- licence fees and access charges for the use of water resources. These vary between jurisdictions. For example, in NSW, the Independent Pricing and Regulatory Tribunal sets the prices that can be charged for water, including the fees for licence applications and annual water charges; and

- licensing arrangements for fisheries and aquaculture resources. For example, in Queensland licences are required to undertake commercial fishing, buy fish from a person licensed for commercial fishing, provide charter fishing services, fish in the Torres Strait, own a commercial fishing boat, or own a boat that transports fish caught on a commercial fishing boat.

Comment

Strictly speaking, a land tax, as John Stuart Mill observed, is a reservation of rent in favour of the public and is as much a non-tax resource revenue as these listed payments. Further, the problem with these ad hoc royalty charges based on per unit or value of production is that they impose costs on infra-marginal production as well as taking rent. They therefore create some excess burden distortions. By contrast, a charge based on unimproved land values (in which is included the market value of timber, mineral or fishing rights) combined with a charge for depletion of value, in the case of exhaustible resources, avoids taxing infra-marginal production and thereby sterilizing resources.

It should be stressed that land value charges should be based on market rather than arbitrary values set by bureaucratic fiat. In the case of water, licence fees set by the ACT and other Governments have concealed a large excise tax component, since the charges are unrelated to water resource values (typically urban users are charged far more than rural users) and instead are based on arbitrary prices per unit consumption of the good. Water and other resource charges set as arbitrary per unit charges fail to capture true economic rent. They also create excess burdens, impede Australia's export competitiveness, reduce living standards and represent an erosion of the Constitutional allocation of excise taxing powers to the Commonwealth.

Page 33

The largest measured tax expenditures are found in the social security and welfare functions of government (see Table 2.6). Included in this function are superannuation concessions, estimated at around $25 billion in 2006-07. Also included are the exemption from income tax of Family Tax Benefit (around $2.5 billion) and the senior Australians tax offset (around $1 billion). Significant tax expenditures not included in the social security and welfare function include the capital gains tax discount for individuals and trusts (estimated at $6.9 billion) ….

Comment

The phrase "tax expenditure" conceals a multitude of value judgments. For instance, family tax benefit is meant to be an <u>offset to tax burdens</u> on families and represents a tax adjustment in respect of ability to pay. To tax it would be to tax a tax refund. Similarly, the CGT discount replaced averaging and indexation. To describe these as "tax expenditures" is therefore misleading and deceptive. Further, the concept of tax expenditure depends on the norm adopted. Arguably, a normative tax system would include some form of family quotient (to recognize the number of people enjoying the benefit of a given income) and exclude

taxation of capital gains (to recognize that realized capital gains represent the capitalized value of after-tax income streams and that double taxation should be avoided). On such a norm (not so far removed from Australia's 1915 or 1936 Income Tax Assessment Acts), the instanced "tax expenditures" are not tax expenditures at all.

Page 37

Tax concessions are also a means to provide transfers. They include items like the superannuation tax concessions; the medical expenses tax offset …

Comment

It is both offensive and analytically incorrect to describe tax allowances for superannuation or medical expenses as "transfers" from the government to taxpayers. To describe a tax concession as a "transfer" is to choose to overlook the fact that the word "concession" may denote a necessary, legitimate and proper allowance in levying taxation correctly in the circumstances of the case. It is unfortunate that Treasury seems to think the adjective "unjustified" must always be read in before the phrase "tax concession".

Under a proper income tax system, lifetime income averaging for personal exertion incomes would be the norm, as John Stuart Mill (1848-1871) and William Vickrey (1947) recognized long ago. Superannuation is simply a means of achieving that and, to the extent it does so, tax allowances for superannuation are <u>not</u> transfers at all but a proper design component of a personal income tax system. Similarly, a personal income tax system which purports to have regard to "ability to pay" or "horizontal equity" can hardly ignore medical expenses. If manufacturers can deduct costs of repairing plant and equipment why cannot taxpayers deduct the costs of maintaining their bodily existences?

One notes that questions of personal equity do not arise under an established land value tax, since the taxpayer buys free of the tax in the case of an existing tax due to tax capitalization. Questions of transitional equity upon the introduction of such a tax need to take into account both the origins of land tenures as gifts of the Crown and the practical compensation which such a tax provides if used to abolish other taxes.

Page 42

Means testing operates on a couple or family basis, on the principle that targeting support should take into account other sources of financial support, including from close family members (spouse, parents of dependent children).

Comment

A large part of the churning problem of which the paper complains is generated by this mis-match of units. Dwyer and Cox (EPAC, 1988) observed that if income transfers in cash and in kind between and within families were recognized for ***both*** *taxation and social security purposes, one could implement the logical principles that –*

- *no one who pays tax should be a social security recipient; and*
- *no one who receives social security should be a taxpayer.*

It may be observed that one reason the Australian Labour Party traditionally hated indirect taxation of the necessities of life was that such taxation reduced the working people of this country to dependence on "State charity" as a poor substitute for a living wage.

It may further be observed that land value taxation can provide a fund for payment of a social dividend (such as non means-tested child endowment)without the distorting effects of payroll or income taxes. Indeed, several jurisdictions (eg Alaska) which have tapped land values (such as oil revenues) have paid social dividends from such revenues.

Page 49

Tax expenditures

The Australian government also provides significant tax concessions, which can be a form of transfer. Some relevant examples are the superannuation tax concessions and the 20 per cent medical expenses tax offset.

Comment

As noted above in respect of page 37, it is offensive and analytically incorrect to describe superannuation and medical expenses concessions as tax expenditures. One must remember that the word "concession" does not always mean an unjustified capitulation – it is a legitimate meaning of the word in the English language to describe an allowance properly made for the circumstances of the case.

Page 49

…. subsidised services, such as electricity, water and public transport …

Comment

Any charge in excess of short run marginal cost (SRMC) is properly described as tax where one is dealing with natural or legislated monopolies. It is therefore analytically incorrect to describe anything as a transfer which reduces per unit consumption charges to SRMC. What often happens with utility charges is that some consumers are taxed via high charges well in excess of SRMC to subsidize others below SRMC. The economic optimum, as Hotelling (1938) and Vickrey (1977) recognized, is to recover the fixed charges of such reticulated services through ad valorem land value taxes to enable SRMC pricing to ***all*** *consumers.*

Page 52

The Australian Taxation Office (ATO) is a key player in the policy formation and legislative process…

Comment

One trusts that the ATO will therefore no longer write letters to complaining taxpayers which state that the ATO merely administers the law as enacted by Parliament – as if it had nothing to do with the policy of the law.

More fundamentally, it is wrong that the ATO be a "key player" in the policy formation and legislative process. Instead, it should be a disinterested and dispassionate administrator of the taxation laws. It is not generally recognized that the administration of Australia's taxation laws in its practical operation effectively violates the separation of legislative, administrative and judicial powers.

- *The ATO instructs Office of Parliamentary Counsel and thus effectively drafts the law.*
- *The ATO administers the law with direct or indirect powers of access to electronic surveillance, banking records and people's papers and private dwellings which parallel or exceed police powers in respect of terrorism. This is the kind of "vexatious inquisition" which Adam Smith rightly condemned. The basis on which the Commissioner of Taxation was given wide information gathering powers in 1936 was in the context of a civil administrative function, simply collecting taxes due, but the information gathered is being used increasingly for criminal prosecutions as well.*
- *The ATO "interprets" the operation of the law through its "rulings", "practice statements" and "interpretative decisions. The ATO often holds to its "interpretation" of the law even in the face of adverse Court judgments (witness recent FBT litigation, where the ATO only relented on its interpretation in the face of a Full Federal Court judgment). Often the ATO seeks to confine a Court's declaration as to the meaning of the law to the particular case and to ignore its role as binding precedent, forcing taxpayers to surrender or re-litigate declared law.*
- *Finally, the ATO can enforce its view of the law by imposing penalty taxes without any judicial or quasi-judicial process. The onus is then on the taxpayer to seek reversal of the penalty already imposed and operative as a debt.*

The ATO should be divided up into separate divisions responsible to separate Commissioners answerable to a Board of Inland Revenue to reflect these different functions and to guard against oppressive use of power. Furthermore, penalties should be only imposed by a properly-constituted judicial body, not by organs of the Executive Government.

Page 54

The States also interact more broadly with the ATO under information sharing agreements to ensure that consistent information is used across the Australian government and state tax

systems. For example, information on house sales is used for the collection of stamp duty on conveyancing and for checking capital gains tax on investment property sales.

Comment

A major advantage of land value taxation is that is can be assessed and levied on an annually updated land register with unimproved values available for public inspection. It requires no intrusion into taxpayers' private affairs. It can even be self-assessed. For example, New Zealand land tax law had a provision which allowed the landholder to declare his own estimate of unimproved value and be assessed thereon with the rider that the Crown could buy him out at his own valuation with compensation for improvements.

Page 59 Table 2.9

Comment

The Garnaut-Clunies Ross petroleum resource rent tax, while conceptually superior to per unit royalties such as the crude oil excise, does not capture all the economic rent of an oil leasehold from the Crown. Because it is transaction-based it may be an inadequate measurement tool for ascertaining and taxing economic rent.

Pages 73 and 75 Table 2.14 and Table 2.16

Comment

In seeking to tax direct "investment in" (rather ownership of) Australian resources, it is a mistaken policy to rely on income tax and capital gains taxes. Direct land value taxation is superior since land value taxation is assessed against ownership and cannot be avoided by using low withholding rates, thin capitalisation or liquidation of intermediate holding vehicles.

Pages 78-80 Table 2.18 (taxes on financial transactions)

Comment

Transfer duties on real estate of up to 7% act as transfer taxes on land and improvements. By taxing buildings they increase the cost of housing. By taxing both, they create a lock-in effect, along with CGT if applicable. Transfer duties should be abolished and replaced by a simple uniform state land value tax or rate.

Page 96 Table 2.18 (parking space levies)

Comment

Parking space levies are inferior to a general land value tax. By selectively taxing one use of land, they distort land uses. Instead of punishing car drivers selectively for "causing congestion", a general land value tax can recapture from urban sites the value created by community-provided transport facilities. Revenue from urban rates can then be used to

finance the fixed costs of railways and roads (including resumption of private lands) to expand these facilities. Indeed, one of the advantages of land value taxation is that it reduces inefficient land speculation and lowers the market value of land relative to a speculative market. Land value tax taxation therefore not only raises revenue for public works to relieve congestion but also reduces the cost of resuming private land to do so.

Pages 98-100 Table 2.18 (land tax)

Comment

Instead of having graduated land tax scales which require grouping land parcels by owner, land value taxes should be imposed on all land at a simple flat ad valorem rate. The existence of metropolitan region improvement taxes or park levies could be generalised by having a common land value tax base used by Commonwealth, State, local and semigovernment authorities (where the latter could earmark rate revenue for public works in the region covered by the semigovernment authority). This used to be done with water boards and it meant that Australian cities were well supplied with water in contrast to the present position of emerging Third World scarcity in Australian urban water infrastructure.

Pages 114-118 Table 2.18 (motor vehicle tax)

Comment

Unless motor vehicle taxes are based on clearly identifiable damage to roads caused by the particular vehicle, they act as internal taxes upon trade and weaken the benefits of the Australian common market. It is always preferable to finance the fixed costs of infrastructure through lump sum land rates rather than transaction-based user charges. An error made in setting user charges above the short run marginal cost of use creates all the distortions of a tax: an error in recovering infrastructure costs from land rates does not adversely affect economic decisions at the margin -- land rates are a lump-sum tax and do not involve excess burdens.

Pages 127-140 Table 2.19

Comment

Attempts to collect the value of Crown resources exploited by the Crown's tenants through per unit or per value royalties are inherently inefficient, see Gaffney (ed) (1967). Often royalty rates are set low to avoid sterilising low-grade mining. Mining properties should be brought within a general land value tax and taxed annually on the unimproved value of the mine. Since the value of the mine declines with extraction of resources, an additional annual lump-sum commutation adjustment can be made on the change in the unimproved value attributable to extraction. This would recognize the loss of future ad valorem rates on the resource extracted. Such a method of collecting resource rent appears to be neutral and superior to other alternatives which necessarily distort decisions, for example, in relation to mining low grade ores, see Dwyer (1980) pp 249-255.

Page 141 Table 2.20

Comment

Effectively land value, site value and unimproved value are attempts to measure the same thing, namely, the value of land having no regard to improvements (or detriments) made by the current owner or his predecessors in title and having no regard to exhausted improvements or to improvements which may still be of benefit but the cost of which have long since been recouped. In short, land value is not "prairie value". Land value reflects the value of community-provided improvements or external benefits such as roads, water mains, power lines, telecommunications et cetera (which is why such facilities should have their fixed costs covered by land rates instead of trying to recoup all the costs as user charges). Where an improvement has outlived its usefulness, as in the case of land being acquired to demolish a building and build a new one, no regard should be had to the old building and the whole purchase price should be treated as land value. Similarly, where an improvement, such as the draining of a swamp, was made decades ago, its costs can be regarded as having been recouped and the land valued without any deduction for the cost of the merged improvement.

Page 153-166 Tables 2.27-2.34

Comment

Concessions provided in respect of rates, water and sewerage charges and the like can amount to off-balance sheet tax transfer systems. They can also lead to horizontal inequity: a worker with a family who is renting could get no concessions whereas an asset rich but lower income retiree with a pension entitlement may get concessions in respect of an owner occupied dwelling. Rather than providing ad hoc concessions to offset soaring infrastructure user charges, it would be better if such charges did not include bogus capital costs based on replacement cost of previously-funded assets and user charges were set at short run marginal cost prices. When new infrastructure investment was required, it could be financed by loans to be amortized by rates on land values. The political need to give concessions in respect of utility charges has arisen from a failure to adhere to a justifiable and equitable rating system for funding public works.

Page 167

- There are many taxes in Australia, all of which are ultimately paid from the earnings from only three factors of production: labour, capital and land (including natural resources).
- Individuals (rather than businesses) own these factors of production and therefore ultimately bear the burden of taxation. Who bears a tax or benefits from a transfer payment can be very different to who pays the tax or receives the payment.
- All taxes affect choices by encouraging individuals to shift from higher taxed to lower taxed goods and services or activities and by lowering their available income. Similarly,

transfers can impact on people's choices by increasing available income in certain circumstances. The costs of the tax–transfer system include its impacts on these choices (economic efficiency) and the costs of administering and complying with the system. These costs are significant.

- Equity is an important objective of the tax-transfer system. There is no unanimity about how best to assess equity but two fundamental principles are: horizontal equity, which requires that individuals in the same economic circumstances pay the same tax; and vertical equity, which is generally considered to mean that those with greater capacity pay more tax than those with less capacity.

Comment

The first two paragraphs are correct. However, it should be noted that a land value tax can be capitalized and thereby become a burdenless tax, as John Stuart Mill and others recognized. Further, a land value tax, unlike taxes on labour or capital, does not distort choices and, if previously capitalized, does not lower the available income of workers or investors. A land value tax is really a reservation of rent in favour of the public and no more distorts decisions or reduces income than a request by a private landlord that his tenant pay him a market rent.

As to equity, horizontal and vertical equity concepts are peculiar to an income taxation system which seeks to tax people on their personal incomes without distinction as to the source of those incomes. As concepts, horizontal and vertical equity are often in the eye of the beholder and in practice seem to be honoured more in the breach than the observance, as indicated by the oppressive taxation of income sharing units such as families. In terms of ethics, it can be persuasively argued that justice is better served by not taxing people and what they create with their labour or capital, but taxing land values which do not arise from the exertions of any particular individual.

Page 168 Chart 3.1

Comment

Chart 3.1 should recognize that taxes on companies, persons and superannuation funds are partially paid out of land incomes as well as capital incomes (that is, with capital properly defined as reproducible physical assets).

Page 169 Box 3.1

Comment

The equivalence asserted in Box 3.1 of labour taxation with consumption taxation does not hold where land is an independent factor of production not created by savings (which is the case). The equivalence could only hold in a primitive zero rent non-Ricardian economy where savings were invested in corn for future consumption. In the real world, it is more

accurate to think of a consumption tax as a flat rate income-tax with an exception for saved income.

Page 169

Returns to land and resources are also difficult to distinguish from returns to capital.

Comment

A land value tax does this automatically. From a statistical point of view, Australia's unique land valuation records show that land value taxation could go a very long way in replacing or reducing personal or company income taxes, see Dwyer (2003) reproduced in Appendix E.

Page 170

Net income accruing to foreigners has grown strongly during the recent terms of trade boom.

Comment

Once one allows foreign ownership of one's land and natural resources, one surrenders part of one's national income and sovereignty. That is why alien ownership of land was traditionally prohibited in many societies. In the modern context, if non-residents are to be allowed to own Australian land and resources, they should be compelled to pay rent through general land value taxation (which is not avoidable in contrast to income or capital gains taxation).

Page 171

Some generally accepted outcomes are that the economic incidence will fall to a greater extent on:

- a good or factor, the demand or supply for which is unresponsive to a change in its price;
- a good with no ready substitutes; and
- a factor of production that is relatively immobile.

Where a tax is levied on a good or factor which does not have these characteristics, or on a business entity, the burden of the tax will tend to be shifted to goods or factors of which the demand or supply is relatively less price responsive, less substitutable or less mobile.

For example, foreign investment is generally considered to be more mobile than the resident labour force. It is generally accepted that for existing investment, the incidence of a change in company tax falls on shareholders in the short-run. However, in the longer run, it is more likely the incidence falls on land and labour, particularly where domestic consumers can substitute foreign goods for goods produced by the resident company. Under these conditions, a high rate of tax on capital income may discourage some new capital investment resulting in a smaller stock of productive capital. With reduced capital investment, average

labour productivity could be expected to fall, and with lower labour productivity wages would be likely to be lower. It is through lower wages that, in the longer run, labour may bear the economic incidence of the company tax.

Comment

This analysis is correct, and it is indeed true that the optimal tax rate on (true) capital income is zero, see Dwyer (1998a) and (1999b) and references cited. That is why jurisdictions such as Hong Kong and Singapore have prospered by having low company tax rates and no capital gains taxes.

But it is important to recognize that whereas a tax on capital (defined precisely as reproducible capital goods) can be shifted to labour, this is not true of a land value tax. It is crucially important to avoid including land (either consciously or unconsciously) in one's concept of "capital" when thinking about the implications of such incidence theorems. If, for example, Australia were to reduce or abolish its company tax by raising revenue through a land value tax, labour would benefit from increased capital accumulation since a land value tax is not a tax on capital.

Page 173 Box 3.3

Comment

Box 3.3 should recognize that land supply is perfectly inelastic and that therefore there is no excess burden or efficiency cost associated with a land value tax. Further, taxes on goods and services resolve themselves into taxes on the three factor incomes accruing to land, labour and capital. It should also be recognized that tax capitalisation is uniquely associated with land taxation and means that there is no tax wedge. Nor is there even an income effect once a land value tax has been established (the inability to pass on the tax means it operates as a lump-sum wealth change on introduction and that does not affect future owners).

Page 174

All taxes — whether on labour, capital or land and natural resource income — have two types of effects.

- First, taxes affect individuals' *incentives* by encouraging them to shift from taxed to untaxed activities and goods or from heavily taxed to lightly taxed activities and goods (that is, the substitution effect). For example, taxes on wages may discourage people from working additional hours, or encourage them to find alternative forms of remuneration that are not taxed. Taxes on capital income encourage people to save less or shift their savings into vehicles which are taxed less. The loss in economic value due to these incentive effects is what economists call the efficiency costs of taxation (see Box 3.4).
- Second, taxes reduce individuals' *incomes*, which can also affect their behaviour. For example, taxing wages might encourage an individual to work longer hours if they desire

a given level of income to meet their spending requirements. Similarly, taxing the return to saving might encourage individuals to increase their level of savings to achieve a desired level of income in retirement.

Comment

A land value tax does not adversely affect incentives. Because land has no real supply cost, land value taxation does not create a tax wedge which discourages factor supply (unlike taxes on labour or capital incomes).

Further, since the acquisition of land does not represent saving, in the sense of capital formation, the taxation of land values does not adversely affect saving.

Page 174

Government spending, particularly on transfers to individuals, can also have important incentive and income effects. Transfers act like reverse taxes. Rather than raising money in ways that affect individuals' incentives and reduce their after-tax incomes, transfers give money in ways that affect individuals' incentives and increase their after-transfer incomes. For example, transfers can reduce the incentive to work, particularly means tested payments, and to save.

Comment

As recognized in Dwyer and Cox (EPAC 1988), the disincentive effects of income tested payments can be minimised if –

- *the taper rate is sharp and the taper range is small;*
- *voluntary self provision or family transfers are recognized and allowed to substitute for social transfers.*

Page 175

In contrast, efficiency costs represent losses to the Australian community. The vast majority of taxes and transfers affect the choices that individuals and businesses make by altering incentives to work, save, invest or consume things that are of value to them. Individuals and businesses generally respond to taxes by choosing more of lower taxed items and less of higher taxed items than they otherwise would. (They may respond to transfers in ways that increase the payment they receive.) These changes in behaviour can ultimately leave the economy and society as a whole worse off than if the revenue had been raised (or distributed) without affecting their behaviour. It is this consequential loss of value that is referred to by economists as efficiency costs.

The size of these efficiency costs varies across different taxes and transfers. For example, taxes that alter production decisions will tend to have higher efficiency costs than taxes that alter consumption decisions. This is because such taxes alter both the mix of business inputs

used to produce a good or service, as well as the final consumption choices of individuals. At a system level, the efficiency costs of taxation in Australia have been estimated to be around 6 per cent of GDP (Freebairn 1998). These estimates are broadly consistent with 'rules of thumb' developed from studies of the efficiency costs of taxation in the United States (Government Accounting Office 2005). Additional efficiency costs could be expected to result from the effects of the transfers system on individuals' choices. However, it is the marginal efficiency cost of raising the last dollar of revenue from a particular tax that is relevant for comparing the efficiency of different taxes or additional spending. Some taxes, such as taxes on economic rent, are likely to have negligible marginal efficiency costs if well designed, whereas the marginal cost of other taxes can be high.

Comment

The logic of these two paragraphs leads ineluctably to the conclusion that land value taxation should be adopted in lieu of the current distorting taxes on labour and capital.

Page 176

That is, minimising the efficiency costs of taxation would require higher tax rates on factors of production, the supply of which is relatively unresponsive to the rate of tax, and on goods and services for which demand is relatively unresponsive to the rate of tax.

Comment

This is a crucial argument for land value taxation, the only inelastic factor of production. There are only three things you can tax, land labour or capital - and only one of them does not stop breeding or working; only of one of them does not depreciate, wear out or move offshore.

Note that taxes on goods and services feed back to factor incomes and it is to the final incidence on factor incomes that we should look. Thus a heavy tax on "inelastic" water demand acts as a tax on a wage-earner's income which is not so inelastic in supply. It was a commonplace among the classical economists and even 1970s Keynesians to worry about the impact which taxes on necessities of life would have on wage demands or wage push inflation.

Page 176

Such a tax system is impractical, due to deficiencies in our understanding of the efficiency impacts of individual taxes and because the considerable costs of administration and compliance associated with such an approach would likely outweigh much of the gain in economic efficiency.

Comment

This statement is absurd. It is not impractical. Australia did it. The Federal land tax was a major plank of the Australian Labour Party and was introduced by the Fisher Labour

Government in 1910. Dwyer (2003) reproduced at Appendix E shows the latent revenue capacity of such a tax base.

Similarly there is a widely held view in academic circles that capital should be taxed at lower rates than labour or consumption, particularly for a small, open and geographically isolated country like Australia, because of the higher international mobility of capital relative to labour.

Comment

The view is correct so long as "capital" is recognized as not including land (by which is meant all sites and natural resources).

It is also this general principle that has underpinned an OECD wide trend towards financing lower rates of tax by broadening the tax base and applying a uniform rate of taxation across the tax base.

Comment

The "broad base, low rate" dogma only makes sense where the base is a homogeneously inelastic factor of production. This is not true of income or consumption taxes which are indifferent taxes on all factors of production, see Dwyer (1998a) at p 12.

For example, is it more efficient to apply a uniform rate of income tax across all forms of income, or to have differentiated rates across different types of income, such as that accruing to labour, to the extraction of natural resources and to capital?

Comment

It is more efficient to differentiate and tax land values in preference to taxing capital or labour incomes. That much has been demonstrated earlier in the paper's discussion of incidence and excess burden.

Page 177

There is no commonly accepted benchmark for what constitutes an equitable distribution of opportunity in an economy. Whether elements of the current tax-transfer system improve equity or not depends on a range of judgements. People put different degrees of emphasis on different priorities of a tax-transfer system and these priorities can sometimes conflict. For example, some people believe that high marginal tax rates on capital improve equity since they may help to redistribute income from rich to poor. Others believe that high rates harm equity because they may reduce the level of investment and capital income formation, and through that channel result in lower growth in wages, as well as imposing a higher tax rate on Australians who decide to save rather than consume.

Comment

Utilitarianism is not the fundamental philosophy of most people. If one takes a rights-based, rather than a redistributionist view of social justice, one gets a clearer view of what is involved. This is the approach of writers such as Robert Nozick (1974), Bertrand de Jouvenal (1952) and Henry George, inter alia. The ethical argument is that redistribution is unjust, provided that the original distribution was just. The original distribution will be just if there is equality of access to natural resources. This was the ethical dimension to Henry George's argument in favour of a single tax on land values, see George (1891) and (1892).

This argument from justice based on natural rights must be distinguished from a merely utilitarian argument against theft, not because it is wrong, but because it will discourage capital formation and reduce living standards. Such a utilitarian approach to the problem of equitable distribution fails to address the point that theft may be quite profitable for the thieves even if deleterious to society.

Page 177-178

There are a number of perspectives on equity that people use to inform their assessments of the tax-transfer system, including:

- *inter-temporal equity*, which looks at how the tax-transfer system impacts on longer term decisions of individuals, such as work, saving, family structure and education. Equity therefore requires some consideration of dynamic or future lifetime resources;
- *intergenerational equity*, which looks at how the decisions of today's individuals affect future generations. In general, this includes the objective of ensuring that the wellbeing of future generations is at least no lower than the current generation;
- *spatial equity*, which focuses on the degree to which the tax-transfer system should deliver individuals in different geographic areas similar consumption opportunities, at least for certain types of goods and services;
- the *opportunity and freedom* of individuals to participate in society and to achieve the things they value. Considered here is the role of the tax-transfer system in providing individuals with capabilities and opportunities rather than specific outcomes; and
- *'rights based'* frameworks, which emphasise that the tax-transfer system should not violate fundamental rights and the procedural fairness necessary to sustain a liberal democracy. For example, the tax-transfer system needs to treat issues of privacy carefully and certain forms of inequality — such as direct discrimination on the basis of race, gender or sexual preference — should be ruled out altogether.

Comment

Land value taxation performs rather well on all these criteria of equity. In relation to intertemporal equity, land value taxation does not distort the allocation of resources between present and future consumption. In relation to intergenerational equity, land value taxation

prevents one generation locking up resources as against succeeding generations. For example, land value taxation would operate to prevent young home buyers being locked out of land markets. In relation to spatial equity, land value taxation is uniquely efficient, because land values reflect the availability of public services. Land value taxation could operate to assist decentralisation and against the excessive bloated growth of metropolitan areas, because unlike income taxes or consumption taxes, tax contributions would reflect the value of services available to workers or investors in a given area. As to the opportunity and freedom to participate in society, land value taxation unlocks the land that makes it available for productive use. Finally, land value taxation is based fundamentally on a rights-based framework. It does not require the violations of privacy which income tax administration inevitably leads to, including such perversions as automatic tracking of private financial transactions undertaken by taxpayers.

Page 178

The beneficiary principle states that people should pay tax according to the benefits they receive from spending funded by tax revenue, regardless of their income. The principle could be appropriate for funding the public provision of services where it is possible for a user charge to apply (such as public transport, electricity and water).

Comment

Land value taxation uniquely satisfies the beneficiary principle in relation to the funding of spatial infrastructure networks. User charges should be set at short run marginal cost and land value rates used to cover the fixed costs of such infrastructure, because value of the availability of infrastructure is reflected in land values. All the beneficiaries of infrastructure should pay, not merely the immediate users.

Page 178

The beneficiary principle can, nevertheless, be used to justify higher tax burdens on groups that benefit disproportionately from public goods. For example, the principle may support progressive income taxation if higher income earners use relatively more public goods. It may also support taxing foreigners through company tax, as they benefit from government funded infrastructure, legal institutions, and a skilled workforce.

Comment

It would be hard to use the beneficiary principle to justify progressive taxation of higher income earners. Typically, income tax is redistributive and the beneficiary principle would appear to dictate that pensioners be forced to pay for their pensions and that those not claiming on state charity should be relieved of much of their tax burdens. The beneficiary principle is actually followed to some extent with lifetime premiums for health insurance and levy surcharges for those not taking out private health insurance.

As for the suggestion that company tax taxes foreigners full benefits from government funded infrastructure, legal institutions and a skilled workforce, this seems rather tendentious. It may be observed that governments no longer fund a lot of infrastructure, that legal institutions are supported by court fees and the skilled workforce is subject to HECS. It is far more logical to say that overseas investors should be taxed for access to Australia's land and natural resources.

The beneficiary principle and the ability to pay principle converge in land value taxation - as Adam Smith recognized. The taxpayer pays because he has the benefit of an exclusive right granted by the Crown to resources and he has the ability to pay because the tax is based on the market value of the resource.

Page 179

The choice of unit — individual, family or household — also has implications for distribution based on measures of ability to pay. While some are critical of the individual as the unit of taxation, it avoids specifying a family structure that is preferred for tax purposes, and minimises workforce disincentives for secondary earners, such as mothers in families.

Comment

One can have the individual as the administrative and legal unit for taxation, but tax neutrality requires that income transfers between family members be recognized for tax purposes, see Dwyer (1993) and (2004). To do so is not to favour some family structures over others but to tax income in the hands of ultimate recipients. It should also be recognized that workforce disincentives also exist for primary earners and that the existing system favours two wage families and families with splittable property income over single income wage earning families.

Page 179

The individual tax unit of taxation is generally thought to be less complex to administer and comply with, but it may provide some opportunity for informal income splitting of unearned income.

In Australia, the income needs of families are addressed through the transfer system as well as the tax system. Those with children in particular receive government support according to an assessment of the family's income and circumstances. More broadly, many OECD countries have moved away from family based tax in favour of individual based systems (although the Czech Republic is an exception, introducing joint tax in 2005). Consistent with this direction, reform in Australia over the past decade and a half has been focused on facilitating the employment of secondary earners, where this is compatible with their personal circumstances.

Comment

If one believes in horizontal equity, it is clearly inequitable that property income can be split but not wage or salary income. Curiously, the Commonwealth government has split age pensions but does not allow wage or salary incomes to be split. One might also observe that facilitating the employment of secondary earners is not the objective of economic policy - the objective of economic policy should be to maximise welfare. Traditionally, increased leisure has been seen as a sign of increasing community welfare whereas high labour force participation has been a sign of economic stress such as experienced in World War II.

Page 180

The transfer system provides a number of benefits, including pensions, allowances and income tested payments which affect the overall redistributive impact of the tax-transfer system. Whether people think higher or lower taxes will improve the distribution of income or consumption, it is generally acknowledged that both income and consumption need to be measured broadly and consistently to determine whether a system is vertically or horizontally equitable.

Comment

As noted above the concepts of horizontal and vertical equity are irrelevant to a rights-based approach to taxation theory. The concepts are only applicable to a Haig-Simons personal income tax model. They are not relevant to a traditional British flat rate income tax which seeks to tax income as such, nor are they relevant to flat rate consumption taxes.

Pages 183-184

Chart 3.9 plots the percentage of wage and salary income, and capital income, against the percentage of taxpayers, ranked according to their taxable income. Points along the 45-degree line represent a proportional distribution of income, with a given percentage of income being earned by an equivalent percentage of taxpayers. The chart illustrates that both wage and salary income and capital income are skewed toward higher income earners but that capital income is more highly skewed (indicated by the greater curvature of the line at higher incomes). ….

The top 10 per cent of taxpayers receive 28 per cent of salary and wage income (point D) and 53 per cent of capital income (point E)….

There are also considerable differences in the distribution of the individual components of capital income — interest income, dividends, net rent, net capital gains, net business income and net distributions from partnerships and trusts (Chart 3.10). The bottom 20 per cent of taxpayers earned around 8 per cent of gross interest income but only around 3 per cent of dividend income and around 4 per cent of net capital gains. In contrast the top 10 per cent of taxpayers receive around 28 per cent of gross interest income but over 64 per cent of net capital gains and dividends.

Comment

What is described as capital income needs to be broken down into its land income and capital income components. As the paper recognizes, there are three factors of production - not two. If one considers imputed rent and "negative gearing", it seems likely that the distribution of land income would be even more highly skewed. From that point of view, a land value tax may be seen as progressive.

Page 186

The tax-transfer system also distributes income over a person's life-cycle. That is, the tax-transfer system can treat the same people differently at different times in their lives. At different stages of their lives individuals may be net taxpayers (pay more in tax than they receive in transfers) or net recipients of transfers (receive more in transfers than they pay in tax).

Comment

As noted in Dwyer and Cox (EPAC, 1988), if the income tax system were modified to allow taxpayers to transfer income between themselves or over time, there would be less need for the tax-transfer system to do it for them. If private voluntary income transfers were tax-deductible, the resulting reduction in tax rates on labour income would mean a reduction in the excess burdens associated with the system.

Page 188

Tax to GDP ratios are commonly used for comparing the level of taxation across countries. These measures can be calculated for taxes paid by particular industries or under particular revenue heads and are calculated as the tax revenue expressed as a percentage of GDP. Tax to GDP ratios are a 'backward' looking measure of the tax burden, in that they are an estimate of taxes already paid.

Comment

Tax to GDP ratios are meaningless in measuring tax burdens. Social Security levies are not compared with mandatory superannuation guarantee contributions and proper comparisons are not made between social security provision of invalidity benefits versus mandated accident, workers compensation and health insurance schemes. In some countries, such things are on Budget, and in other countries they are not. Further, tax to GDP ratios do not pick up disguised taxes hidden in user charges which are levied in excess of short run marginal cost.

Page 189

Effective tax rates on labour take account of the complete wedge between gross income and disposable income, including any reductions in transfers, as well as income tax.

Comment

The term "effective" should be replaced by "equivalent". To withdraw assistance is not to impose a tax.

Page 190 Table 3.2

Comment

Dwyer and Cox (EPAC, 1988) noted that EMTRs may be reduced in scope by tighter targeting so as to reduce the number of people facing them.

Page 191

In the second period, since the mid-1970s, there has been a greater focus on improving the equity, efficiency and simplicity of the tax system.

Comment

One suspects that anyone who has filed a tax return since 1972 might question whether the system has become more equitable, efficient and simple since the 1970s. Some things such as imputation have been equitable and efficient but there have been many other changes, such as capital gains tax, which may not be as equitable as thought and which are certainly not simple or efficient.

Page 191

The original design of the tax systems of the six colonies was driven largely by the feasibility of administration, rather than principles of equity or efficiency.

Comment

This is historically unfair and inaccurate. The adoption of land value taxation by the Australian colonies was driven by clear perceptions of equity and efficiency. The Australian people had seen one of the largest engrossings of fertile land in the history of mankind and wanted to restore equity of access to natural resources, see Scheftel (1916), and John Quick (1883). Land value taxation was adopted to compensate the colonies' loss of revenue from the public lands and to avoid the inequitable burdens of indirect taxation or higher customs duties. Sir Joseph Carruthers moved New South Wales in 1906 to unimproved land value rating to improve the condition of poor by not taxing buildings and creating an incentive to get rid of slums.

Page 192

By the end of the Second World War, tax revenue had grown to over 22 per cent of GDP. The further increase in tax largely reflected Australia's involvement in the war and the introduction of government support programs, such as the Widows' Pension in 1942 and Unemployment Benefit in 1945. This marked the beginning of the modern social security system which is discussed in more detail in Section 4.2.

Tax revenues declined during the 1950s and by 1963-64 the tax to GDP ratio was around 18 per cent. In the early 1970s, tax revenue increased significantly, partly driven by funding requirements for social programs such as the introduction of free higher education.

Since the late 1980s Australia's overall tax to GDP ratio has been relatively stable and is currently around 30 per cent of GDP. The majority of tax revenue, equivalent to 25 per cent of GDP, is raised by the Australian government with around 5 per cent raised by the state governments.

Comment

Australians might question why tax levels should now exceed those in World War II. They might also question whether a tax ratio of 30% of GDP is an accurate measure of their burdens, since it ignores the tax element in user charges, as well as mandatory superannuation, workers' compensation accident and health insurance schemes.

Page 195

In 1907, the Harvester Judgment established the concept of an arbitrated 'living wage' — a non-market wage paid to a 'breadwinner' wage earner for the support of themselves and dependants. This effectively introduced a model where welfare outcomes were pursued via wage-related benefits rather than tax assistance or transfers, either in cash or kind.

Comment

To be fair, it should be recognized that the classical economists assumed a subsistence wage should be such as to support a labourer and his family, so that the labour force would not diminish in the long run. The idea of a "living wage" is arguably not that different from the idea of a long-run equilibrium wage. To the extent that land value taxation could be used to reduce taxes on labour, the tax wedge on wages would be reduced and workers better able to support themselves and their families without assistance.

Child Endowment (1941) — a family allowance paid at a fixed rate with no means test;

Comment

It should be recognized that child endowment was financed in World War II by a payroll tax given in lieu of a wage increase. Workers agreed to forego the wage increase for the war effort provided that those of them with dependent children were looked after. Child endowment has been means tested since, while the payroll tax was given to the States and increased.

Page 196

A 'universal' Family Allowance was introduced in 1976, replacing Child Endowment and tax rebates for children.

Comment

If one seriously believes in any form of horizontal equity, there should be universal adjustments of tax burdens for those with dependants.

… the phasing out of dependency based payments for women; and individual entitlement to income support for partners of income support recipients.

Comment

Given that the Family Law Act imposes an obligation to support spouses and children, it is reasonable to expect both the tax and transfer systems to take account of such private income redistribution.

Page 197

In 2000, as part of *The New Tax System* package, the Family Tax Benefit (FTB) was introduced, replacing a range of pre-existing payments and increasing the assistance provided to families with children. Additional assistance for the direct costs of children was provided through an ad hoc increase to both the maximum and base rates of FTB Part A. FTB Part B further increased the level of assistance for single income families including single parents.

In subsequent years, FTB supplements, more generous means testing, and the Maternity Payment resulted in significant increases in family assistance outlays.

Comment

It should not be forgotten that the impact of the GST was – and always will be - more severe for taxpayers with high expenditures such as families raising future taxpayers. To a large extent, the increase in family payments can be seen as an attempt by the government to offset the adverse impact of the GST on families (electoral considerations may, of course, have focused the government's mind on the adverse impact of GST on families.)

Page 199

As a result the States' tax base was reduced until 1971 when the Australian government ceded control of payroll taxes to the States to supplement their tax base with a 'growth' tax.

Comment

It should not be forgotten that land tax was transferred to the states in 1952, a move that was strongly opposed by the Australian Labor Party in opposition. The late Clyde Cameron wrote of the Labour Party's traditional support of land value taxation and its announced determination to restore Federal land value taxation.

The 'wide view' of excise duties adopted by the High Court in the late 1990s has meant that the power of the States to impose such taxes is severely limited.

Comment

As it should be. The High Court's view is consistent with both precedent and legal and economic principle. It should be a matter of concern that the States are already encroaching seriously in the field of indirect taxation through bogus user charges well in excess of cost - let alone short run marginal cost. The huge payments extracted by States as either lump sum franchise fees or as ongoing dividends from water and electricity utilities are largely, from an economic point of view, excise taxes and have all the damaging effects one should expect from such taxes, such as reducing Australia's international competitiveness and living standards.

Page 201

- Australia is a low tax country by OECD standards but our tax to GDP ratio is above that of our immediate neighbours, reflecting the greater role of government in our economy.

Comment

This ignores tax versus quasi-tax methods of social provision. Australia has quasi-taxes, such as mandatory superannuation, workers' compensation, accident or health insurance premiums which do in Australia what is done by taxes in other countries. In any case, OECD comparisons are irrelevant to good economic policy. The question is whether Australia wants to have a declining economy or not – most OECD countries have performed poorly over time.

- While Australia's mix of direct and indirect taxation is broadly comparable to other OECD countries, its composition differs in several respects. Australia is one of two countries, with New Zealand, that do not levy a social security tax and which have a dividend imputation system. Our reliance on broad-based consumption taxes is below the OECD average, while our reliance on revenue from taxes on property is greater.

Comment

Mandatory superannuation, third party and workers' compensation are quasi social security taxes.

Taxes on land values are not taxes on property once capitalized. Further, taxes on land and physical capital should not be confounded together.

- Although Australia's top personal income tax rate is typical of the OECD, the absence of a social security tax means that Australia has a high tax burden on capital income relative to comparable OECD countries, taking into account differences in capital tax settings.

- Australia's corporate tax rate is the eighth highest in the OECD and above the OECD average. Corporate tax revenue as a percentage of GDP is the fourth highest in the OECD.

Comment

This is a non-sequitur. The reason Australia is showing apparent high returns from "capital income" and company tax is that resource rents are being included as "capital income". Both urban land values and resource rents figure highly in capital gains tax and company tax collections. Tax rates on genuine capital income should be cut while tax collections from land values (including resource rents) should be used to cut taxes on both labour and capital.

- Australia's taxes on fuel are low in comparison to other OECD countries.

Comment

This is a pointless and invalid comparison. Like Canada and the USA, Australia has large distances between producers and consumers in its internal market, unlike European countries. To increase fuel taxes is to undo the work of Federation in creating a common internal market and to destroy economies of scale. Australia simply cannot afford high transport taxes.

- Australia's tax-transfer system is highly redistributive by OECD standards.

Comment

That is relatively more efficient if redistribution, rather than "churning", is consonant with minimizing distortions.

Page 202 Chart 5.2

Comment

The graph in Chart 5.2 should start at the origin.

Page 203

These nine countries — Canada, Ireland, Japan, the Netherlands, New Zealand, Spain, Switzerland, the United Kingdom and the United States — are also used in this paper to draw international comparisons of Australia's tax settings, in addition to the broader 30 OECD countries.

Comment

But all except two (Canada and the USA) are spatially compact compared to Australia. This should be borne in mind when looking at transport taxes.

While tax revenue in Brunei Darussalam is around the same as that of Australia as a percentage of GDP, 95 per cent of this comes from oil and gas companies.

Comment

Australia would do well to raise more revenue from non-distorting land value taxes (including resource values) since, as with Brunei (which is paradoxically a tax haven), such taxes could fund social expenditures while allowing Australia to compete internationally as a tax haven with much lower taxes on capital and labour incomes. The key to success as an international investment destination and in terms of domestic capital formation is not the tax to GDP ratio but whether capital income (as opposed to land income) is low-taxed.

When considering investment decisions, tax is only one of a range of factors, including: macroeconomic stability; a supportive legal and regulatory framework; skilled labour and labour market flexibility; and well-developed infrastructure.

Comment

True, but Australia's tax system might not be described as "supportive" in terms of its regulatory burdens. One might also note that taxation can drive skilled labour away. There are many Australian expatriates earning money in countries where tax rates on labour income are less. Further, Australia's infrastructure is falling behind as Governments cut capital spending and privatize while pusillanimous and economically-illiterate regulators permit pricing abuses which mean infrastructure users are paying again for the use of sunk capital invested by taxpayers decades ago.

Page 205

Australia is one of two OECD countries that do not raise tax revenue from social security contributions (Chart 5.5).

Comment

As noted above, this ignores mandated superannuation, third party and workers' compensation schemes.

Page 206

Property taxes contribute just under 9 per cent of total Australian tax revenue compared with an OECD average of just under 6 per cent (Chart 5.7). Australia's property taxes come from two main sources. Taxes on immovable property contribute around 4.5 per cent to total tax revenue compared with an OECD average of around 3 per cent.

Comment

"Property taxes" is a misleading genus for economic classification. It includes heterogeneous taxes. A tax on land values is not the same animal as a tax on buildings or a net wealth tax or taxes on estates, inheritances or financial transactions. The paper has stated correctly that all taxes fall on land, labour and capital. These "property taxes" need to be dissected and separated further to explore the underlying anatomy of national tax systems.

Page 208

In the academic literature, retirement savings tax regimes are generally classified by three letters which indicate the point(s) at which taxation is imposed. The presence of a 'T' reflects the imposition of tax, while an 'E' indicates an exemption from taxation. It does not reflect the overall burden of the tax imposed (for example, a system that imposes 1 per cent tax on contributions, 1 per cent tax on earnings, and 1 per cent tax on benefits would be described as 'TTT').

An expenditure tax model exempts contributions and earnings from tax, and taxes benefit payments ('EET'). In contrast, a comprehensive income tax model taxes contributions and earnings, and exempts benefit payments from tax ('TTE').

Comment

It may be observed that lifetime income averaging under a personal income tax produces an EET model as a norm.

Page 209

The imputation system also has different equity implications as indicated by the change in Australia's ranking from fifth lowest for high income earners to second lowest for average income earners.

Comment

Any system of fully or partially double taxing an income will always work inequity on a low income earner, compared to a system of full conduit taxation. Hence, Australia's full imputation system is the fairest of dividend taxation systems currently in use though it has some unfair restrictions such as not allowing flow through of foreign tax credits.

Page 210

Since 2001 the unweighted average corporate tax rate for OECD countries has decreased by around 6 percentage points. This reflects the trend among OECD countries toward lower corporate tax rates driven, in part, by concerns about global capital mobility and economic efficiency.

Comment

The OECD countries have not separated out land and capital income taxation. A land value tax raises no concerns about global capital mobility and can be harnessed to reduce tax rates on mobile capital. Hong Kong's 15% tax rate was largely made possible by reliance on land revenues from leaseholds.

Page 211

Australia's corporate tax revenue as a proportion of GDP is the fourth highest in the OECD and significantly higher than the OECD average of 3.7 per cent (Chart 5.11). This largely reflects structural differences in the composition of the incorporated sector in Australia compared with other OECD countries, the imputation system, as well as the strong performance of the Australian corporate sector in recent years.

Comment

The high level of Australian company tax collections, like Norway's, also heavily reflects resource rents.

Page 212 Chart 5.12

Comment

It is natural and desirable that Australia's fuel taxes should be lower (preferably nil) given the size of the Australian continent and the high impact of transport costs. Australia cannot remotely afford European fuel tax rates.

Page 213

The highly targeted nature of the tax-transfer system has resulted in Australia having higher effective tax rates (ETRs) for certain household types than in other OECD countries. In three of the four household types with children, Australia has ETRs above the OECD average (OECD 2007b).

Comment

Equivalent marginal tax rates are an inevitable price one has to pay for directing assistance to the most needy. However, equivalent marginal tax rates may be reduced in their effective area of operation by –

1. *not taxing labour income (whether through income taxes, payroll taxes or consumption taxes) and raising revenue through non-distorting land value taxation;*
2. *reducing the amount of churning and disentangling the tax and social security systems by converting family payments into additional tax-free thresholds which are deducted from earners' incomes; and*
3. *adopting "dollar for dollar" income test tapers and additional eligibility criteria based on status so that the number of people subject to high equivalent marginal tax rates is very few. For example, age or widowhood cannot be manipulated to claim benefits.*

Page 215

The OECD (Johansson et al 2008) has recently undertaken a cross-country study of the effects of different taxes on economic growth. The indications from this analysis are that

property taxes have the least detrimental impact on growth, followed in order by taxes on consumption, taxes on labour income and taxes on capital income.

Comment

Property taxes, a heterogeneous collection of taxes on land, buildings and financial transactions, obviously emerge as more efficient to the extent they are taxes on land values which have no detrimental effects on capital formation, labour supply or investment in human capital. Consumption taxes which are flat rate taxes levied indifferently upon the incomes from land, labour and capital follow next because they do not have the distorting effects of graduated taxes on labour incomes and capital incomes. Finally, taxes on capital incomes appear the worst because of the mobility of capital as opposed to land.

Page 216

However, the view of the literature is that capital income should be taxed at a lower rate than labour income solely from the perspective of efficiency considerations (Diamond and Banks 2008).

Comment

It is curious that, having identified all taxes as falling upon the incomes of land, labour or capital, the paper talks as though the only choice is between an income or expenditure tax base, without recognizing that both such taxes are composite taxes on land, labour and capital incomes. The literature is correct in suggesting the optimal tax rate for bona fide capital income is zero. But land income is not "capital income" at all and increased taxation of land values in order to reduce the taxation of capital income improves efficiency. Given the distribution of land ownership, it is also tolerably certain that land value taxation also improves equity (used in the sense used by Haig-Simons followers).

Page 217

Taxes on capital include company tax, taxes on individual capital income (interest, dividends, capital gains and some business income), the petroleum resource rent tax, crude oil excise and taxes on property such as land taxes and stamp duties on conveyances. Taxes on consumption include the GST, excises on tobacco, alcohol and fuels and other taxes on consumer goods.

Comment

It is not analytically helpful to confound taxes on capital with taxes on land. Nor is it helpful to allocate revenue according to capital, labour and consumption. Having recognized the three factors of production, the analysis should try to break down each tax insofar as it affects land, labour or capital incomes. Otherwise the analysis risks attributing the good effects of one tax to another and the bad effects of one tax to another.

Page 217

In 2008-09, company tax revenue is estimated to be $10.7 billion, or 14 per cent, higher than would otherwise be the case. This reflects higher company profits flowing from increased bulk commodity prices.

Comment

Company tax in this case is functioning as a tax on land income in the form of resource rents. However, it would be interesting to examine the hidden contribution of site rents to income tax revenue.

Page 219

Taxes on capital include company tax, taxes on personal capital income and property taxes.

Comment

These are compound taxes on land, labour and capital incomes. They cannot properly be described as taxes solely upon income accruing to physical capital as a factor of production.

Page 219

Compared with other OECD countries, and the OECD-10, Australia has a relatively low reliance on tax revenue from labour, representing around 37 per cent of tax revenue by this measure. In other OECD countries, the reliance on labour taxation is significantly greater. This reflects the significant use of social security contributions in other countries, which are levied on wages, salaries and similar income. Social security contributions represent a significant source of revenue for many OECD countries. For many, this is a larger source of revenue than personal income taxes, in some cases contributing up to 40 per cent of total tax revenue. Australia's closest taxes are the payroll taxes levied by the States, which account for around 5 per cent of tax revenue.

Comment

As noted previously, these comparisons are quite misleading and ignore the impact of compulsory superannuation and workers compensation as quasi-taxes on labour income.

Page 220

Chart 6.5 provides a perspective on the relative weight given to capital taxation in Australia. It is a surprising result in a globalising world with increasingly mobile capital flows for a small open economy to have the highest weight given to the taxation of capital income.

Comment

It is not surprising at all, once one realizes that a large part of what is mistakenly described as "capital income" really represents resource rents and site rents. These land revenues are reflected in company tax collections and revenues from so-called property taxes. Taxes on

these land revenues are not taxes on mobile capital and therefore not subject to international tax competition.

Page 220

… the total tax burden, measured in terms of tax to GDP, is relatively low (Chart 6.6).

Comment

As noted previously, this assertion ignores Australia's quasi-taxes which substitute for Social Security taxes – mandatory superannuation, workers compensation, third-party and health insurance premiums.

Page 221 Chart 6.5

Comment

Both Australia and Norway collect revenue from resource rents disguised as company taxation.

Page 222

The increase in the corporate tax to GDP ratio has been due primarily to strong growth in corporate income, particularly in the resource sector.

Comment

As noted previously, this really reflects the latent potential of land values (in the form of resource rents) as a tax base.

Page 227

The individual is generally the unit of assessment for the taxation system. However, there are exceptions where income tested programs are applied to individuals taking into account their spouse's income and/or family circumstances, such as the senior Australians tax offset and the Medicare levy surcharge.

The unit of assessment in the transfer system is the couple or family, based on the principle that the provision of targeted support should take into account other sources of financial support, including from close family members (spouse, parents of dependent children).

Comment

One of the major causes of churning is the failure to integrate units of assessment in the tax on transfer systems. Dwyer (1993) and (2004) points outs that an individual unit of assessment in the tax system can be integrated with a family unit of assessment in the transfer system, if the income tax system recognizes deductibility and assessability of intra-family transfers. It is absurd, illogical and unjust to means test transfers on the basis of other sources of financial support including from close family members, without taking into

account those transfers in imposing tax upon those providing the support. The current system discourages family formation and encourages single-parent households with unstable serial relationships which cannot be taken into account for social security means test purposes.

Page 229

At an aggregate level, Australia has a low level of churn by international standards, as the personal tax-transfer system is tightly targeted, highly progressive and substantially redistributive.

Comment

Keep it that way and make it more so if you want to keep economic and social disincentives to a minimum.

Historically, redistribution of family assistance from breadwinners to primary carers within couples has been an important reason why governments have supported direct payments rather than delivery of assistance for children through the tax system.

Comment

The notion that men cannot generally be trusted to look after their families should be discarded as the basis of social policy. It is reasonable to impose child support levy where a family is no longer intact. It is not reasonable to tax one partner in a marriage to distribute funds to the other where that family is intact. To do so violates the principle of subsidiarity (that decisions should be left with the smallest unit in society able to deal with them). It also creates disincentives to work effort and is also likely to be largely ineffective as an income redistribution mechanism. Consciously or unconsciously, willingly or unwillingly, wage earners paying more tax are likely to provide less housekeeping money for their families if their incomes are reduced by taxation and they know their spouse is getting housekeeping money from family payments.

Page 229

Churning of income support recipients with private income has increased since the 1980s, as income support payments have risen from below the tax free threshold to well above it. While a relatively low tax free threshold increases this form of churn, a higher tax free threshold would have the disadvantage of increasing opportunities for tax planning.

Comment

But churning and marginal tax rates can be reduced by selectively increasing tax-free thresholds for families with dependants as a substitute for family payments. See Dwyer and Cox (EPAC, 1988).

Chart 7.5 demonstrates that most churning is due to family payments. The relaxation of income test tapers has also caused more churning.

Pages 231-232

Over a lifecycle, people receive greater subsidies at times of higher need, such as when they have young children and in old age, and pay higher levels of tax at times when they can better afford to do so, such as in later working years when their children have left home. In this way, the tax-transfer system 'smooths' income through more difficult periods and bears some of the risks associated with unemployment, illness and other life contingencies.

Comment

But why not allow taxpayers to smooth out their incomes and support themselves and each other through the life cycle as they can do, as they used to do and as many still do? If tax recognition of superannuation is justified on the basis that superannuation is a means of providing income support in old age and reducing reliance on transfers, why does the same logic not apply in cases of sickness, accident, study, child rearing and so forth? A rational and efficient income tax regime would allow lifetime income averaging through segregated savings accounts and tax deductions for insurance providing contingent annuities. It would also recognize intra- and inter- family income transfers, so that those supporting others and doing their own income redistribution would have that fact recognized in their tax assessments while those receiving income support would have that fact recognized by social security income tests.

Pages 232-233

The transfer system plays the societal function of providing support for people who are transitioning into the workforce or are unable to work, or not expected to work (due to age, disability, study or carer responsibilities).

Comment

The truth is that private voluntary redistribution in society is far greater than public income support. To design a public income support system without considering its integration with, or its effects upon, private voluntary income redistribution within and between families is to embark on a futile and socially-destructive exercise. The history of sole parenthood in Australia since the introduction of the supporting mother's pension in the 1970s demonstrates how a failure to understand the interaction between public and private income support can create incentives for perverse outcomes such as Government- subsidized dysfunctional households created out of serial short-term relationships.

Page 236

Many households that receive income support have private sources of income and wealth. This is particularly the case for Age pensioners where a growing number of recipients are

retiring with increasing levels of wealth, including superannuation savings. This trend is expected to continue as more people retire with higher levels of superannuation. However, the proportion of people receiving the Age Pension is not expected to decrease significantly. Projections prepared for the second Intergenerational Report (Australian Government 2007b) indicate that even with the maturation of the superannuation guarantee (SG), there will only be a modest increase in the proportion of older Australians who will not receive at least a partial Age Pension. However, the proportion of retirees on full-rate pensions will fall from over two thirds to less than half.

Comment

If superannuation benefits were taken into account on a "dollar for dollar" basis in assessing eligibility for age pensions, it would be more efficient in substituting private self provision for taxpayer financed transfer payments. Unfortunately, the expansion of pension eligibility as a ticket to other concessions has increased the willingness of superannuitants to arrange their affairs in order to claim pensioner concessions.

Page 237

Both pensions and allowances are indexed by the CPI to maintain their purchasing power in the face of price increases. In addition, pensions are benchmarked to earnings as measured by MTAWE. This means that pension recipients benefit from productivity growth in the economy.

Comment

What is the logical basis for tying welfare pensions to productivity growth but not tying earned public sector superannuation pensions to wages growth? If one group is entitled to share in productivity increases, why not the other?

Page 237

Over the last 21 years, transfers have increased the disposable income of a single income family earning the minimum wage by 67 per cent (Chart 7.9). In contrast, there has been little change in the real value of the minimum wage over that period.

Comment

This is a shocking indictment of 21 years of economic "reform". What it says is that productivity benefits have gone to the Treasury, not to the workers, and the Treasury in turn has doled out the increase in national income as welfare "assistance".

Page 239

Taxes on earned income are a significant source of government revenue. An increasing dependency ratio will affect the ability of the working age population to support government

programs. This gap can be filled by increased participation of people in the workforce and increased productivity.

The personal tax-transfer system can affect workforce participation decisions by altering the financial rewards of working — that is, disposable incomes. Where transfers are high enough to meet an individual's needs, their incentives to work longer hours are reduced. Tax, together with reductions in transfers as people earn more income, reduces the financial rewards from work, making it less attractive. Policy settings thus need to consider participation goals alongside other concerns such as adequacy and affordability.

Comment

An increased dependency ratio is not a concern if the dependants are children who will become future taxpayers. What should be a concern to Treasury is the impossible situation increased workforce participation creates for mothers. If women are forced to work outside the home to sustain family incomes, it means that other activities such as child rearing may take second place with a resulting adverse effect on net reproduction rates and the future labour force. It may also mean that family members have less time to provide in-kind or caring support for aged or invalid relatives. The labour force participation of married women is not a cheap or easy way to solve the dependency ratio problems caused by an ageing population. On the contrary, it may exacerbate them.

Page 240

Workforce participation is an important driver of economic growth and has benefits for broader social inclusion. While the proportion of the population in paid work is currently at an all time high, the increased prevalence of part-time work and employment of female workers have increased the importance of personal tax-transfer settings that encourage participation. These groups seem more responsive to incentives than are males working full-time hours, as they tend to have more flexible patterns of participation and are more affected by interactions with the personal tax-transfer system.

Comment

This paragraph seems to confuse economic ends and means. If workforce participation were an end in itself, fewer people would seem so keen to retire as soon as they felt they could afford it. The object of economic policy should be to improve economic welfare, not to force as many people into the paid workforce as possible. As for incentives between classes of wage earners, one also has to look at disincentive effects of labour taxation on males considering promotions or senior positions and tax induced distortions in the household allocation of labour between market and non-market activity.

Page 241

… over the decade to 2006-07 there had been a reduction in the number of working age Australians facing very high ETRs of over 80 per cent. However, it found there had been a

pronounced increase in the overall number of people facing ETRs of greater than 50 per cent (from 4.8 to 7.1 per cent). Almost two-thirds of these people were members of couples with dependent children. This was due to the extension of eligibility for family assistance to a greater proportion of people.

Comment

Reduction of taper rates and means testing of family payments (which should be universal tax offsets) necessarily produces this sort of result. If family payments were converted back into universal additional tax-free thresholds and taper rates were "dollar for dollar", the effective scope for operation of high equivalent marginal tax rates and resulting disincentives could be reduced. (A high taper rate of 100% is better for efficiency if only 3% of the population and fewer workers are exposed to it than a 50% taper rate affecting 40% of all workers.)

Page 242

While participation is important, some parts of the personal tax-transfer system are designed to enable people to stay out of the paid workforce. The provision of Age, Carer and Disability Support pensions and Carer Payment reflects a community decision that certain people should not or cannot be expected to rely on paid work for income. There are also measures to support people taking time out of paid work for shorter periods, such as students or carers of young children. In recognition of the longer term value of these activities, the community bears some of the short term costs.

Comment

What is the economic logic of saying that some people should work and others should not? That A, a mother with children and a heavy mortgage, should work to pay taxes to support B, a retiree with a non-means tested million dollar debt-free house and who does not work? Why should these be community decisions at all? Do these community decisions produce perverse redistribution in many cases?

Page 243

The savings of individuals and households fulfil three important functions:

- to provide a means for them to smooth their income over time — in particular, between the individual's working life and their retirement;
- to meet transitory adverse shocks such as sickness and unemployment; and
- to finance investment in capital that can be used to improve productivity, leading to higher incomes.

Comment

Why not allow the first two objectives to be better met by recognizing inter and intra-family income transfers and forward income averaging and income insurance in the tax system? As for the third, saving only leads to capital formation if savings are invested in physical capital and not spent on acquiring land. Land value taxation reduces incentives for inefficient land speculation and encourages savings to be directed towards productivity-enhancing physical capital formation.

Page 244

Australia's principal tax–preferred savings vehicles are owner-occupied housing and superannuation. Owner–occupied housing is generally exempt from capital gains tax and taxation on the value of rent saved from owning a home. Consistent with this treatment, expenses such as interest costs and maintenance costs are not deductible. In the transfer system, the owner-occupied home is exempt from asset testing.

Comment

Savings spent on acquiring existing houses and land do not represent investment. From the point of view of an income-tax system, it is debatable whether housing can be described as tax-preferred when costs of housing are not deductible. One of the advantages of general land value taxation is that it taxes imputed ground rents, without discouraging capital formation through investment in new dwellings or renovation of old ones.

Page 245

Improving skills is therefore an investment decision, and the tax transfer system acts both to subsidise the cost of this investment (directly and indirectly) and to reduce the after-tax return from it.

Comment

It seems a curious policy to subsidise something on the one hand while discouraging the motives to undertake it on the other. If income averaging and inter and intra-family income transfers were recognized in the tax system, people would be better able to take time out of the labour force to improve their skills.

Page 247

Individuals and businesses tend to make savings and investment choices based on a number of factors including the tax treatment of the investment. Therefore, tax settings can have an impact on the choices people make, which ultimately determine investment in productive assets and individual sectors in the economy.

Comment

Savings do not translate into genuine productive investment if they are used to acquire existing assets, notably land (including other natural resources). A reduction of capital

taxation financed by increased taxation of land values facilitates the translation of savings into productive physical capital formation. It reduces the net returns to inefficient land speculation and increases the net returns from investment in physical capital.

Page 247

… our natural resource wealth including our extensive mineral resources as well as our native forests, our limited water supplies, our marine resources (including fisheries), the quality of our air, and our national parks

Comment

Per capita, Australia's water supplies are very high by world standards. In particular, there is plenty of water naturally available for urban use, but its availability for productive use has been sterilized by State government policies which have vetoed low-cost dams in favour of expensive desalination and sewage recycling (notwithstanding the obvious health risks of the latter). Further, while National Parks have value and should not be wantonly exploited, it must be recognized that in some cases the use of land is national park means an effective reduction in Australia's resource base through sterilization of the resource for other uses. In each case, a proper cost-benefit analysis should be undertaken.

Page 247

… financial and non-financial assets such as bank accounts, shares, factories and patents

Page 248

… and non-physical assets (such as patents) that add to the country's productive capacity.

Comment

Patents are not productive assets but government-sanctioned private monopolies. There are very strong economic arguments that patents do more to suppress innovation than support it and fundamentally anti-productive and anti-competitive. Henry George raised this argument in the 19th century and it is receiving renewed academic support in response to the increasingly apparent abuses of the US patent system, which Australia is obliged to accept under the World Trade Organization treaties. To the extent that the World Trade Organisation treaties increased both the scope and duration of patents, they represented a monopolisation of trade. As a small country, no matter how innovative, Australia's economic welfare would be improved from a pragmatic point of view if patents were abolished and Australia had to pay nothing for technology transfer.

Page 250

… the exclusion of the returns from owner-occupied housing (including imputed rent) and other personal use assets (such as vehicles), and their related expenses from taxation

Comment

The inclusion of these assets in the income-tax base would probably result in tax losses given the extent of gearing and the depreciation of personal use assets for capital gains tax purposes. One of the advantages of land value taxation is that it selectively taxes the unearned increment without opening up opportunities for gearing to erode the tax base.

Page 251

For concessional superannuation, the ability to invest out of pre-tax income produces a negative EMTR.

Comment

It is hard to see how the taxation rate on superannuation could be less than 15% in the accumulation phase or 0% in the pension phase.

Page 253

Stamp duty is levied on housing transactions. While paid by the buyer, the incidence of stamp duty is likely to be shared and partly fall on sellers by lowering the after-tax price received though sale. As a tax on transactions, stamp duties can discourage turnover and influence housing decisions. They may also encourage some home-buyers to buy larger houses in order to avoid further stamp duty from subsequent moves into family-sized homes. Similarly, stamp duties may affect decisions of existing home owners. Some people wishing to upsize may choose to renovate their existing home rather than move. For those who would prefer downsizing to a smaller house, stamp duties can pose an additional difficulty in the relocation process, by increasing the required return on the property sale before they are able to move. These impacts are partly ameliorated by concessions that the States offer to first home buyers and to pensioners who move to homes that better suit their needs.

Comment

The adverse effects of stamp duties as taxes upon transactions was why John Stuart Mill recommended the abolition of taxes on conveyances of land and their replacement by a land value tax. A tax on holding land as opposed to a tax on transferring land has no lock-in effect. The same argument also applies in favour of abolishing capital gains tax. Furthermore, since both stamp duties and capital gains taxes are taxes on buildings as well as land, they are also taxes on capital in the form of housing stock. A land value tax can tax land income (actual or imputed) without having deleterious effects on capital formation. Indeed, Sir Joseph Carruthers abolished rates on improved values in New South Wales in 1906 in order to untax buildings.

Page 253

Land tax is levied on the unimproved value of land, with investment properties subject to the tax and owner-occupied property exempt. In addition to favouring owner-occupied housing

over investment housing, land taxation affects housing investment decisions in two ways. Most land tax regimes have progressive scales, which can discourage large scale investment in land. This impact can be significant. Averaging across jurisdictions, a single company holding ten land parcels worth $300,000 would pay five times more land tax than if the same parcels were held in separate hands. This encourages property investment by small-scale investors, who pay less tax per property than larger entities. Land tax is also likely to encourage greater investor participation in properties where land is a low proportion of total property value (such as apartments) than in detached houses.

Comment

These are, of course, arguments for a uniform land value tax without thresholds or graduated rates. A uniform land value tax of this kind is much easier to administer (as well as being more efficient) since there is no need to be concerned with the characteristics of the owner.

Page 254

Capital gains are typically taxed upon disposal (a realisation basis). Taxing gains on a realisation basis is considered more practical than accruals taxation due to potential difficulties in measuring gains as they accrue and the cash-flow problems that an annual accruals tax could cause for some taxpayers.

Comment

Land value taxation levied annually on an ad valorem basis taps land income as it accrues without any lock-in effect. If the amounts payable are large, like rates, the tax can be assessed annually and collected quarterly or monthly.

Page 257

For rental property held by a company, stamp duty, land tax and rates result in estimated EMTRs above an investor's personal tax rate.

Comment

In calculating EMTRs, no account should be taken of a tax which has been capitalized. To the extent that the existing land tax is already capitalized on land prices, it represents a burdenless tax and is no more part of an EMTR then the rent a lessee pays to a landlord. For a general, uniform, land value tax with no exemptions based on use, capitalization will occur.

Page 261

By providing a credit to shareholders for company tax paid on the profits from which dividends are paid, dividend imputation is the mechanism that converts company income tax into (in effect) a withholding tax rather than a separate (final) tax. Australia is one of only a few countries that still has a dividend imputation system but many other countries provide

some form of relief to resident shareholders (for example, by exempting all or part of the dividend, or taxing dividends at reduced rates).

As discussed below, dividend imputation may also impact on company financing and overseas investment decisions. The relevance of resident shareholder tax arrangements for the decisions of many companies may be declining as non-residents become a more important source of capital.

Comment

Dividend imputation should not only be retained but improved by allowing the flow-through of foreign tax credits and abolishing restrictions such as "at risk" rules. It would be extremely foolish to reduce the benefits of imputation in reducing double taxation of dividend income. Such a policy would raise the cost of capital to Australian companies and discourage domestic capital formation. It would also have the less obvious effects of encouraging corporate tax reduction manoeuvres and the emigration of corporate domiciles out of Australia. It is not generally realized that most companies do not seek to reduce their income tax bills aggressively because they know that to do so only reduces the imputation credits available to their shareholders. If these credits were not available, any reduction of company tax would be a permanent benefit to shareholders. Further, imputation anchors Australian companies to their major source of capital. At present, an Australian company which emigrates its corporate domicile loses a large part of its attractiveness to domestic investors including burgeoning Australian superannuation funds. It should be noted that, without such an anchor, major companies in the UK have changed their domicile elsewhere and some others such as Prudential are reported to be considering doing so.

Page 261

Non-residents own around 32 per cent of the shares in Australian companies. Company income tax is the primary means by which the returns to non-residents from their equity investments in Australia are taxed. Collecting tax from non-residents is of direct benefit to Australia but has the potential to reduce total investment and so reduce the productivity of Australian workers and, in turn, their real wages.

Comment

Company tax is not the best way to tax non-residents on their investments in Australia. A land value tax can better capture "investment" which merely represents the acquisition of Australian resources while a reduced company tax rate can encourage genuine productive investment in physical capital formation which is what really increases the productivity of Australian workers and raises their real wages.

Page 263

Under a dual income tax, or schedular, approach, as adopted to varying degrees by countries such as Sweden, Norway and the Netherlands, capital income is taxed at a (low) flat rate,

while returns to labour are subject to progressive rates of tax. Given the lower rate of tax applying to capital income, efforts are also made to tax company or business income that is attributable to the labour of owner-managers at the progressive rates of tax applying to labour income.

Comment

But why tax land income less than labour income? There need to be three schedules, not two, since there are three factors of production. The most economically efficient scheduler tax system would be land taxed, labour exempt, capital exempt.

Page 265

Taxing residents on their world-wide (capital) income has become a more significant issue with the increased mobility of capital. Doing so may have global efficiency benefits … Most tax administrations, (including Australia's), have responded to the enforcement challenges by seeking enhanced international tax cooperation and information exchange — for example, through tax treaties and tax information exchange agreements.

Comment

Land is not mobile and no efficiency issues are raised by Australian land value taxation. In contrast, attempting to tax overseas investment inevitably raises questions of comparative tax rates in other countries in relation to physical capital investment. Further, administrative attempts to enforce the taxation of overseas income through international tax cooperation and information exchange inevitably mean either the destruction of legitimate financial privacy, if successful, or, are futile if there are countries intelligent enough to realize that they may profit handsomely from non-cooperation in a global tax enforcement cartel.

Page 266

The outbound [*quaere* inbound] 'thin capitalisation' rules, which are broadly based on the level of debt an entity can use to fund assets used in its Australian operations, are then the primary means by which Australia seeks to limit excessive allocation of debt to Australian operations.

Comment

Land value taxation has the singular advantage over income taxation that thin capitalization is impossible as a tax reduction technique. The tax is simply unavoidable.

Page 267

A number of efficiency benchmarks have been identified for the taxation of cross-border investments. The benchmarks focus on achieving a non-distorting (neutral) outcome for particular aspects of cross-border investments and savings, with a view to improving the efficiency of the national or global economy.

Capital export neutrality aims for neutrality in international investment decisions so that the allocation of investments between countries is unaffected by tax considerations. It could be achieved by countries taxing their residents on all their income from offshore investments as it accrues, with a full credit for foreign tax paid. Capital export neutrality has previously been an objective for some countries moving to more comprehensively tax outbound investment income.

Capital ownership neutrality aims for neutrality in the allocation of capital to companies so that the most efficient and productive companies attract capital. It can be achieved by countries not taxing the offshore investments of resident companies, with company income tax focussed on taxing domestic source income. Achieving capital ownership neutrality would be consistent with *capital import neutrality*, which aims for neutrality in international savings decisions.

National neutrality aims for neutrality in residents' investment decisions on the gross return to their country of residence, with pre-tax returns on domestic investments matching post-foreign tax returns on offshore investments. National neutrality maximises national, but not global, welfare. In effect, it is a variant of a capital export neutrality benchmark but with a bias to domestic investment achieved by treating foreign tax as an expense of doing business.

Comment

A zero tax rate on true capital (i.e non-land, non-labour) income satisfies all neutrality benchmarks. A land value tax is not a tax on the export or import of capital and is therefore always neutral, no matter what its rate. This contrast again emphasizes the need to separate land from capital in one's analytic thinking.

Pages 267-268

Equity investments in Australia by non-residents are primarily subject to Australian tax through company income tax. For debt, nil or low withholding tax rates apply to interest income. Other forms of inbound investment may be taxed either on assessment or by means of a withholding tax. Withholding tax rates are set out in domestic law, but are usually reduced on a reciprocal basis under tax treaties.

Tax treaties play an important role in allocating taxing rights between countries, thus giving investors greater certainty as to how their investment will be taxed. The generally adopted approach in Australia's tax treaties is to apply the OECD model tax treaty, which generally restricts source country taxation in favour of residence taxation. Recent treaties have seen Australia's position move closer to the OECD model in some respects. However, Australia's taxing rights over 'real property' are typically broader than under the OECD model, particularly in relation to our natural resources.

Comment

The deductibility of debt interest for income tax can substantially erode Australia's return from its own natural resources. By contrast, a land value tax base cannot be so eroded.

Australia has bound itself by treaty to the OECD model which favours the country of residence, in order to attract mobile financial capital. But the cost of doing so has been to erode Australia's right to tax its own natural resources, notwithstanding the attempts to reserve some rights. Foreign investors can always thinly capitalize their acquisitions of Australian land and resources and may dispose of their interests in those resources by disposing of intermediate holding vehicles. Rather than futilely trying to repair piecemeal the damage done to Australia's revenue base, a shrewder policy would be to tax land directly and introduce a federal land value tax (including taxation of the value of mineral and oil bearing lands). The land revenue could be used to cut Australia's capital and labour tax rates, starting with corporate tax rate.

Australia could then become internationally more competitive and become a low tax country which could offer investors the benefit of tax treaties.

Page 268

Australian tax is, however, only part of the story. Effective rates of tax on an investment in Australia (or alternative investment location) also depend on the tax system of the foreign country from which the investment originates. This includes whether it provides a credit for Australian tax paid or, alternatively, exempts the income from tax.

Comment

Australia's national interest would be best served by capturing the value of its natural resources on the one hand and assisting overseas investors on the other to keep their worldwide taxes to a minimum, in return for contributing to Australian physical capital formation, thereby raising the productivity of Australian labour and its wages. Australia should certainly not assist other countries in collecting tax revenue from Australian-sourced income – to do so only discourages overseas investment in this country.

Page 269

Optimal tax literature suggests that, in the absence of location-specific rents, a small open economy should not impose source-based capital taxes when capital is perfectly mobile between countries. Doing so would reduce investment and, with lower levels of investment, labour productivity, wages and returns to other immobile factors (such as land) would fall.

Comment

This is correct, see Dwyer (1998a) and literature cited therein.

In practice, capital is not perfectly mobile, location-specific rents are present (for example, in respect of natural resources and the existing capital stock) and foreign countries may credit

domestic tax paid. However, as capital has become more mobile, countries have begun to compete more to attract capital investment.

Comment

Location specific rents are, in fact, site rents and resource rents. These are reflected in land values which can be taxed separately and apart from capital and while maintaining a zero tax rate on capital. The existing capital stock does not earn true rents, only quasi-rents which are the return on capital invested. Untaxing capital by taxing land is a virtuous circle because the induced increase in capital formation adds to the value of the land tax base – one of the cases in economics where there is a "free lunch" to be had.

Page 269

As noted in Section 5, non-tax factors are also important drivers of FDI. These non-tax factors include macroeconomic stability, a supportive legal and regulatory framework, skilled labour and labour market flexibility, and well-developed infrastructure.

Comment

Relative to Hong Kong, Singapore, Malaysia and China, Australia's comparative advantage in infrastructure is far less than it was 30 or 40 years ago. Indeed Hong Kong investors now own some of Australia's infrastructure. Australia is losing its advantages of cheap energy and reasonably priced, well maintained, infrastructure. Private and public utility monopolies have been allowed to drive prices well in excess of efficient short run marginal cost under the guise of replacement cost accounting. Further, vetoes on efficient infrastructure such as dams for urban water and mandating of expensive desalination plants have seen the price of water driven to extraordinary levels.

Page 270

The Australian natural resources sector is made up of two components — the mining and petroleum sector and other natural resources such as forestry and fisheries.

These natural resources are owned by all Australians, with legal ownership vested through governments' rights over these assets.

Comment

All natural resources, including land and telecommunications licences, are held from the Crown. The feudal theory of taxation was that the Crown should live off its resource rents and its customary dues and leave the subject untaxed. The feudal theory was that Parliaments only have authority over taxation, because it is seen as a voluntary gift from the Commons to the Crown, as argued by Pitt the Elder. If governments properly collected their resource rents, they could afford to leave the people untaxed on their labour and capital. From this point of view, the introduction of a Federal land value tax to reduce other taxes could be seen a move towards restoring the ancient English constitutional principle that the

Crown should live "off its own" and that the people should be left undisturbed in the enjoyment of the fruits of their labour.

Page 270

Such payments can enable governments to collect a return from the extraction or use of the community's natural resources but can also impact on the level of investment, both by Australian and overseas investors.

Comment

But if the payments are extracted through land value taxation, they are merely a collection of rent and have no deterrent impact upon genuine investment in reproducible physical capital.

Page 270

There are challenges in valuing many of Australia's natural resources. A market price may not always exist and, where it does, it may not reflect the full value that the community ascribes to the asset — for example, the value of an old growth forest. There are a range of factors that can affect the price of these resources, including government ownership and regulation. In many cases, the prices (implicit or explicit) charged by government for access to the community's natural resources are non-transparent, or at least very difficult to compute.

Comment

Ken Henry, see Appendix D, has written about the community receiving the value of its resources. Strictly speaking, as Henry George recognized in his "A Perplexed Philosopher", we all have equal rights to these resources and the only fair way to decide between competing interests is by fair and open competition, rather than by arbitrary pricing through bureaucratic fiat setting a price too high or too low. Where the market is thin and nobody wants to use a resource, the land value will be low. Assuming the landholder's assessment of its value appears on the public record as being accepted by the Valuer-General, over time it may be that others emerge who wish to use the resource. They are always free to make a bid for the resource and send a copy to the Valuer- General. Both realized and potential sales may therefore contribute to the valuation database. Finally, it may be observed that a veto on using natural resources amounts to the Crown setting an infinite price on that resource. Economists may argue that a more market-based solution would be for the Crown to match any potential bid, so that the community can continuously monitor the costs and benefits of its current allocation of resources between various possible uses, private or public.

Page 270-271

Exports of mineral resources from Australia were valued at $91 billion in 2005-06, accounting for 46 per cent of total exports of goods and services. Reflecting the rapid increase in commodity prices, mining exports are forecast to grow to $176 billion in 2008-09.

…. Nearly 50 per cent of all revenues from the mining sector come from company tax. As a tax on non-residents, company income tax is particularly important in the mining sector, with around 50 per cent of mining assets owned by non-residents.

Comment

These figures alone are an excellent argument for taxing land values (including the value of mineral and oil bearing lands). One suspects that governments in the Middle East are a little more hard-nosed about collecting the true market value of their resource rents, having had many years of dealing with multinational oil companies.

These royalties can discourage high risk investments (for example, in the case of an ad valorem royalty, revenue can be collected even when net losses are being made).

Comment

It is true that a "per unit" or "gross value" royalty may discourage investment and production. However, a land value tax (which may be self-assessed with an option for the Crown to exercise eminent domain at that self-assessed value) solves the problem neatly. If a mine is making losses and has no value, the owner will have no objection to being bought out at his own valuation with compensation for the depreciated value of usable improvements. But if the mine has a value notwithstanding temporary losses, it can only be so because profitability and economic rents are expected to return in the future. In such a case, a mine owner will continue to pay tax as an unavoidable lump sum charge, just as an unprofitable business experiencing a downturn still expects to pay rent. In either case, investment is not discouraged by the existence of a rent charge.

Page 274

With an increase in world price to p_{NEW}, previously marginal or uneconomic projects become viable, and production increases to q_B. In addition, rents increase in respect of the initial output level q_A. The extent to which these increased rents are shared by the community depends on the particular tax or royalty arrangements that apply.

Comment

As the resource rents increase, so does the value of the mining tenement. A land value tax therefore automatically keeps pace with the increase in resource rents and the higher the rate of the tax, the greater the extent to which resource rents are captured for the community.

Page 275

Estimating these latter two components is particularly problematic, in part because the market for timber may not be fully competitive. For example, the high cost of transporting timber may mean that in some regions there is only one log supplier, the state forest agency, and one (or very few) buyers, such as a large sawmill. State ownership of forestry resources, may

also mean that usual market incentives to minimise costs and seek an appropriate market return for the timber are diminished.

Comment

Ken Henry (see Appendix D) has written of his recollections of the pricing of timber on the North Coast of New South Wales. It is true that the Crown should not dispose of public assets too cheaply. Whether it was grazing lands in the nineteenth century, irrigation licences or Canberra 99 year commercial leaseholds in the twentieth, Australia has many stories of dereliction of duty by governments in disposing of resources. There needs to be free and open competition. However, a system of open competition is still free and fair even if there is only one bidder. If a body such as an Environment Department feels that resources are being sold too cheaply there is nothing to stop it submitting a competing bid to set a floor price subject, of course, to Parliamentary appropriation. In this way, the value of resources can be continuously monitored.

Page 276

An alternative to residual value pricing is the use of auction or tender arrangements. When VicForests trialled an auction system in 2006, it resulted in significant increases in prices (150 to 160 per cent over the existing price).

Comment

Whether the tenure or right being sold is only temporary or long term, fair and open bidding should be the norm. Where the tenure is long-term, revaluations of land value should be made on a "mark to market" basis. All these matters should be on the public land register and freely open to inspection without charge so that an efficient market in access to resources is maintained. The Crown and the public have much to gain from having an informed market for land and natural resources.

Page 277

Improving technology is making it administratively feasible to replace some taxes with more direct user charges.

Comment

User charges are still taxes if the charges are in excess of short run marginal cost. The High Court was led into error by the affidavit evidence in the Airservices Australia case if it was led to believe that economists think otherwise or that Ramsey pricing is not a tax-transfer mechanism.

Page 278

Some goods and services are GST free, including basic food, health and medical care, education and charitable goods.

Comment

On the logic of the GST as a tax on final, not intermediate, consumption, it is right that goods and services used in production be GST-free. This was the basis of the classical economic argument that the necessities of life be tax-free as labour itself has a cost of production. People die and do not breed if they lack food, clothing and shelter.

Page 278

Chart 9.1 shows the impact of directly imposed taxes on consumer goods and services. It ignores taxes on business inputs that are passed onto consumers through the prices on the goods and services they produce.

Comment

Rates and land taxes, if capitalized, are not passed on to consumers as increased prices but are borne by the landholders as a lower market value of the land.

It is also interesting to observe that the new carbon tax regime will obviously create a spectacular "tax on tax" cascading distortion for the pricing of transport services provided through motor vehicle use.

Page 280

… the decision of an individual to smoke tobacco may not only cause harm to their own health, but also affect the health of others and impose a financial cost on society through increased demands on a publicly-funded health system.

Comment

Without wishing to defend smoking, one may observe the example is inapt as one of externality. A smoker may retort that he did not ask for a publicly funded health system, that he pays private health insurance premiums and the risk is a matter between him and his insurer. Further, he may ask for an accounting of the tobacco excise revenue as it is applied to health. It is understood the Treasury has always opposed hypothecation of tobacco excise tax revenue to health expenditure on smokers because the tax collected is well in excess of what is spent on the health care needs of smokers.

Page 280

Corrective taxation is most efficient when the activity that generates the external cost is taxed directly — for example, actual pollution emissions.

Comment

Externalities are reflected in land values, since externalities are spatial. Capital and labour can move in the long run to escape from lower returns caused by an adverse externality and to capture the benefits of a beneficial externality. This process is reflected in land rents and

land values, as returns to capital and labour are equalized. To that extent, if revenue is raised through a land value tax, automatic corrective taxation takes place. For example, if an urban motorway is built, the traffic noise may adversely affect some land values and increase the values of land made more accessible to the city. There is no need for compensation, however, as the land values and taxes rise for the "winners" and fall for the "losers" from the externality. The higher the rate of the land value tax the greater the corrective taxation. Curiously, this also seems a result that a Coasian theorist should accept as the market works without anyone having to make an arbitrary decision to have the winner explicitly pay the losers rather than vice versa. From a social point of view, if the net value of all land rises, the external costs are outweighed by the benefits.

Page 280

All that is required is that the costs to society of undertaking the activity are reflected in the economic decisions of consumers or producers. Taxation is not the only way to achieve corrective action. For example, licensing restrictions on alcohol and product controls on tobacco aim to affect consumer behaviour, as do public health campaigns. To the extent that the externality is addressed through non-tax means, there is reduced need to apply a corrective tax.

Comment

This is all very well but has the Treasury ever proposed this solution be applied to the problem of teen pregnancies? Are the fiscal costs of unwed motherhood recovered through a corrective tax? If this logic were applied to social security recipients as is suggested for smokers, there would not be much of a social security system left since many of those benefiting from social security might be regarded as having indulged in conduct which inflicts fiscal externalities on the taxpayer. Note that fiscal externalities are not the same as true physical externalities in any case and are as much due to voluntary choices on the part of the State as to the conduct of those benefiting from the fiscal externality.

Page 282-283

Australians undertake many activities that cause environmental damage. To the extent that the environment is a public good, then it is likely that these activities make other Australians worse off. There are few examples of environmental taxes in Australia. To be an environmental tax — rather than just a tax — there must be a direct link between the tax and the marginal social cost of the activity damaging the environment. The tax effectively 'corrects' for the market under-pricing the loss of social value from a damaged environment (see Box 9.2).

Box 9.2: Aircraft Noise Levy

The Aircraft Noise Levy is targeted at the noise emitted by jet aircraft landing at declared airports. Airlines are charged for the noise pollution caused to those who live near the airports. The levy is calculated so that a relatively noisy aircraft such as a B747 pays some

three to four times more than a quieter aircraft such as a B737. Depending on market conditions, airlines may try to pass on the cost of the levy to passengers in the ticket price. Revenue from this levy is used to recover the costs of Australian Government-funded noise amelioration programs. After the full cost of the noise amelioration program is recovered, the noise levy for that airport ceases to apply.

Comment

It is tendentious to say that Australians cause environmental damage. That is in the eye of the beholder: the "environment" is valued by human beings and there are many "environments" to be valued. Should water be used for a pleasant urban garden environment or for bush creeks? If the environment is a common access resource (a commons) then those who want to stop it being used one way should be willing to pay as much as those who wish to use it that way or any other way. One man's use of the environment may be another man's eco-vandalism, just as one man's bright painting of a house may be another man's eyesore. One man may prefer nice neat urban lawns and gardens while another may prefer bush gardens and bush streams. The only way to resolve such conflicts fairly is to allow the competing uses to be bid for openly.

Further, the Airport Levy is a good example of mistaken corrective taxation. Land values had already reflected the externalities of aircraft noise. One might also note that Kingsford Smith Airport was in existence for many years before many homes were nearby and virtually all current owners would have bought their properties in any case having discounted the land values for the noise. To the extent they received the benefit of Government-funded noise amelioration measures they were double compensated for the noise. Effectively an excise tax was placed upon the travelling public to compensate landholders for a cost they had already discounted. To the extent that land values were depressed by aircraft noise, land value taxation would have automatically compensated landholders by giving them reduced tax bills.

Page 283

In general, there is no efficiency reason to spend the revenue raised by environmental taxes on additional environmental programs as is the case with the Aircraft Noise Levy. This is because an effectively targeted tax creates incentives in the market for individuals to respond to environmental concerns.

Comment

This seems to confuse the collection of a rent with a corrective tax. There is no need to spend a rent in any way but that may not be true with a corrective tax, since by definition one wishes to alter behavior and ensure that a resource is not damaged. The revenue from a corrective tax is more like a depreciation or depletion charge rather than a net revenue – it may need to be spent to restore the resource (eg revegetating disturbed soils).

Page 283

In some cases, environmental taxes may not be the most appropriate way to deal with activities damaging the environment. If property rights are clear and the cost of enforcement is not prohibitive, then people damaging the environment might be required to compensate affected parties for the damage caused, or they could be paid to encourage them to stop their damaging activities by others who care about the environment.

Comment

As noted above, land values reflect externalities, both good and bad, and automatic compensation can be built on that fact through land value taxation. The fact that land values are positive shows that generally positive externalities outweigh negative ones.

Page 284

The auctioning of permits will provide the Australian Government with a source of revenue and the capacity to help industry and households adjust to the impacts of the scheme.

Comment

Whether or not one believes the "carbon dioxide pollution" theory of devastating global warming, it has to be recognized that the emissions trading scheme is essentially a form of indirect tax farming similar in some respects to the auctioning of the right to salt monopolies in pre-Revolutionary France. The State creates a monopoly right to do or produce something which everybody needs and then sells that monopoly right to tax farmers. Salt was essential to preserve food in eighteenth century France, carbon burning is essential for food, clothing and shelter today. The scheme should therefore be described as a carbon tax regime.

Page 285

Once the scheme is introduced, the prices of emissions-intensive goods and services will rise relative to those that are less emissions-intensive. The extent of the increase will depend on the emissions embodied in the production of a good or service, the extent to which the threat of imports limits the ability of producers to pass through their cost increases, and the availability of firms and households to substitute away to less emissions-intensive goods. The higher prices associated with the costs of the scheme will require households to spend a greater proportion of their income to obtain the same goods and services purchased before the introduction of a carbon price. Without compensation, this would reduce households' real incomes and purchasing power. The Government has committed to using all revenue raised from the Carbon Pollution Reduction Scheme to help households and businesses adjust to the scheme and to invest in clean energy options.

Comment

But it should be recognized at the outset that the carbon tax regime necessarily involves an unambiguous cost to society. It is as though carbon suddenly became harder to extract. Those who agree with the "carbon dioxide pollution" theory will correctly say that this is a

case of coming to the shock of realizing one has not been paying the true social cost of a resource. Others who disagree with the "carbon dioxide pollution" theory will say it is merely a selective tax on energy which will cascade through the economy on top of the GST and create a large measure of hidden tax burdens on exporters. But both sides can agree that the carbon tax regime, whether rightly corrective or not, will create a massive change in the costs structure of the Australian economy and thereby affect living standards and real wages. It is therefore essential that such a scheme be based on unchallengeable scientific proof that the "carbon commons" in the atmosphere is being over-grazed and all countries agree to corrective action if Australia is not to shoot itself in the foot as a cheap energy country.

Page 288

The Australian Government has made a number of commitments regarding transport fuel in the *Carbon Pollution Reduction Scheme Green Paper*, including cutting fuel taxes on a cent-for-cent basis to offset the initial price impact on fuel associated with the introduction of the scheme. The Australian Government will periodically assess the adequacy of this measure for three years and adjust this offset accordingly. At the end of the three year period the Australian Government will review this adjustment mechanism. For heavy vehicle road users, fuel taxes will be cut on a cent-for-cent basis to offset the initial price impact on fuel associated with the impact of the Carbon Pollution Reduction Scheme. The Government will review this measure after one year.

Comment

Given the high level of existing excise taxes on fuel, there seems a good argument for saying that fuel is already more than "carbon-taxed". Hence the offsets should be permanent.

Page 288

Fuel excise is an effective and administratively simple tax for raising revenue. However, it is less effective as a means of meeting additional social or environmental objectives. For example, fuel excise rates do not substantially change the decision to drive in particular vehicles (to reduce road damage), in particular areas (to reduce noise pollution) or at particular times (to reduce congestion). Fuel excise levied for social or environmental objectives also leads to higher burdens on activities where there may be no costs on others. New technologies (such as 'etag' and the global positioning system) are increasing the viability of more efficient direct charging mechanisms.

Comment

Fuel excise also happens to be highly distorting in terms of its damage to Australia's spatially separated common market extending across a continent. As noted previously, land value taxation can internalize externalities of road use and provide funds for the repair of damage and construction of new roads to alleviate congestion. Since the externalities

instanced are all reflected naturally in land values and land values also reflect the positive external benefits of roads, it seems natural to rate the land values to pay for the roads.

The philosophy of charging the immediate user is incorrect as an economic principle since the user should only be charged short run marginal cost which may be very small. It is the beneficiary who should be charged and the beneficiary is very much the landholder whose land is serviced by roads and which would have no value without road access. Just as access charges are urged as a means of funding the "access deficit" of telecommunications companies, so land value taxes can function as access charges for lands served by roads. Finally, the use of "etags" to spy on the private activities of the subject is something profoundly disturbing to anyone who is remotely sensitive to our inherited traditions of English liberty. It is simply not the business of the State to monitor our movements along public roads.

Page 289

Use of all fuels on-road in heavy vehicles is eligible for a partial fuel tax credit equal to the effective fuel tax paid, less the amount of a non-hypothecated road user charge. The user charge is intended to reflect the damage to roads caused by heavy vehicles.

Comment

Why is the road user charge non-hypothecated if it is intended to reflect the damage done to roads?

Page 291

… and a series of High Court cases through to the late 1990s where a progressively broader interpretation of excise duties effectively narrowed the range of taxes that the States can impose.

Comment

This is not correct. As noted previously, the High Court's view on excise is consistent with both the law and economics. It is curious to see such sympathy shown by the Commonwealth Treasury to State taxes which not only erode the Commonwealth's direct excise monopoly but indirectly erode its income-tax base through their deductibility for business.

Page 292

Other taxes such as conveyance duties have delivered increasing amounts of revenue to the States in recent years, but the tax base can be subject to fluctuations in line with the property market.

Comment

All the more reason to abolish conveyance duties and to take John Stuart Mill's advice from over 150 years ago and replace them with a uniform land value tax. Land value taxation is a stable revenue source which adjusts to market conditions without being dependent upon turnover.

Page 292

Stamp duties on transactions, such as on motor vehicle purchases, insurance contracts and property conveyancing are significant sources of revenue. Such transaction taxes can reduce economic efficiency either through discouraging turnover (as tax is levied on the full value of the product each time a transaction occurs) or being embedded in the cost of production.

Comment

A land value tax is capitalized since land rent is a demand determined price, land having no cost of production. Hence a land value tax does not raise the cost of production, see Dwyer (1980).

Page 293

Taxing on the basis of the frequency of transfer may discourage turnover of the good, such as housing, to minimise or avoid tax. Individuals and businesses may continue to use an existing good instead of a preferred alternative simply to avoid the tax. By reducing turnover, a high transaction tax can also make price discovery in a market more difficult. Reducing the certainty and quality of a price signal imposes additional risk on all those who engage in the market.

Comment

As noted previously, land value taxation not only avoids these problems but encourages an active land market because, as a holding cost, it encourages land to be put back to the market if it cannot be used productively. Hence, it creates another virtuous circle – the tax facilitates the operation of the market which sets the values for the tax base.

Page 294

Such tax competition can lead to significant erosions in tax bases. This is of particular concern if it occurs with relatively more efficient taxes, as the loss in revenue may be made up from increasing the rates of less efficient taxes.

Comment

Tax competition is unambiguously good. Like a slow process of Darwinian natural selection, it weeds out incompetent governments and incompetent bureaucracies. Land value taxation is not subject to tax competition since land values are solely demand-determined prices, not based on a cost of production (which is zero in the case of land). The losers in tax competition are those governments who are stupid enough to abolish taxes on immobile land

values while retaining or increasing taxes on transactions or labour and capital. The winners in tax competition are those governments which cut taxes on labour or capital and fund themselves from land rents including resource rents. This is what has enabled Hong Kong and Brunei to function as tax havens. Australia and its States could do worse than to study the success of countries which we looked down upon 40 years ago as Third World and which today in some cases have infrastructure and per capita incomes which are superior to our own.

Pages 294-295

In addition to revenue from taxes, the States raised a further $36 billion in 2006-07 from other own-source revenue. Use of other own-source revenue reduces the need for the States to raise tax revenue. Other own-source revenue includes user charges for services provided by governments, dividends and tax equivalent payments from state owned enterprises, resource royalties and charges, fines, and interest income. The proportion of other own-source revenue to total state revenue ranges from over 30 per cent in Queensland to around 14 per cent in the Northern Territory…

Comment

As Dwyer and Larkin (1994) observed (and Box 10.3 acknowledges), user charges in excess of short run marginal cost are essentially taxes: hence, tax burdens and tax distortions are understated if inflated "user charges" are ignored. In particular, it is very clear that water, electricity and privatised tollway charges include large elements of monopoly rent or taxation by another name. Often, the extent of the monopoly rent is disguised by the use of depreciated optimized replacement cost accounting which has the effect that users are made to pay again for infrastructure they previously financed. Ironically, these disguised forms of indirect taxation have flourished under the eyes of the Federal Treasury even as Australia adopted what was purported to be a "National Competition Policy".

Page 298

The allocation of expenditure responsibilities between levels of government in Australia has been largely shaped by the Constitution and reflects, to some extent, the principle of subsidiarity — that is, that decisions should be taken as close as possible to the citizens by the lowest level of government possible. The States have, and will continue to have, significant expenditure responsibilities and this means that the States need sustainable sources of revenue to fund expenditure.

Comment

A common land value tax base could be shared between the Commonwealth, States, local and semi-government authorities. Each could set its own rate for the territory within its jurisdiction and annual, quarterly or monthly bills could be sent to landholders with the relevant breakdown to be paid in one bill to a joint collection authority which could distribute the proceeds to the relevant taxing or rating authorities. Such an arrangement

respects the full autonomy of each jurisdictional authority and does not involve any conflicts over the tax base since land, unlike income or sales, is territorially fixed.

Page 305

A certain level of complexity and operating costs is required to implement the tax-transfer system in a manner that is efficient and equitable. However, at some point, equity or efficiency is likely to be compromised by increasing complexity.

Comment

General uniform land value taxation is virtually the simplest of all taxes to administer. The tax base is visible, it cannot be hidden and, without violating any legitimate privacy, it can be a matter of public record so that errors can become quickly apparent. It can even be self-assessed with the Crown having the right to buy the owner out at his own valuation with compensation for improvements. It is effectively unavoidable. Tax avoidance of municipal rates is virtually unheard of.

Page 305

In 1975, the report of the Taxation Review Committee (Asprey et al, 1975) noted with some alarm that the income tax law extended to 526 pages, six times its original length in 1936. The income tax law is now 5,743 pages.

Comment

This is a nice comment on the benefits of tax reform. One might observe that the income tax law could be made somewhat simpler if drafting were not so often driven by an obsession with stopping tax avoidance. As the late Professor Wheatcroft wisely observed, "a tax system breathes through its loopholes". An obsession with plugging every loophole inevitably leads to Parliamentary moves to re-legislate for approved loopholes for socially worthy activities which it did not intend to be stopped.

Page 306

Notwithstanding the concerns expressed about the complexity of the tax-transfer system and the associated compliance costs, taxpayers and transfer recipients behave in ways that contribute to the problem by seeking special treatment or seeking to maximise their incomes (after taking into account taxes and transfers).

Comment

This seems to be a case of "blaming the victim". Taxpayers do not write the income tax law. Many would vote for its abolition. It is only to be expected that, as normal rational economic actors, taxpayers should seek to take advantage of any legal means of retaining what are, after all, their incomes to begin with.

Page 308

In the late 1990s the Tax Law Improvement Project was established to rewrite the income tax law to make it easier to understand. The new drafting style, while clearer, better structured and shorter, did not involve any significant policy simplification.

Comment

The Tax Law Improvement Project is an abysmal failure, notwithstanding the best of intentions of its originator, Mr Brian Nolan. There are now two income tax laws. In some cases, the rewrite has changed the law by "clarifying" it to impose an ATO view which was not necessarily tenable under the previous wording. In other cases, the plain English wording and the examples do not rest upon a proper appreciation of the underlying law governing the transactions being taxed. There are even cases where there are references to nonexistent parts of the law and typographical errors have started to creep in.

Page 319

Twenty-three years after the introduction of CGT, the exemption for pre-1985 assets continues to add considerable complexity to the provisions.

Comment

Is the Treasury proposing retrospective imposition of capital gains tax on assets acquired before 1985? If the Treasury wants a simpler capital gains tax system, it would be better to abolish the capital gains tax system altogether and tax the only asset which really appreciates in the long run, namely land, and do it through a uniform Federal land value tax.

Page 320

… improving the clarity of legislation through, for example, the application of plain language and principles-based drafting techniques

Comment

These are inevitably less precise and leave the taxpayer increasingly at the mercy of the Commissioner's view of the law as expressed in tax rulings, statements of principle and interpretive decisions.

Page 323

All households will face changes in the relative prices of the goods and services that they purchase as carbon prices are incorporated into businesses' cost structures. The precise impact of the scheme on the prices of particular goods will depend on many factors and will change as production practices evolve. However, as a general principle, the prices of goods that are emissions intensive to produce will rise relative to those that are less emissions intensive to produce.

Final decisions on scheme coverage will also affect the ultimate price impacts of the scheme. If the initial coverage of the scheme includes all emissions sources other than those from agriculture and land use, and given the offsetting adjustment to fuel taxes, it is likely that price impacts will initially be concentrated in electricity and gas prices. The prices of other goods will also rise as the carbon price permeates the economy.

Comment

Assuming monetary policy is not accommodating towards inflation, the real prices of all commodities must rise - some by more than others.

The introduction of the carbon tax is similar in some ways to the introduction of the GST. But whereas the GST replaced other taxes, the revenue raised from taxing emissions will be largely used to fund expenditure, not to cut other taxes. Hence there is little or no possibility that increased effective tax rates on some goods and services will be matched by falls in effective tax rates on others. There will be both absolute price increases in real terms as well as relative price increases for the most heavily energy-intensive goods and services. Everyone must be worse off.

This is not surprising as the whole object of a carbon tax is based on the premise that the market price of carbon use is below its true cost to the community – that we have not been paying enough for carbon dioxide emissions and this "free ride" should end. The argument is that we should now start paying more because Australia's introduction of a carbon tax will bring compensating benefits (i.e. preserve our current climate or at least prevent unacceptable deterioration).

Without expressing a view on the climate science involved, from the economic point of view, the relevant question to be answered is whether the net benefits of reducing carbon dioxide emissions exceed the costs of doing so or whether it would be cheaper to devote economic resources to adapting to whatever climate may evolve. To put it simply, does one incur costs of $x billion on the basis this will stop climate change progressing and doing much damage or does one spend $y billion putting up sea walls etc if and when the climate changes?

These are not easy questions to answer but one notes that the paper assumes that –

1. *carbon dioxide emissions will cause adverse climate change;*
2. *action (whether unilateral or internationally co-ordinated) by Australia to limit emissions can reduce the impact; and*
3. *the cost of action to limit emissions in Australia is less than the cost of simply adapting to the climate as it evolves.*

It appears the Treasury is acting upon propositions 1 and 2 as declared matters of Government policy outside its remit (as is its duty) but it would be interesting if the Treasury could publish its cost-benefit analysis of proposition 3, along with its PRISMOD projections

of price changes across goods and services and estimates of the carbon-tax induced excess burdens.

It is certainly misleading to suggest that carbon taxation involves merely relative price changes as opposed to a real reduction in today's living standards. The real question is whether that reduction is warranted by the benefits to be obtained in protecting future living standards.

Page 331

$Y_t = rR_t + iK_t + wL_t$ where r is the return to resources, i is the return to capital and w is the return to labour.

This framework allows for an analysis of the relationship between the two main broad bases of income and consumption.

Comment

But as the equation demonstrates, income and consumption are the not true tax bases – the true tax bases are land income, labour income or capital income. Of these tax bases, two, labour and capital, have positive elasticities of supply whereas land has an inelastic supply. The rewards paid to the owners of labour and capital influence the supply of these factors in the economy and hence economic output and living standards. That is not true of land income (traditionally described as economic rent). Rent is a demand determined price: hence a tax on rent is absorbed by the landholder and is capitalized as a reduction of land value. There is no excess burden associated with a tax on rent: there are excess burdens associated with taxes on labour or capital.

It should also be noted that r and R should represent dollars per acre per year, i and K should represent dollars per machine per year and w and L should represent dollars per worker per year. In the short run, the returns to capital are quasi-rents. In the long run, capital is not re-created unless the quasi-rent on the machine exceeds (and in equilibrium equals) "iK" where this time "i" is the rate of interest and "K" represent the cost of production of the machine.

Unfortunately, since John Bates Clark confused the measurement of the value of capital with its nature as produced means of production, many economists have slipped into the idea that capital is a fund of value. But as Böhm-Bawerk realized in his debates with Clark in the Quarterly Journal of Economics in the early 1900s and in his (1921) treatise on "Capital and Interest", it is a cardinal error to confuse the value of a thing with the thing itself. If the value of a thing is the thing itself, then all factors can be reduced to a homogeneous fund of value and economic analysis becomes impossible. Further, as the Cambridge critics realized in the 1960s capital controversies, it is impossible to measure capital through its value since that value is the result of a process of capitalization – "capital" is measured as factor of

production (capital value) using a price (the rate of interest) which is the product of that value.

The legacy of John Bates Clark has been to leave many economists confused as to the fundamental economic distinctions to be drawn between capital and land, between rents and quasi-rents and between interest and quasi-rents. It is notable that Alfred Marshall, as well as Böhm-Bawerk, rejected the J B Clark parable of economics. Part of the problem is that the words "capital" and "investment" are used in several senses without people always paying attention to the precise meaning in mind at the time.

Page 331

Comprehensive income taxation falls on the earnings of the providers of capital, natural resources and labour. …

According to the Schanz-Haig-Simons income definition, the income tax base is the total amount that an individual can devote to consumption in a given period (C) plus the increase in the economic wealth between that period and the next…

Comment

"Comprehensive income taxation" in the Haig-Simons sense is not income taxation in the traditional British sense of a tax on national income (as implemented by Pitt the Younger following Adam Smith's discussion in the Wealth of Nations). A tax on "personal incomes" is not the same thing as a tax on national income. The concepts are different.

"Comprehensive" income taxation as conceived by Simons means a tax on personal resources (personal income) accruing in a period regardless of whether those resources represent parts of national income. For example, Simons would tax gifts received, yet not allow deductions for gifts made. A husband and wife making gifts to each other could under Simons' logic have huge "personal incomes" even though the gifts are not part of national income.

Further, the definition of national income excludes revaluation gains whereas Haig-Simons theorists include them as personal income. A change in the value of an asset due to a change in expected future income is the capitalization of future income increments which are properly to be counted as income in future periods. Observed capital gains on assets may represent changes in capitalization rates, changes in expectations of future incomes or the emergence of accruing income (e.g a bond rising in value as coupon date approaches). Problems of double taxation may arise if both income receipts from assets and capital gains on the assets are taxed. Land value taxation avoids such potential problems because it taxes accruing land income but does not tax actual rent receipts. These issues are discussed in Dwyer (2003) reproduced as Appendix E.

Page 332

A tax on consumption is equivalent to a tax on labour under strict conditions.

Comment

The conditions are never satisfied in the real world.

Page 333

Of this income a proportion α is saved for future consumption. Assume it is saved through the acquisition of land (R) and capital (K) …

For the reality of rents above the discount rate … note that in the long run, rents and interest on capital or naturally endowed resources will equal return on savings, but there may be timing differences so that for sustained periods of time rents are above normal returns to capital. In such circumstances, the consumption tax base is greater than simple wage income as it captures rents. …

Let savings invested in land (R) generate a return r ….

Comment

This is a fundamental analytical error. The value of land does not represent something created through saving wages. Land exists apart from human effort. Men buy land, they do not create it. Land values are not some sort of bank account representing "saved wages": they are the capitalized values of future expected rents. There will always be land rents and these are not created as the returns to invested savings. Even if no one had to buy land and it was always gifted by the previous generation it would still have a rent and command a value.

Having correctly recognized at the outset that there are three factors of production, the paper slips into the perennial J B Clark error of trying to assimilate land into capital and treating both as the return to savings. If this were true, why waste time talking about taxing resource rents?

Page 337

this model suggests that an income tax would only collect around 20 per cent of the revenue that would be collected under a consumption tax in period t+1 where all labour is retired and the stock of savings is being fully consumed.

Comment

Is it cynical to wonder if the Treasury is planning to cover any fiscal deficit resulting from ageing of the population by doubling the GST to cover falling income tax revenues as people retire? And if that is what Treasury is thinking, has it considered what will happen to demographic collapse as the tax on child rearing is doubled (child rearing being wrongly

treated as consumption subject to GST)? Land value taxation can raise revenue without creating such adverse demographic feedback effects.

APPENDIX C

A Short History of Land Tax

Most people think taxes have always been part of our history. This is not correct. The traditional view was that the Crown should live "off its own" and the taxes were free gifts by the people to the sovereign for extraordinary emergencies. A land value tax, from a philosophical point of view, may be seen as a method of restoring the idea that those who hold the land of the country should be expected to pay rent for the expenses of running the country. This was a view which may be seen close to the surface in Adam Smith and John Stuart Mill.

History of land tax in England

When William the Conqueror seized England after the Battle of Hastings in 1066, all the land of the Kingdom passed to him. The King then parcelled out those lands to his followers in return for rent. That rent took the form of military service to the Crown and was required together with other payments in kind or cash.

The King's revenues therefore came from his ownership of the land and not from taxation. That is why the Common Law has traditionally frowned upon tax legislation as penal legislation which derogates from Common Law rights. The feudal theory of taxation was that the King should live "off his own" and leave his subjects' property alone.

In time, the King's nobles resented paying their feudal dues and sought to evade them through devices such as the trust. Gradually, as the King's revenues declined from his own lands, he was forced to seek Parliamentary approval on behalf of the people for taxes. The struggles over taxation in the 17th century led by 1662 to the Statute of Tenures which abolished military tenures.

After the Glorious Revolution, the land tax was allowed to be commuted in 1694. Local rating remained on the parishes to provide those social services which used to be provided by the previously abolished monasteries.

Much later, in the 19th century, there was a strong movement towards reintroduction of land taxation led by the British Liberal Party about 1909. Prominent among supporters of land taxation were Winston Churchill and Lloyd George.

Land tax in Australia

The colonists brought English law with them to Australia. Hence the concept of Crown ownership of land meant that the revenues from land such as licence fees charged to squatters, were not subject to Parliamentary appropriation. As Governor Darling retorted to William Charles Wentworth "To take a rent for the use of Crown land was not to impose a tax". Later, however, the Crown gave over the management of its lands to the New South Wales Legislative Council.

During the 19th century in Australia there was strong movement for breaking up large pastoral holdings for closer settlement. John Stuart Mill's arguments against the unearned increment from land holding and later Henry George's espousal of land taxation had wide influence in the colonies. In New South Wales, free traders led by George Reid supported land taxation while Sir John Quick and others championed similar moves in Victoria.

Sir John Quick was one of the founding fathers of Federation, He was a boy in Bendigo in November 1856 when responsible government was established in Victoria. His doctoral thesis *A History of land Tenure in the Colony of Victoria* (Bendigo 1883) may be found in the National Library in Canberra. Quick argued that land should only be alienated on leasehold terms so that the Crown did not deprive itself of future land revenues in perpetuity. As he wrote in his Notebook "The settlement of the land question in particular involved momentous problems and responsibilities. It meant the disposal of over 56 million acres of the landed inheritance of the Victorian people for all times. .... "Unlock the lands" was the watchword of the party thus formed, which may be regarded as the first definite organisation of the Liberal Party in Victoria."[22]

Quick's views were shared by many Victorians. "The Victorian Land Tenure Reform League in its 1872 circular argued for retention of land revenue. The League argued that by retaining land revenue "with an absolute freedom from taxation, and full and unfettered scope for industry, every inhabitant of the country would enjoy a beneficial interest from a share in state lands ... A rent on state lands being light and for the manifest benefit, would meet all the requirements of a just and desirable means of raising revenue. It would be easily and cheaply collected, and would greatly reduce the expenses of government by rendering unnecessary some of the present costly and otherwise hurtful departments."[23]

Mr Berry in Victoria and Sir George Grey in New Zealand were both proponents of land taxation. An unsuccessful attempt was made in 1875 to introduce land tax in Victoria but a land tax was introduced by 1877. Mr John Ballance, New Zealand Treasurer, said on the introduction of the land tax "We believe that no form of wealth is more legitimately called upon to contribute a portion of the public revenue of the colony than the value of land minus improvements, which for brevity, I shall call the unimproved value, as no other commodity increases so rapidly in value from the increase of population and the natural progress of a country. By exempting improvements, we award a premium to industry and discourage a system of speculation which thrives only upon the labour of others."[24]

Scheftel observes that revenue requirements were prominent in the move to land taxes. "The weakness of the State finances during the 1870s and 80s is attributable to several causes. First, the indebtedness of the colonies and the over expenditure for purposes of public improvements of all kinds produced an ever increasing drain on the Treasury. Secondly, the remission of the tariff duties in some of the states caused deficit. Thirdly the loss of the land fund further increased this deficit in the colonies. Under these circumstances direct taxation had to be resorted to. It is significant, therefore, that synchronously with the movement to reduce the tariff duties which had obviated for a long time the necessity of direct taxation, the

land taxes were either proposed or enacted. ... Griffith's coalition government [in Queensland] came into power and succeeded in putting through the legislature the Valuation and Rating Bill of 1890 by which the powers of the local authorities were extended to raise revenue by rating on the unimproved value of land. Mr Griffith had always favoured the tax on unimproved value and urged it with success."[25]

It is remarkable that at least three of the Founding Fathers of Federation, Sir Samuel Griffith, Sir John Quick and Sir George Grey were so committed to land taxation.[26]

Interestingly, some graziers of New South Wales who supported free trade were willing to accept a land tax. They reasoned they were better off to accept a land tax rather than to have labour costs inflated by indirect taxes which would push up wage demands.

In 1906, under the Carruthers Government, New South Wales took the step of abolishing taxation, at local government level, of buildings or improvements. Rates were to be based on unimproved land values regardless of tenancy.

Under the British system, if a property were unoccupied there were no rates levied. This led to a spectacular example in the early 1970s of a new office block being left vacant for several years because the rate of capital appreciation more than compensated for the loss of rent and there were no holding charges by way of rates on an unoccupied office building.

The New South Wales system of rating on unimproved land value eliminated such distortions and, by not taxing improvements, gave landholders every incentive to put their land to the best use.

Land tax was taken up at the Federal level in 1910 and remained in force until 1952 when the Menzies Government handed it back to the States. The 1910 land tax was a graduated scale and was designed not only to raise revenue but to break up large absentee stakes.

One of the merits of land tax which Queensland has observed is that it is possible to have differential rates on residents or absentees. Thus, a State government can raise more money from non resident investors without prejudicing local voters. There are, of course, avoidance routes which can be used to circumvent such restrictions.

Interestingly, one of the reasons for all land in the ACT being held on leasehold was the idea that Canberra should be a tax haven. If the Commonwealth were to grant the land on leasehold, all the increase in value resulting from the establishment of a national capital would flow back to the Commonwealth and no other taxes would be required in the ACT. Because the lease rentals were not regularly adjusted the system fell into desuetude and the Gorton government in 1971 rolled the lease rentals into the rating system.

Since World War II there has been less emphasis on land taxation, but its influence may still be seen in the differential progress of different States which have followed different policies. For example, there is empirical evidence to show that local government areas which taxed

improvements fared less well over the century than those which simply taxed unimproved land.

APPENDIX D

The following speech is included because it illustrates many of the concerns which land value taxation addresses and resolves naturally. A land value tax is a market-based solution to environmental externality; it equalizes opportunity of access to natural resources and it gives governments an incentive to maximize the long term value of resources.

Economics, Economists and Policy: Presentation to the Master of Economics 30 Year Reunion Symposium

Australian National University, Canberra 21 September, 2001

Ken Henry, Secretary to the Treasury

Today, you are celebrating 30 years of the ANU's Master of Economics program. 30 years is a long time. Long enough to have a considerable impact on the fortunes of a country. And long enough, too, to take a 13 year-old from his second year of high school in country New South Wales to the job of Secretary to the Treasury.

I want to say some things to you today about some of the changes that have taken place in Australia in the last 30 years. My approach will be a little unusual: I'm going to tell you a little about some of the things that I experienced in this country 30 years ago; how those things affected me at the time, and over time; how I see things as having changed; and my perception of the role played by economics and economists in those changes.

I should warn you at the outset that my 30 year recall is far from perfect; so I'll be begging a little licence.

At the age of 13 I didn't know what economics was. And I doubt that I had heard of an economist.

But I had already had my first lesson in economics - indeed, my first lesson in economic policy. A lesson that has stayed with me these past 30 years. And, quite plausibly, a lesson that may very well explain why I am where I am today.

Let me tell you a story.

When I was nearly 5 years of age - some 38 years ago - my parents walked off the dairy farm they had been leasing on the Mid North Coast of New South Wales, and my father returned to his earlier career in the timber industry - cutting railway sleepers and, later, cutting logs for a number of local sawmills.

For all but a few years of the remainder of his working life, my father worked in the timber industry - for most of that time felling logs. Most of the timber my father cut came out of the State forests of New South Wales.

My father worked long hours, leaving for the bush at dawn and returning after sunset. But one day, about 30 years ago, he arrived home in the late afternoon. He had something he wanted to show to his three young sons. He bundled us in the car and took us down to the sawmill. There, lying on the ground - like the vanquished party in "Jack and the Beanstalk" - was the biggest log we had ever seen. When our father stood at its base it was apparent that it measured some two metres in diameter. And it was 12 metres in length - as long a log as a truck could carry. All up, about 7,000 super feet of timber.

You can imagine our amazement. We were even more amazed when our father explained that the tree from which the log came was a good deal thicker than two metres (he said 'six feet', of course) at its base - he had had to climb a fair way up the tree in order to get to a point at which he could fell it safely with his chain saw. He was, understandably, very proud of his achievement: to have taken out a log of that immense girth, single handedly, with nothing more than his chain saw.

We three kids were very proud of our dad. But we were also a little uneasy. And it wasn't long before the questions started coming:

"Dad, how old do you reckon that tree must have been?" "Oh, very old. At least a hundred years. Anywhere up to five hundred." "Wow!"

"Where did you find it?" "It came out of the Landsdowne State Forest."

"How many houses do you reckon you could build out of that log?" "Oh, it would make the framing for at least three houses."

"Wow! So how much would that log be worth?"

"I'm not sure, but certainly thousands of dollars."

When I think about it now, it seems to me that it could have been at that instant that my future career was set. The following sequence of Q&A went something like this:

"So how much do <u>you</u> get?" "Not much, only a couple of hours' wages." Now I knew that that wasn't much.

"So the sawmill gets the rest?" "Oh, not all of it; there are royalties too."

"What's that?" "Well, the State Government charges royalties on all timber taken out of State forests. Royalties are like a tax."

"Oh, right. So what would the royalties be on that log?" "A few dollars I guess, perhaps not that much."

I was young, but I wasn't stupid. There was something about this that troubled me. I could see, too, that my father and brothers were troubled.

Our sense of unease only grew as our father told us that he had cut down hundreds of trees just like the one from which this log had come, but had had to leave them lying in the bush. He explained that old hardwoods typically have hollow cores - 'pipes' he called them - and the saw mill didn't consider it economic to pay the transport costs that would be required to bring in a log with less than one foot of solid timber around the hollow core. That was one of the impressive things about the log we were looking at: it had a very small 'pipe'. The problem was that you couldn't tell how hollow a tree was until you brought it down. That didn't trouble the saw mill, because it paid royalties only on what it took out of the forest. The Forestry Department didn't get a cent for what was left behind on the forest floor. Hundreds of trees, hundreds of years old, torn down - their carcasses left to rot where they fell.

The memory of that afternoon has troubled me for all of the last 30 years.

I don't know if I managed, at the age of 13, to discover the source of the sense of unease I felt at the time. But if I did, I hope that as I looked at that enormous hardwood log I found entirely unacceptable the fact that somebody could legally appropriate, for only a few dollars, this extraordinary asset of the people of New South Wales — an asset that would take perhaps hundreds of years to replace. I hope that this smacked to me of highway robbery. I hope that I was less than impressed that the elected representatives of the people of New South Wales appeared to be demonstrating such disregard for the protection of their citizens' property. I hope I wondered about the ability of governments - and not just the venal - to redistribute wealth so arbitrarily, and to disenfranchise future generations. And I hope I vowed that one day I would do something about it.

Certainly, if not at age 13, then at some point in the last 30 years I came to hold all of those views.

Growing up on the Mid North Coast of New South Wales, I had occasion to be reminded, constantly it now seems, of the failure of economic policy. I recall my disquiet on learning that ancestors on both sides of my family were 'cedar getters'. "What's a cedar getter dad?" And though he surely didn't use these words, what I heard him say was something like: "Well that's why we don't have any cedar trees any more."

These ancestors of mine settled places with curious names like Cedar Party - curious, at least, to a kid: there was no party, and no cedar either.

I remember being concerned when I learned that every generation of Australians caught fewer and smaller fish than the preceding generation.

I remember learning that weeds were not native plants, and that rabbits that destroyed riverbanks and foxes that killed chooks were not native animals. I remember learning that soil erosion was caused by humans. I remember being horrified by the apparently wanton destruction wrought by the rutile miners who ripped through the sand dunes and the beach

where I used to surf - leaving a moonscape in their wake, a moonscape devoid of the stunning Christmas bells that used to grow there in profusion.

Even closer to home, I remember being perplexed when the Killabakh Creek that tumbled down through the rainforests of the Comboyne Mountain and then swept around the periphery of my maternal grandmother's dairy farm simply dried up.

I remember being absolutely staggered to learn that one of the conditions of my paternal grandfather's retaining possession of his 600 acre 'soldier settler' block of rainforest timber standing on the other side of the Comboyne Mountain was that he clear a certain number of acres each year ¾ and watching over the years as the trees were replaced by bracken fern and lantana, and as the soil washed into the creeks and gullies, replacing the native fish that had long since been exploited to extinction. And I remember too that as the weeds spread and farming became too difficult my grandfather turned to more facile means of making a quid - stripping the native orchids out of what was left of his rainforest property. Years later I learned that he had never had any interest in farming anyway.

And if I didn't understand the 'how' or 'why' of these things at the time that I became aware of them, I did at least develop a deep conviction that something was horribly wrong with the world.

I became aware of economic policy through observing a succession of its abject failures.

When I studied economics I learned of the importance of property rights, and the important role for governments in their establishment and protection. I learned that free markets might fail: That economists had analysed at length the possibility that economic agents engaging in mutually beneficial commercial exchange might, perhaps inadvertently, impose costs on others - including on people not yet born. That some things that everybody valued might nevertheless not be provided by the market because of the absence of 'divisibility' and 'exclusion'. I learned that governments might have a role in managing the common wealth, in the common interest. I learned about the importance of prices in guiding resource allocation. And I came to the view that peoples' behaviours had a lot to do with their pursuit of self interest, and that a lot of what I might have found objectionable about the things humans did could have had something to do with the opportunities and incentives established by governments.

When I 'phoned my father a couple of days ago to check my recollection of some of the things I have related here today, he expressed considerable remorse for the part he considers he played in the destruction of some of our hardwood forests and the spectacular collateral damage inflicted on soils and eco systems. He said that he feels sick in the gut every time he thinks about those years spent logging the Lansdowne State Forest and surrounding areas. More collateral damage.

Even 30 years ago, my father was clearly uncomfortable with our forestry management practices. As he reminded me a couple of days ago, those involved in forest management at

the time were practicing something called 'timber improvement'. This involved cutting down every tree of a slow growing variety to make way for the faster growing species. My father witnessed the destruction of thousands of red timber hardwoods, including the majestic grey gum and the extraordinary turpentine. These trees, too, were simply left on the forest floor.

30 years ago my father would argue that there was a need for this country to develop hardwood plantations - that if we didn't do so there would come a time when our stocks of hardwood timber would be insufficient to support the timber industry. I have since learned that this view was not novel - even if I may have thought so at the time. A few years ago my wife came across a copy of a classic text on Australian hardwood timbers, *The Hardwoods of Australia and their Economics*, written by one Richard T. Baker, Curator and Economic Botanists, and Lecturer on Forestry at Sydney University. The book was published in 1919 - 82 years ago - by the Department of Education of New South Wales. The introduction to this magnificent text concludes as follows:

'Generous nature has given us a good soil and a perfect tree climate over a vast extent of country, and the duty therefore devolves upon Australians to show their appreciation of these gifts by entering upon and carrying out to a successful issue a vigorous system of reafforestation.

Many woods are illustrated which are only occasionally on the market, and this has been done intentionally in order to show what a great variety of hardwoods are to-day growing in Australia, and especially to bring them under the notice of this and other State Forestry Departments, so that these remarkable timbers may figure largely in future systems of Sylviculture before the species are finally exterminated.

For these to be allowed to pass away without any attempt at their propagation would be bordering almost on criminality, for not many countries can boast of such a wonderful natural heritage as our marvellous hardwoods.'

I wonder how many of these species have been exterminated in the intervening 82 years.

It didn't take much study of economics to figure out why we had so little plantation hardwood, why there were no red cedars left on the north coast of New South Wales, why our creeks and rivers were drying up, why our soil was degenerating through erosion and salinity and why our fish stocks were dwindling. From an economic perspective, these things didn't have so much to do with an absence of 'duty' as they had to do with the understandable pursuit of self-interest, the exploitation of opportunity and the predictable response of economic agents to a set of incentives structured, at least in part, by governments.

I found it easy to accept, as a student of economics, that for the most part Australians were pretty good at pursuing their own private interests. And I found it easy to accept that Australian governments had not always been very good at protecting the common, or public,

interest. Rather, or so it seemed to me, they spent a good deal of effort directing economic advantage to particular individuals and special interest groups.

Evidence of policy failure was easy to find.

The conduct of economic policy in Australia today is not without fault, but a lot has changed in the past 30 years.

Only a few years ago, when I was leading the Tax Policy Division of the Treasury, I was lobbied by multinational oil exploration interests seeking Resource Rent Tax concessions. The sales pitch was along the following lines: 'We are weighing up a potential investment in Australia with alternative investments in the Gulf of Mexico. And your secondary taxation regime is tipping the balance in favour of the Gulf. If Australia wants our investment dollars you will have to forego secondary taxation.'

My guess is that 30 years ago, a Treasury officer would not have been able to respond to this proposition in wholly satisfactory terms. But I, at least, was able to respond that the fact of other governments being prepared to hand over, for no charge, the assets of their citizens to a consortium of private multinationals was not much of an argument for the Australian government's doing the same thing. We had a resource rent tax because we were of the view that the citizens of Australia should be compensated for giving up that part of their material wealth.[27]

We couldn't say that we have the incentives quite right yet - I worry still about the royalties being charged on State forest timbers and the Molonglo River on which I now live still runs brown when ever it rains - but at least today, natural resource management is a very high profile policy project, involving all Australian governments. That is just as well, of course: Environmental issues are likely to be among the most challenging issues confronting policy makers - especially economic policy makers - over the next 30 years.

A reasonable description of the last 30 years, from a public policy perspective, is of a continual debate about the role of government. This debate should never end. Right now, it is probably fair to say that the more influential view is that governments should not, in the main, do what private interest should be able to do, but instead should concern themselves with undertaking the tasks that cannot be left to private interests and creating the macroeconomic, regulatory and institutional framework - the set of opportunities and incentives - to best support dynamic, but sustainable, private activity.

Many people have described this as the triumph of economics. And there is something in that.

The second half of the last 30 years has seen the introduction of a comprehensive economic reform program. The, largely bipartisan, objective has been to build an efficient, flexible, competitive economy, better able to adapt to shocks.

The reform program has been ambitious, establishing or matching world's best practice in many areas, including in the regulation of financial markets, corporate governance, competition policy, fiscal and monetary policy arrangements, and in the transparency and accountability of government. Much has been achieved also in the area of labour market reform, in tax policy and attention has turned more recently to addressing issues at the interface of the tax-transfer system.

Much has been said and written about the details of Australia's economic reform program, and most of that will be familiar to this audience. So I won't spend time on that subject today. Instead, I want to say just a few things about the plausible outcomes of the reforms, to set the scene for some final remarks on the role of the economics profession.

In addressing another ANU conference a couple of weeks ago, I noted that to the September quarter last year Australia had recorded nine years of positive growth - at an average annual rate of a little over 4% - indeed, a period that included 13 consecutive quarters of through-the-year growth above 4%. This is the longest run of such growth recorded in the history of the quarterly National Accounts (ie, since September 1959), and is all the more remarkable for its having spanned the period of the Asian financial crisis. Moreover, even allowing for the recession of the early 1990s, that most recent decade proved to be much less volatile in GDP terms than any of its three immediate predecessors, and was the only one of the last four decades in which Australia's average annual rate of growth of GDP per capita exceeded the OECD average.

Relative to earlier decades, the 1990s proved to be a period of high output growth, high productivity growth, high employment growth and high real wages growth.

The sectors that experienced the strongest productivity growth were, generally, those that had been subject to the most economic reform and those most exposed to competition.

As I noted earlier, it is unlikely that we have, yet, a policy framework that deals effectively with all of the negative externalities that might be associated with economic activity. A rigorous accounting of welfare improvement would discount GDP growth by some amount to reflect the otherwise unmeasured costs affecting present and future Australian citizens.

But I have a sense, too, that the extent of such discounting would, overall, be somewhat smaller in the 1990s than in earlier decades.

On almost any accounting, then, I would suggest that Australia's economic performance in the 1990s was much superior to its performance of the earlier two decades. And it is plausible that that lift in performance was due, overwhelmingly, to the sustained economic reform program.

I would, however, caution against declaring victory in the battle of ideas in economic policy. Economic reform is not irreversible. For those who think it important that the gains of reform be preserved there are some things to worry about. Reform has its detractors. As I

noted in an address to the Australian Business Economists in Sydney on 29 May of this year, liberal market economics is under attack, and not just in the streets.

What are the detractors saying?

First, it is asserted that while it may be true that aggregate GDP has grown strongly, its distribution has become more unequal - some have been left behind.

Second, it is asserted that while material living standards may have improved, broader measures of well-being would reveal a decline in welfare - at least for some. This is a complex argument. Sometimes it is presented as a general criticism of economics - that economists are focussed narrowly on the material, to the exclusion of the important. At other times the argument is that while policy change may have lifted incomes, it has had other affects that have more than off-set the impact of higher incomes on well-being.

And third, it is asserted that even if reform produces aggregate (efficiency) gains of GDP, these will usually be swamped by unmeasured transitional and adjustment costs or net losses of community welfare due to there being asymmetries in the valuation of gains and losses: it is asserted, that is, that the optimal reform is to do nothing.

I doubt the distributional assertion can be substantiated. Empirical studies have been interesting, and many of high quality, but those claiming to support the assertion have been unconvincing. Moreover, the policy implication of the assertion is far from clear. Australian governments have good reason to believe that their market liberalising reforms have lifted aggregate incomes. They would find it difficult - some might say courageous - to accept a proposition that they should reverse their market liberalising reforms, thereby intentionally - if only in their minds - reducing the incomes of most, and perhaps even of all, in pursuit of a more equal distribution of income.

This is not to dismiss the importance of distributional issues. Perceptions of the equity of a policy change affect its public acceptability. If only for that reason, major reform proposals should be accompanied by an assessment of their distributional implications. But I would go even further and concede that in some cases the distributional consequences of a policy change should have the status of 'objective' rather than 'constraint'. I would not, however, accept the proposition that we should dismiss any policy proposal that might plausibly widen the income distribution.

I don't accept, either, the 'materialist' label's being applied to economists.

When I studied consumer theory and neoclassical welfare economics in my undergraduate days, the basic tool of analysis was the neoclassical utility function. Point one: utility is not a material concept. Point two: I don't recall anything in my studies that said that the set of arguments in a person's utility function should be confined to the obvious material variables like that person's present and future consumption of various products, including personal leisure time, and that person's wealth (including wealth accumulated for the benefit of children). Indeed, I recall that my lecturers told me, for example, that one person's utility

might well be affected - positively or negatively - by their perception of the level of utility being enjoyed by another. I remember too accepting, if a little reluctantly at first, that altruistic behaviour was not inconsistent with utility maximisation.

At some stage, I learned that uncertainty might be an important argument in a utility function; and, if rather more recently, complexity also. And I learned too - including from reading some of the eighteenth century writings of Adam Smith - that people might value other essentially abstract things like liberty, opportunity and freedom.

As I have learned these things I have absorbed them into my understanding of economics. Perhaps I have been in error to do so. But knowing that I have, you will understand that I have always found it exceedingly odd to be told that economics is deficient for its having ignored these non-material things. In any event, here at least is one tried and convicted economist who does not accept that he ignores any of this stuff.

Moreover, there would be few - if any - among the 400 or so policy advisers in the Treasury who would accept that they are focussed narrowly on the material. All of them would accept that uncertainty and complexity are important determinants of welfare. And most of them would, as I claimed of most liberal market economists in my speech earlier in the year to the Australian Business Economists, have little difficulty with Amartya Sen's emphasis on the substantive freedoms of political and civil liberty, social inclusion, literacy and economic security, as 'constituent components' of development and welfare.

Finally, let me say something about the proposition that the optimal reform is to do nothing. One such argument is that the present state of the world is capitalised in asset prices. For example, it is, so the argument goes, illegitimate to regard those who hold assets taxed preferentially as in any sense 'benefiting' from a tax concession. The removal of a tax concession therefore produces an arbitrary set of windfall gains and losses. Even if the winners are made to compensate the losers, the heightened uncertainty associated with the policy change will usually swamp the anticipated efficiency gain. Another such argument, based on some findings in behavioural economics, is that people place a higher (negative) value on the loss of a dollar than they do on the gain of a dollar. Thus, even if all people are identical, a policy change that simply transferred wealth from one person to another must reduce community welfare. Since most reforms do involve wealth transfers the proposition is that in order for community welfare to be improved, the efficiency gain would have to be much larger than is commonly found in empirical studies.

I have already indicated that there is often a strong case for policy advisers' considering the distributional implications of their proposals. But it would be a tragedy if this were to prevent governments from undertaking economic reform. I dread to think what might have become of the Australia of 30 years ago had these arguments been found persuasive.

Let us ensure, by all means, that our policy makers understand all of the likely implications of policy proposals before them - including the distributional implications. But let us ensure also that the right policy proposals are indeed in front of them. And, even more importantly,

let us ensure that our policy makers understand all of the implications of policy inaction. If we are going to do that, mainstream economic policy advisers are going to have to get a lot more knowledgeable about a lot of things.

When I asked my father the other day why the Killabakh creek dried up when I was a school kid, I suggested that unpriced access to irrigation water was surely the culprit. He thought that that might have had something to do with it. "But don't forget" he added, "we fell timber all over the Comboyne mountain, pushing in dozer and snigger tracks and roads for the log trucks. That's where the water would have gone. You can see it from the erosion left behind."

My question for policy advisers, then, is this: How much erosion are we going to leave behind?

The Taxable Capacity of Australian Land and Resources

Terry Dwyer*

Previous work on measuring Australia's land wealth is reviewed and a time series of Australian land values constructed for most of the twentieth century. Estimates are made of Australian land income and compared to Australian tax revenues. It is demonstrated that Australia could finance tax cuts and international tax competition for labour and capital tax bases through higher fiscal contributions from land revenues. (JEL H27, Q00, F02: taxation, land values, fiscal competition)

* Terry Dwyer is Visiting Fellow, National Centre for Development Studies, Asia Pacific School of Economics and Management, Australian National University. While the views expressed are those of the author, I wish to thank Lucy Ellis of the Reserve Bank, Carl Obst of the Australian Bureau of Statistics, Dermot Doherty, Peter Stubbs and Peter Urban of the Commonwealth Grants Commission, Debbie Brown of ABARE and Professor Ron Duncan as well as Tony O' Brien and Bryan Kavanagh of the Land Values Research Group for helpful assistance and comments. The research was funded by a grant from the LVRG. This article was accepted for publication 6 January 2003.

1 Introduction

As the liberalization of financial markets and removal of tariff and non-tariff barriers to free trade in goods and services proceeds, greater interest is emerging in optimal tax policies for open economies. On one side are those who argue that globalisation requires some form of international tax organization to protect capital income tax bases from erosion and who sometimes refer to tax competition as part of "the dark side of globalisation."[1] On the other side are those (including the present author) who regard tax competition as a healthy force driving reluctant bureaucracies towards more sensible low-tax policies for mobile factors of production.[2] The debate is becoming more fierce as globalisation proceeds and issues of privacy, national sovereignty and individual liberty will soon be debated as fiercely as at the time of the American Revolution.

A natural question thus arises: if one does not favour a global tax police to enforce residence-based taxes on capital income and if one does not favour higher taxes on labour income, where is the money to fund governments to come from? Does globalisation necessarily mean the end of redistributive fiscal policies to help the socially disadvantaged? Those who remember their Adam Smith will recall that the national income arises from land, labour and capital and, as Adam Smith recognized, taxes must come from one or more of these three factors of production. They will further remember that Adam Smith praised taxes on ground rents and that, if he was not a Physiocrat, his tax policy recommendations were remarkably close to those of the Physiocrats. Given the pressure income tax systems are under from

---

1. For example, see the following press comment by Will Davis, Public Affairs Centre, OECD, Washington DC published at www.motherjones.com. "The Organisation for Economic Co-operation and Development is concerned about the growing presence of offshore tax havens ("Trillion-Dollar Hideaway," November/December). Tax havens allow business and individuals to escape their tax obligations, which deprive countries, developed and developing alike, of revenues necessary to sustain economic growth. They are also often safe havens for proceeds of political corruption, illicit arms dealing, and the global drug trade, facilitating what Treasury Secretary Lawrence Summers calls the dark side of globalization. To eliminate such harmful tax practices, our member governments are working with 35 jurisdictions identified as tax havens to reform their financial systems by next summer."
2. See, for example, OECD (1998) and Dwyer (2000) and (2002).

globalisation and excessive revenue demands, it does not seem an unduly antiquarian pursuit to ask how much revenue could a developed country such as Australia raise from its land and natural resources. Is there an alternative to ever harsher and rising taxes on capital and labour incomes?

Section II reviews conceptual issues in measuring land income in relation to taxable capacity. Section III reviews previous attempts to measure the value of Australian land and explores practical difficulties involved in measuring land income. Section IV presents the author's estimates of land income as a percentage of Australian tax revenues for most of the twentieth century. Section V concludes that land income is a sufficiently large tax base as to enable Australia to reduce very substantially income tax rates on labour and capital. Australia can cut taxes on mobile factors of production to compete successfully for global investment without losing its ability to fund a viable public sector.

2 Conceptual issues in measuring land income in relation to taxable capacity

Economists have almost universally accepted the proposition that a lump sum tax (in the sense that no action of the taxed person can alter his liability)[3] is ideal and most have accepted the proposition that a tax on land values is such a theoretically ideal tax. For example, Professor Martin Feldstein, former Chairman of the US Council of Economic Advisers, acknowledges a tax on unimproved land values "involves no distortion" and is clearly efficient (Feldstein 1976, p 96). Yet there has been little advocacy in economists' discussion of tax reform for a move towards greater reliance on such taxes. One of the apparent reasons for such a lack of advocacy is the view that land revenues are inadequate to finance a modern State.

Yet there are several reasons why the revenue potential of land-value taxation could be under-estimated.[4] It becomes apparent that under-

3. Contrary to some impressions, a lump sum tax does not mean a fixed dollar amount, such as head tax. Even a head tax can induce behavioural change, such as emigration. What the phrase really means is a tax which is fixed regardless of any action of the taxpayer. Thus a land value tax may change with valuations but these are market phenomena outside the control of the taxpayer.
4. The arguments are based on Dwyer (1980, p 329-330). The observations seem to remain essentially valid twenty-two years later.

estimation of land values has plagued attempts to measure Australia's private wealth and that aggregate figures based on direct figures from official valuations are conservative.

First, national accounts do not pretend to measure land income as a share of national income, in the sense of the classical division of national income into rent, wages and profits. Notably, the corporate veil is not pierced. A great deal of land income would appear to be included in corporate profits.[5]

Second, the amount of land income to be imputed to residential dwellings is not easily available for most countries. Australia is unusually fortunate in having official figures which give some idea of residential land values.

Third, historical cost accounting principles give a downward bias to the value of land and other natural resources as shown in the accounts of business enterprises. Under historic cost accounting, assets are recorded at their purchase price not their current market value. In the case of long-lived assets such as land and buildings, the divergences between historic cost and market value can become considerable, especially since the land usually appreciates while buildings depreciate. It is true that the values of land and other natural resources may now be less often under-valued in company accounts given threats of takeovers and asset-stripping, but the point retains force. A company may revalue its assets not in the main accounts but in notes to the accounts or implicitly attribute land value to another asset category, such as goodwill or omit it altogether.[6]

---

5. The mixing of profits on physical capital investment with resource rents is common in company accounts for the obvious reason that investors do not care where their returns come from. For example in its 2000 Annual Report, the Australian telephone carrier, Telstra recorded a 23.2% return on assets but Telstra did not capitalize the value of its telecommunications licences, a resource asset and put no value on its land rights such as easements or upon its spectrum licences. Hence the return on average assets (Telstra, 2000, p 264) shown as 23.2% may largely reflect an undervaluation of land (spectrum or easement) assets in the balance sheet. This is not to say Telstra should charge users for easements over their land but what may be reasonable for commercial accounting may not be designed to list hidden, unpaid-for, land assets. Telstra's high rate of return on assets would thus appear to incorporate a large resource rent component.

Fourth, in the United States, the income tax depreciation allowance for buildings provides a strong motive to understate land value and overstate building value in property assessments.[7]

Fifth, sub-soil assets and spectrum rights etc have often been omitted. The values of mineral, forest, fishery, airwave and water rights often do not appear at all in either private or national accounts as such. Australia is again fortunate in that attempts to value some of these assets have been undertaken by the Australian Bureau of Statistics. There is increasing awareness of the value of natural resources (e.g. mineral, forest, fishery, airwave and water rights) included in the economic concept of land. In Australia, water rights are in the process of becoming tradeable assets with explicit market values (though with some offsetting decline in the value of the land to which the rights formerly attached). Spectrum and fishery licence fees are now also recognized as commercially valuable assets. Oil resources have long been recognized as valuable, so valuable that some countries such as Brunei and Saudi Arabia do not need to resort to taxes found elsewhere.[8] The example of such countries which can fund public expenditure from one kind of land resource should make economists pause before dismissing the idea that land revenues can replace much or most other taxation as a source of public revenue.

---

6. For example, the phone carrier, Telstra Corporation (2000, pp 176-179), includes land and site improvements in its balance sheets at $185 million (p 176) using cost and directors' valuations while noting (at page 177) a higher (largely) market valuation of $682 million. Companies do not need to include the market values of land assets in the formal accounts to repel takeovers - a note to the accounts is sufficient.
7. This argument is due to Professor Mason Gaffney. The same tendency does not prevail in Australia as the Federal income tax building depreciation allowance is irrelevant to State and local government valuations of unimproved land values.
8. Brunei has no personal income tax, sales tax, payroll tax and no capital gains tax. Only companies are subject to income tax, http://www.hawaii.gov/dbedt/ert/cp/brunei.html. Income taxes of Saudi and expatriate employees working in the Kingdom were abolished in 1975. While Saudi law requires that all foreign and Saudi companies pay a tax on profits earned in the country, companies with joint-ventures having at least 25% Saudi ownership are exempt from income tax for a period of ten years. In May 1993, the Minister of Finance and National Economy stated that all foreign companies which are actively involved in the capital expansion of various industrial projects in Saudi Arabia will be exempted from paying taxes on profits made in the Kingdom, http://www.arab.net/saudi/business/sa_taxes.html.

Sixth, land values may be depressed by capital gains taxation which operates as a fine on the market reallocating land to its best use. To some extent this effect may be mitigated by tax planning through like-kind exchanges or roll-overs, but this is not always possible.[9] Transfer taxes such as stamp duties may have a similar effect in depressing land values. Australia's adoption of a capital gains tax in 1985 and increased State stamp duties on conveyances[10] have been measures which would have depressed land productivity and hence, one assumes, market values in the aggregate relative to what they might otherwise be.[11]

Seventh, land values can be depressed by excessive zoning or other restrictions on use or by rent control legislation.[12]

Eighth, taxes on capital and labour also reduce the demand for land; consequently as these taxes were reduced and land value taxes increased, one would expect some increase in the base of the land-value tax. The sixth and eighth points raise questions of the dynamic effects of replacing transaction taxes on land or income taxes on labour and capital with a land value tax. This would require modelling which has not been attempted by any writer known to this author and is not pursued in this paper, though its practical significance may be enormous. The prime example of the possibilities is Hong Kong, which has raised a significant proportion of government revenue from land lease premiums, rentals and rates. Land revenue has allowed Hong Kong to pursue a policy of low tax rates on labour and capital. Corporate profits are taxable at 16% after deduction of interest which is not taxed. Wages and salaries are taxed at a top rate of 15% while capital gains and foreign-source income are not taxed at all.[13] In effect, the risk free

---

9. US tax law has often allowed deferral of recognition of capital gains in case of exchanges of like kinds of property. No such general rollover concession exists in Australian tax law.
10. The New South Wales Treasury's comparison of interstate taxes and charges shows stamp duty on conveyances as now reaching a top rate of 5.5%, http://www.treasury.nsw.gov.au/pubs/trp00_3/middle.pdf
11. A view apparently shared by the Harvey Review of State Business Taxes (2001, p 39) which noted "Stamp duty on conveyancing, as a turnover tax, … [and a] tax barrier to transfer and change of use means some land is retained in less productive uses"
12. Rent control legislation was introduced in New South Wales in World War II and phased out gradually afterwards.
13. See Appendix A

return to capital is largely tax-exempt.[14] The resulting demand from international business for operational space in Hong Kong has meant that, far from land values being depressed by being used as a public revenue source, they have grown strongly historically and could be tapped further to provide even lower tax rates on business and labour income.[15]

Ninth, appreciation of land values is land income insofar as it represents accruals of income, as future higher rents come closer to the present. To apply a low observed yield rate to land values in attempting to measure land income[16] is wrong if the land is appreciating with increasing demand for its use.

To see why this is so, it is important to realize that, particularly with site rents, land income may be greater than current rental payments. Because rents are generally expected to rise, land values generally show a rising pattern. In this common situation, the current rental yield observed on the market value of land does not reflect the full amount of land income being earned in a period (which it would if rental values were static). Land income is the current rental for a year plus the accruing gain due to future higher rents coming one year closer to receipt. Land income may therefore be measured by using the current yield rate *plus* the annual increment in land value, see Gaffney (1970, pp 182-186) [17].

The key point is that land income is not just what is received by way of current cash rents. If today's market rental is only 4% of land value

---

14. The risk free return to capital is usually taken to be the rate of interest on a government bond which is taken to have virtually zero risk of default. The rate of interest on bank deposits is similar, assuming banks are reasonably supervised. Because Hong Kong companies can deduct interest payments, the profits tax tends towards a tax on entrepreneurial profits only for a highly geared company, rather than representing a tax on capital income as such.
15. Some may say that Hong Kong and Singapore are special cases, being city states with scarce and valuable land. But all cities have valuable land reflecting agglomeration economies and urban site values count for a large part of land values in Australia. One could as easily argue that countries with resource rents on top of urban site rents should have an even greater land revenue per capita than small city states.
16. For convenience I use the term "land income" to comprehend economic rent in the classical sense, that is, the income accruing to natural resources. This includes both site rents of land and resource rents, such as mineral resources.
17. See Appendix A

when market interest rates are at 10%, that situation only persists because future land rents are expected to be higher: the land appreciation of 6% needed to justify such a case really represents the maturing of future rents, just as a promissory note appreciates in value as its date for payment approaches.[18]

"Land income" as defined above is not the same as rents in the national accounts statistics which exclude revaluations. The terms "national income", "national wealth" and "private wealth" are used in their normal statistical senses. Wealth concepts are stock concepts unlike GDP, GNP or national income which are flow concepts.

There is not a simple relationship between flow income concepts and stock concepts of wealth (for example, labour earns income but is not valued as an asset). Although taxes are often expressed as a proportion of GDP, this is an arbitrary convention and not always very relevant: for example, GDP ignores depreciation and takes no account of the share of GDP accruing to non-residents. A low tax-to-GDP ratio could be quite compatible with a heavy tax burden on resident investors. It seems more meaningful in a comparison of potential tax bases to compare land income as a tax base with the proceeds being raised from other taxes, since tax reform often is a case of replacing one tax with another.

3 Previous attempts to measure the value of Australian land

Of all countries, Australia seems uniquely suited by history to best test the issue of whether land furnishes a potentially large or small tax base, relative to other taxes. Australia has a long tradition of local government finance through taxation of unimproved land values and its statistics on the subject are among the world's best. Two of its Founding Fathers, Sir John Quick and Sir Samuel Griffith, were passionate advocates of land

18. If a bank buys a $100 bill of exchange for $95 and holds it for 9 months to maturity on 2 July, it will include the accrued discount of $5 as income for the financial year in which the discount was earned, not as income earned in the later financial year of receipt. In effect, by including accrual gains on land holding as land income, one is merely measuring income by levelling out income streams. Just as it is wrong to count as wholly "income" current cash flow from a depreciating asset such as a mine, it is wrong to ignore future rising cash flows in working out what is the return to landholding.

rents as public revenue and its capital city, Canberra, was founded on leasehold tenure so that it would be self-funding through land rent revenues. The question of the taxable capacity of Australian land (including all natural resources) is one of importance not only for Australia but may serve as a guide to other countries with less information on their potential land revenues.

Economists, such as Samuelson, following the work of Raymond Goldsmith in the United States, have tended to assume that land rents are only 3-5% of national income and therefore the revenue potential of land taxation is not great compared to income taxes.[19] That view has been challenged and one unofficial United States estimated that land rent was near 20% of national income.[20]

For Australia, direct comparison of land income with tax revenue is possible. One estimate suggests that "*Australian site values alone were about $67,359 million in 1977. Given that land values in Australia were rising at 23% per annum and allowing for inflation of 15% at that time, also accepting a net 3% cash rental on valuation (after an assumed 2% tax rate), we obtain a rate of return from landownership of 11%. This gives a land income of $7,409 million per annum, which is not insignificant when compared with personal income tax of $11,054 million and company tax of $2,824 million for fiscal year 1976-77.*" [21] This simple calculation was supported by a further calculation for New South Wales which showed a site value per capita of $5,371.68, giving an annual land income of $590.88 per capita. For Australia as a whole, all Federal taxes (excluding Customs) for 1976-77 amounted to $1,134.62 per capita.[22]

Scott (1986) provides a full review of earlier attempts to measure the value of Australian land and provides his own estimates. No attempt is made here to duplicate his work in reviewing earlier attempts but he makes several significant observations.

First, he takes it as almost axiomatic that the value of land as a percentage of national wealth will tend to decline as the economy develops away from land-using primary industries. He argues (Scott, 1986, p 38): "A declining share for the value of land in the national

---

19. See Dwyer (1980, pp 329, 445)
20. Dwyer (1980, p 331), citing Steven Cord.
21. Dwyer (1980, p 321)
22. Dwyer (1980, p 332). Note that Sydney's site values accounted for $18,533 million out of the whole State's site values of $25,693 million, suggesting Hong Kong and Singapore are not unique in exhibiting an urban concentration of land values.

wealth is to be expected from a growth of other assets." Elsewhere he explains (Scott,1986, p 3): *"The importance of export industries in the generation of income and the contribution which land – on which export industries were then based – had therefore been able to make to the nation's prosperity, had given the land a high profile in the composition of the nation's wealth in the nineteenth century. The growing urbanisation of the population, the growing importance of the domestic market and at the development of less land-intensive industries to service it throughout the twentieth century, began a trend which reversed the position. The share of the value of land in private hands – and even of land and improvements – in total private wealth fell over the first half of the century. The trend in the second half of this century is, unfortunately, less clear.*

"From being something over a third of private wealth at the beginning of the century, land had fallen to something just over a fifth (or, on another estimate, between a fifth and one tenth) by the mid-point of the century. Land and improvements taken together, which had comprised over two-thirds of private wealth when the century began, had fallen to perhaps about one-half by the century's mid-point.

"A falling ratio of land to wealth is consistent with the experience of the few other countries for which figures are available over time…

"The Australian ratio (as generally quoted and despite some conceptual and statistical differences in the measurement of private wealth) is high, however, by comparison with the ratios for nearly all countries for which figures are available at comparable times – in the decade of the fifties of this century.… In round terms, the Australian ratio might be said to be about one in five; for nearly all the other countries, the ratio is less than this. On the other hand, the Australian ratio of land and improvements to private wealth was lower than that for most of these other countries." He also notes (Scott, 1986, p 41): "Between 1903 and 1947 and between 1947 and 1956, land, in these [researchers'] estimates (adjusted to improve comparability, at least conceptually), constituted a falling proportion of the total private wealth of Australia. ...".

The argument that the value of land is a falling share of national wealth is not necessarily persuasive.[23] Since land, whether rural or urban, is the fixed resource and its value is accordingly the beneficiary of most productivity gains through capitalization of rising scarcity

23. See Appendix B

rents.[24] Even if it were true that the value of land is a falling share of national wealth, it does not necessarily follow that land is a tax revenue source of declining potential.

First, the relative decline of primary industries has been matched by increased urbanisation which has led to increased site values for urban land. Indeed, Scott himself (1986, p 22) notes that figures for the value of land in private hands derived from the available published figures show that "the national total for 1981/82 was 14 times that for 1960/61. This is more than three times the rise in the Consumer Price Index."

Second, it is not clear that a declining ratio of the value of land to total private wealth is necessarily meaningful in looking at the taxable capacity of land in relation to existing income and company taxes. The growth of private wealth may involve a degree of financial intermediation and double counting. A policy of government deficit budgeting will increase the amount of private wealth in the form of government bonds but this does not represent increased national wealth. Nor is it easy to eliminate intra-sectoral claims. Just as it is sometimes difficult for accountants to decide whether to consolidate one corporate entity's accounts with another, so it is difficult, if not impossible, to "consolidate out" all transactions within the private sector. For example, a businessman who operates through two companies and three trusts, may appear to an outside observer to be five unrelated entities each with their own equity.

Third, the concept of private wealth in Australian hands does not necessarily coincide with any measurement of Australia's taxable capacity since there are Australian assets owned by overseas interests. Given that Australia is a persistent capital importer, large segments of Australian industry and natural resources are owned by overseas investors.[25] While income tax treaties may impose some limits on Australia's ability to tax revenues[26] from such overseas-owned Australian-based assets (depending on factors such as thin capitalisation), there is no such inhibition on Australia's ability to collect revenue from land or resource rent taxation. The success of the crude oil levy, later

24. Thus the value of urban land in Chicago, New York and other cities rose with the invention of skyscrapers and elevators and hitherto unused resources such as the spectrum for 3G mobile phone technology acquire value as man discovers how to use them.

converted to a resource rent tax, is an indicator of how overseas multinationals may be more exposed as revenue contributors through land taxes than through income taxes.[27]

Perhaps too much attention has been focussed on land as a component of private wealth. If the question of interest is the capacity of land taxes to replace other taxes, what counts is land income relative to tax collections. Rather than attempting to draw any conclusions from land values measured as a proportion of national wealth, if one wishes to inquire into the taxable capacity of Australian land and resources it seems more fruitful to try the direct approach and ask "What is land income and how does it compare to tax revenue?" This is especially so in Australia, where there is a long tradition of land valuation and taxation.[28] But the direct approach to measuring land income has some problems.

---

25. Overseas shareholders feature strongly in the share registers of dual listed companies such as BHP-Billiton and Rio Tinto as well as holding shares in other companies. It is estimated by the Investment and Financial Services Association that foreign investors account for 37% of the Australian share market, see *Australian Financial Review*, 6 November 2002 p 63. Overseas-owned Australian land is clearly a large part of business land values, especially if the resources sector is included and explains why States such as Queensland historically levied higher land taxes on absentee owners.
26. Although Australia's double tax agreements historically gave some greater emphasis to preserving the taxing rights of the source country, they still follow usual OECD patterns such as limiting source country withholding taxes on dividends, interest and royalties (eg Articles 8,9,10 of UK Agreement) and excluding business profits not associated with a permanent establishment (eg Article 5 of UK Agreement).
27. For example in 2000-01, petroleum resource rent tax was estimated at $1,280 million and crude oil excise estimated at $259 million. By comparison, only $225 million was collected in dividend withholding taxes, see Commonwealth Treasury *Budget Statements 2000-2001*, Statement No 5, pp 5.6, 5.10, 5.13.
28. As Scott (1986, p 4) notes: "Unlike the aggregates of other assets which would appear in a national balance sheet, the value of land in Australia is the subject of extensive official attention. It is a basis of taxation; and the attention it attracts has its origin in the importance of property taxes in the financing of local government. The Commonwealth also levied a land tax for some forty years, until 1951-52 when it relinquished the tax and left the field open to the States. They were slow to enter the gap but did. However, the States remain today seemingly reluctant to make very much use of land taxation over and above the requirements of local government."

First, land valuations may tend to be conservative due to lags in valuation and the natural desire of administrators to avoid appeals to Courts over valuation disputes.[29]

Second, valuation techniques may attribute too much value to exhausted or recouped invisible improvements or to visible or invisible but useless, outmoded or unwanted "improvements."[30]

Third, land values for rating purposes may exclude sub-soil mineral, gas or oil deposits as well as invisible land assets such as the electromagnetic spectrum licensed to radio and television stations and mobile phone carriers.[31] In addition, assets such as national forests which are licensed for logging may not appear as assets. As Scott (1986, p 44) notes: "In addition, the [wealth] estimates published by Garland and Goldsmith (1959)... exclude sub-soil assets, e.g. mineral deposits."

Nonetheless, the direct approach of comparing taxes with land values is both feasible and enlightening. Tables 1 to 3 compare general government sector receipts and Commonwealth taxation receipts to land values for the decade ending in 1977/78. They indicate a very large potential land tax base.

Table 1 provides a first overall glance. Table 1 compares total Australian government revenue from taxes, fees and fines with land values as computed by Scott for the years 1967-68 to 1977-78. It is interesting that, even with missing land values for subsoil assets or

---

29. In relation to valuation conservatism and lags, Scott (1986, pp 9-10) notes: "It would, however, impose an impossible burden on any administrative structure to value all properties in an administrative area simultaneously. Valuations are therefore made over a period for application as at a particular date. Moreover, the sales and purchases of properties on which valuations are based occur independently of and, naturally, without regard for the administrative requirements of rating authorities so that valuations for official purposes are made at varying periods after sales have taken place. Although allowance is made for such time-loss, at least to some extent, a general element of conservatism is introduced into official property valuations in these two ways. This conservatism is reinforced, moreover, by one of the very elements contributing to uniformity – the appeal system, available to ratepayers, which necessarily relies for evidence of value on past events." The net result as Scott (1986, p 11) concludes is that: "It is clear that, in the outcome, valuations must have lagged behind values."
30. See Appendix C
31. Though formally owned by the Crown and held under licence, mineral or other rights may, like Crown leases, often have considerable private market value because the licence fees do not extract all economic rent.

spectrum rights and with conservative valuations, the ratio of total revenue to land values suggests considerable revenue potential, with land income (defined as including revaluations gains) almost equalling total taxes in 1972/73 and 1975/76 as shown by the figures in the last column of 107.28% and 109.5% for taxes as a percentage of land income. The variability of revaluations affects year to year ratios but, even so, the rate of growth of land values not only matches the growth of total taxation revenue but appears to be able to outstrip it at times, as when the ratio of taxes to land income drops from 197.97% in 1973/74 to 109.5% in 1975/76.[32]

Table 2 shifts the focus from *all* taxes to *income tax*. Table 2 compares Commonwealth government revenue from personal income tax and company income tax with land values as computed by Scott for the years 1967-68 to 1977-78. The result is startling: land income easily exceeds company tax (which never exceeds 75.68% of land income and falls as low as 12.59%). For some years, land income even exceeds the sum of both company and personal income tax, as in 1971/72 (45.94% plus 17.52%), 1972/73 (40.5% plus 15.07%), 1974/75 (69.86% plus 20.9%) and 1975/76 (47.1% plus 12.59%). Given the likely investment yield on any particular plot of land (which one might expect to vary between 5 and 20%, depending on whether increased rents or changes of use were in prospect), the figures suggest higher taxation of land values could entirely replace company taxes or replace most of the personal income tax. Far from being a small potential revenue source, land values look a remarkably buoyant potential source of revenue.

However, Tables 1 and 2 use land value figures which were adjusted by Scott to add back existing capitalized land taxes.[33] While I have used

---

32. For 1975/76, land revaluation of $15,904 million plus assumed current rents at 5% of $3,657 million comes close to total taxes of $21,240 million.

33. If we are seeking to measure the total value of land, as Scott was, we must make allowance for the fact that taxes on land are capitalized, reducing the private market value of the land (though not its underlying economic value). A land tax puts the government in the position of a co-owner or, from the historical perspective, restores to the Crown some of its rents as ultimate owner of the land of the realm. Scott (1986, p 25) therefore comments that his "figures were adjusted for the capitalised value of property taxes collected, taken as local government rates and land taxes levied by State Governments." He observes that capitalization of rates on land would not be necessary if the benefits of local government services affected land values positively to the same extent as rates and did so equally between States but notes (correctly) that neither equality can be relied upon.

Scott's *adjusted* figures (adjusted for capitalized land taxes) in Tables 1 and 2, if we are seeking to measure the *additional* revenue-raising capacity of land taxes to replace *other* taxes, we do not need to make such an adjustment. We may simply look at the remaining private value of land and compare it to the annual company or personal income tax collected to get a feel for whether there sufficient annual taxable capacity in land values.

Table 3 therefore replicates Table 2 over a slightly longer period but ignores Scott's adjustment for capitalization of land taxes.[34] As capitalization of land taxes involves more assumptions, there seems merit in using the rawer, "harder" figures for private land values. The conclusions from Table 3 are still much the same as from Table 2. For example, land income exceeds the sum of personal and company income taxes in 1971-72 (55.33% plus 21.1%), 1972-73 (44.52% plus 16.57%), 1973-74 (69.1% plus 24.03%) and 1975-76 (55.6% plus 14.86%). Given the buoyant rate of appreciation of land values shown over the years, it still seems safe to say that a tax on land values could easily finance the abolition of company tax. It also seems likely that a tax on land values (at a higher rate) could alternatively finance the abolition of much of personal income tax. Company tax is always much less than land income and personal income tax is never more than 129% of land income.

We start to see that land income (treating increments of value as accruals of rent)[35] is amply sufficient to finance sharp reductions in *marginal* personal income tax rates or company tax rates. Since most revenue from personal income tax comes from the lower marginal tax brackets and a cut in the company tax rate is offset to some extent by reduced value of depreciation deductions and franking credits, the

---

34. Table 3 here uses his Table 7a instead of his Table 9.
35. As noted above, a vital question in comparing tax revenues to land income is how should one measure land income? Where land values are stable, land income is the annual rental for the land. But where land is appreciating, it means that future rentals are expected to be higher. How does one annualize a rising rental to a level rental stream in order to ascertain the land income which could be available without loss of value? In the absence of reliable historical data on this point, adopting a conservative 5% fixed rental yield and adding the annual value increment, as representing the accrual of future rentals, may be taken as approximating the full annual rent (per Gaffney 1970, pp 182 - 186). This has been done in Tables 1 to 3.

figures thus far suggest even a moderate tax on land values could significantly improve the tax competitiveness of the Australian economy.

The data thus far points to three basic conclusions:

1. Land values are sufficiently high that any reasonable estimate of returns to landholding would show a large ability of land value taxation to replace personal income or company taxes.
2. Land values (even if under-estimated) show a sufficiently strong growth pattern to suggest that land taxes would be reasonably buoyant revenue sources.
3. Land values have been understated due to conservative official valuations and omission of sub-soil, fishery, and spectrum assets.

But the figures seen so far do not exhaust the information we can glean on the long-term performance of land income relative to tax revenues.

4 The current estimates

Drawing upon and extending data used in Tables 1 to 3, Table 4 presents a much longer series from 1910-11 to 1998-99 showing the growth of all Australian tax revenues and land income over most of the twentieth century. This has been constructed by the author building on the notable and valuable work of Scott, Herps, Coleman and others. These previous studies have been sponsored by, undertaken for, or adopted by the Reserve Bank of Australia, the Commonwealth Grants Commission and the Australian Bureau of Statistics. The methodology is set out in Appendix I and involves both adjusting land valuations for lags and smoothing increments to land values. Smoothed land income consists of an assumed annual current yield of 5% on land values plus an annual increment (called the "accrual yield") based on long run compound growth rates for land values.

The results are remarkable. They show that even though taxation has risen strongly as a percentage of GDP over the century, the growth of land values and land income has largely kept pace.

Table 4 shows that before the Second World War, the growth of land values and tax revenues tended to be more restrained. This may reflect the supremacy of the gold standard, Depression and a horror of deficit financing by governments. In the post-World War II period, the growth of land values and land income has outstripped the growth of tax collections, even as Keynesian deficit financing and the growth of the

welfare state generated a larger public sector. Total Australian taxes peaked as a percentage of 400.4% of land income in 1951-52, yet by 1994-95 total taxes were down to 138.3% of land income, notwithstanding the growth of the public sector in the economy since 1950.[36]

Table 4 suggests that while at times it may have appeared to some observers that land was shrinking as a component of national wealth or income, such a perception may have been an illusion due to financial intermediation and multiplication of gross claims in the economy. The results in Table 4 show the growth of Australian land income more than holding its own relative to tax revenues, even though tax revenues have increased so much over the twentieth century as a percentage of national income.

At first sight this is a puzzle. It might be argued that land income should decline as a percentage of tax revenues for two reasons. First, there has been a shift away over the past century from land-based industries such as agriculture and mining to manufacturing and, later, service industries which are not land-intensive. Second, taxes such as income tax are based on a broader base of economic activity than land, so the capacity of land income to replace other taxes must be declining.

On closer reflection the apparent contradiction of these arguments by the data seems explicable. First, it is not the *quantity* of land used but its *value* that counts in measuring a land income tax base: service industries may not use broad acres, but city office blocks sit on very valuable land.

Second, much of the income tax base is indirectly land-related in origin: corporate accounting profits (eg for mining companies) do not distinguish between capital and land returns (that is not their purpose). Capital gains are often based on real estate either directly or through holdings in companies, mutual funds or pension funds.

Third, there is another reason for land income to keep up with or even exceed taxation revenue which has often escaped attention. Much spending of tax revenue adds to land values and the demand for land. It has long been recognized (eg by Hotelling (1938, p 300), Vickrey (1977 p 349) and Lowell Harris (1973) – among many economists) that tax-financed government spending on physical infrastructure such as roads,

36. See the trend in column 35 of Table 4. (The table omits spreadsheet columns which were only used for subsidiary data or computation and checking purposes.)

electrification, water systems etc adds value to land.[37] To the extent that such spending is justified on cost benefit grounds, one would expect land values to rise by more than the expenditure. But it is less well recognized by others that government *social* spending can also be capitalized in land values.

When tax revenue is paid as unemployment benefits or as age pensions, including *a fortiori*, targeted payments for rent subsidies, it inevitably underpins a level of demand for residential real estate which also affects commercial land values as well.[38] Further, to the extent that government social spending is usually available to citizens or residents of a country, one would expect little leakage outside national borders.[39]

At the same time, owner-occupied residential land is outside the scope of income tax (but not necessarily of rates or land taxes). Hence, the existing tax base is excluding part of land income while the tax revenue from it is being used in part to push up land values. Given the importance of residential land in overall land value statistics, such phenomena may explain why land income has risen so strongly in line with tax revenues.

Fourth, land is well recognized as a natural hedge against inflation. As taxes have risen and the value of money fallen over the post-World War II period, the holding and retention of income producing land has been the best defence for many investors against the combined ravages of taxation and inflation. The impetus for investors to "buy and hold" real estate is a powerful opposing reaction to the threat of high inflation

---

37. The most elegant example of this is the "Henry George Theorem" developed by Vickrey, Stiglitz and others where land rents precisely reflect spending on public goods or subsidies to cover fixed costs of infrastructure priced at marginal cost. Arnott and Stiglitz examine the generality of the Henry George Theorem that, in cities of optimal size, aggregate land rents equal expenditures on public goods.
38. For example, the exemption of family homes from social security income and assets tests increases residential land values by subsidizing the holding of properties off the market. Houses that would otherwise be sold to earn an income are retained by pensioners to avoid income and assets tests. In many cases, the age pension might be seen as a subsidy to those who inherit a house which an age pensioner parent would otherwise have sold.
39. To the extent that aged people can migrate and welfare pensions become portable, one can imagine Australian tax revenues propping up values in Italian villages or US tax revenues propping up land values on the Australian coast, but such migration and portability is the exception.

and taxation which may help explain why the growth of land values has paralleled the rise of taxation.

Whatever the reasons, it is interesting to take the 1998-99 figures from Table 4 to see if we can get a better feel for the true "bottom line".

Table 4 shows the following figures for 1998-99 –

Total Australian taxation	$177.9 billion
Total individual income tax	$76.7 billion
Total company tax	$20.7 billion
Smoothed land income	$132.7 billion

But even this may be an under-estimate. In addition to land and subsoil assets, there are spectrum, native forest and fisheries resources. A tentative estimate for 1998-99 using a common accrual factor of 8.92279% plus a running yield of 5% (totalling 13.92%), shows: –

Asset class	**Value** ($billion)	**Income** ($billion)
Land[40]	822.7	
Subsoil assets	130.2	
Subtotal	952.9	132.7
Spectrum, etc[41]	2.7-58	0.4-8

40. In the past land and site values have reflected the benefit of water rights or reticulation services for gas, electricity etc. If these rights are stripped from land or utility services are charged for on a monopoly basis rather than marginal cost, land and resource rents can be adversely affected: monopoly rents enjoyed by utilities can grow at the expense of the lands they were created to serve.

41. ABS (2001) puts a value of $2.7 billion on the spectrum as at June 2001. This figure is based only on the third generation spectrum (3G) licences and does not include existing radio and TV licence rights. The Productivity Commission (2000, pp 186-187) estimated in its Broadcasting report that $211.1 million was paid as annual radio and television licence fees in 1997-98 and the growth had been 8.6% compound in real terms over the twenty years from 1978-79. The licence fees are based on a percentage (between 0.25% and 9%) of advertising revenue. ABS Catalogue No 8680.0 gives total income for radio and television spectrum licence holders at approx $4.5 billion in 1996-97. ABS catalogue 8145.0 gives 1996-97 revenue for telecommunications carriers at $20 billion. If one third of these amounts represents resource rent than the value of the spectrum could be as high as $8 billion annually or $58 billion (capitalized at a 14% earning factor).

Native forests[42]	2.5	0.4
Fisheries[43]	0.8	0.1
Total	958.9-1,014.2	133.6-141.2

The "bottom line" reinforces the overall conclusion from Table 4 that land-based tax revenues are indeed sufficient to allow total abolition of company and personal income tax.[44] Further, to the extent that some taxes such as rates, land tax, resource rent taxes and even part of income tax on land rents are already capitalized in lower market values for privately-held land, the figures would tend to understate the capacity of land income to replace existing taxes.[45]

5 Conclusion

Previous attempts to measure the value of Australian land have tended to focus on its position as part of national wealth rather than its annual taxable capacity. It appears land income has been under-estimated. However, it is possible to generate an almost century-long series to

42. ABS *Australian National Accounts: National Balance Sheet*, 1998-99, Consolidated balance sheet and sectoral balance sheets as at 30 June 1999, p 21
43. Figures were kindly supplied by Debbie Brown of ABARE for value of boats with and without quota licences. These were aggregated to give a value of $834.6 million for the total Australian fishery.
44. This paper does not examine the political economy question of whether voters and parliaments would *wish* to do so. It is merely pointing out that there is an unrecognised but real social choice to be made about tax bases if one is concerned about losing revenue from mobile tax bases in an era of globalization. If that question arises, this author must declare some sympathy with the view that "If you are foolish enough to try to tax what runs away (in preference to taxing what cannot) that is your choice and you cannot be heard to complain about other countries' pursuing more rational choices"
45. In some cases, the imposition of higher annual land holding charges would squeeze "speculative water" out of market values for land, but this effect would tend to be concentrated on land held semi-idle by speculators (e.g. on urban perimeters) rather than land held by serious users. The market value of the bulk of land being used productively could be expected to increase with increased competition for land, when net returns after tax to land-using labour and capital rose. It should also be noted that there is no way to avoid a land value tax by re-categorizing land income as labour or capital income. The market value of land is fixed by demand external to the owner and hence his tax burden is an unavoidable "lump sum" tax so far as he is concerned. Further, if he sells to try to avoid the tax, his buyer discounts for the tax in the purchase price.

compare land income to Australian taxation revenues and thus see the large scope for replacing other taxes with economically efficient taxes on land and resource rents.

The logical implication is that Australia could choose to make a fundamental shift in tax policy. Australia could increase Federal reliance on land revenues[46] and use the proceeds to make substantial cuts to marginal personal and company income tax rates. Australia could become a tax haven and out-compete Hong Kong and Singapore in attracting regional or international headquarters or investment. There is nothing inevitable about Australia being a generally "high tax" country which discourages investment nor is it inevitable that Australia becomes a branch office economy. Australia may have different forms of land resources to Saudi Arabia or Brunei but, like Hong Kong and Singapore, Australia's land is worth a fortune as a tax base. Australia is as well positioned to finance large cuts in personal, corporate and consumption tax rates (or even abolition of one or more of these) through taxing land incomes.

Rather than complaining about the so-called "dark side of globalisation" and joining in OECD complaints about the threat of other countries' supposedly "harmful tax practices" to OECD tax revenues and redistributive social spending, Australian policymakers and commentators would be better advised to look at what they stand on – "black gold" can mean dirt and mere location as well as oil. In a world where capital is mobile and labour supply is shrinking in line with demographic decline, an immobile tax base is the only tax base which makes economic sense. Australia is indeed a lucky country to have in its land and resource values a tax base of such large potential. But is it a clever enough country to use that potential tax base to its advantage?

---

46. Land tax was originally a Federal tax and there is no Constitutional impediment to a Federal tax on land values being introduced and earmarked for reduction of personal and company income taxes.

Appendix A

(REF FOOTNOTES 13 AND 17)

Hong Kong

Only income and profits derived from Hong Kong are subject to tax and there is no tax on capital gain, dividends or interest. The current profits tax rate is 16% for corporations and 15% for non-corporate taxpayers, http://www.info.gov.hk/info/tax.htm. The role of land revenues in underpinning Hong Kong's low tax rates is recognized even by critics. In a submission of 5 October 2001 to the Advisory Committee on New Broad-based Taxes on "A Broader-based Tax System for Hong Kong?" Mr Alan Lung Ka-lun, Chairman of the Hong Kong Democratic Foundation, wrote "We feel that the paper does not go sufficiently into the nature of the tax system that we currently have. Although the take from land taxes has been lower in recent years (the only years analysed in the paper), over the medium to long run, land-related taxes have been the mainstay of the fiscal system. The very high yield from land sales, premium on conversion, rates, stamp duty on property, rentals and other property-related income, has enabled the Government to keep direct tax rates relatively low. However, this benefit has come at the cost of massive distortion to our economy – through overreliance on property – and higher property prices for everyone.", http://www.hkdf.org/papers/011005tax.htm. The last sentence embraces a number of debateable issues such as the differing effects of land holding taxes versus transfer taxes or whether property prices would fall if a government gave away land.

Accruals of Income

Tax theorists in the Haig-Simons tradition would agree with this concept of income but it is not necessary to be in that tradition to accept it. In this respect, the writer agrees with Gaffney (1970-71) pp 411-412 that accruals of income are income but notes that double taxation can still occur if income is taxed on both an accrual and on a cash receipts basis. An annual tax on land values does not tax cash rental receipts so the problem of double taxation is academic for land value taxes while remaining a live issue for design of income and capital gains taxes. For example, given a 10% discount rate and a 50% income tax rate, land yielding $10 in cash rental will be valued at $50 (the present

value of the $5 after-tax income stream). If, unanticipated, the pre-tax rental jumps to $40, the after tax land value will be $200. The income tax revenue is $5 annually before and $20 after. The difference between the pre-tax value of $400 and the post-tax value of $200 already represents a capital tax of $200. But a capital gains tax also takes a further $75 (half of $150 less $50) which is not creditable against income tax on future rental receipts.

Appendix B

(REF FOOTNOTE 23)

Reference must also be made to the work done by Piggott (1987) and Callen (1991) of the Economic Research Department of the Reserve Bank of Australia. Their work is significant for two reasons. First, they carefully reviewed previous studies on the private wealth of Australia and, second, they noted reasons why the value of land in national wealth was likely to be understated. Piggott (1987, p 61) argued that his estimates represented a close approximation to the market value of the nation's private wealth. Piggott observed (1987, p 62) that private wealth included intangible assets such as goodwill or patent rights and claims on other sectors, notably the government and overseas sectors. Significantly, Scott's previous (1968) estimates of land values based on local government assessments were not regarded as a reliable guide to the total market value of land because of their conservative valuation basis (Piggott, 1987, p 63). Further, previous wealth estimates (including those of the Australian Bureau of Statistics) were criticised for not reflecting the value of land on which dwellings are built which Piggott seeks to overcome by using price indices (Piggott, 1987, p 65). In comparing his estimates with the results of previous researchers (Piggott, 1987, p 69) attributed most of the discrepancy to residential and rural land. The net result was that, as at the second quarter of 1985, Piggott (1987, p 69) found a total personal wealth of $793.9 billion of which for $439.9 billion was residential land and dwellings and $102.5 billion rural wealth, half of which represented land values. A significant amount of land wealth would also have been the included in the $116.2 billion of business assets. Piggott noted that while the use of a capital city index for house prices may have given an upward bias, there was a bias in the opposite direction in that "the average site value of newly completed homes is less than the average for the whole stock, since

many new completions are located on the fringes of cities." The significance of Piggott's work is that it suggested previous estimates of Australian private wealth were seriously underestimated and most of that under-estimation was accounted for by undervaluation of land assets. In particular, it strongly suggests that estimates of land values, such as Scott's, which are based on official valuations are likely to be substantially below current market values.

Callen (1991) reviewed Piggott's work. Instead of using a price series for dwellings based on the four capital cities of Sydney, Melbourne, Adelaide and Brisbane, he used an index based on a weighted average of capital city and other area prices. This lowered the estimated market value of the dwelling stock. But he also argued that commercial property had been undervalued and that while the dwelling stock accounted for 52 percent of private wealth, business assets accounted for 37 percent in 1990 (Callen, 1991, pp 1, 4). For business and real estate, he found that "in 1989 land represented 26 per cent, 33 per cent and 31 per cent of the value of the property for retail, office and industrial structures respectively" (Callen, 1991, p7). Given that he used NSW Valuer-General's data on site values, these percentages seem conservative. In addition, corporate land wealth is still understated, as mining companies were excluded (Callen, 1991, p 5).

The significance of Callen's work lies in its suggestion that business land wealth had been seriously underestimated previously and a higher valuation would be consistent with the ratio of business income to household dwelling rent in the national accounts. As he puts it: "the ratio of business wealth to dwelling wealth is 0.71, compared to 0.28 in the Treasury's estimates. If one thinks of GDP as the return on wealth ... business wealth should be about 2.5 times as large as dwelling wealth. This follows from the observation that the gross operating surplus of corporate and unincorporated business is about 2.5 times as large as imputed and actual rent, which can be thought of as the return on the dwelling stock.... Hence, it is likely that, despite being large relative to previous estimates, the estimate of business wealth presented here still understates its true share of total wealth." (Callen, 1991, p 9). It is also worth noting that overseas ownership of Australian business assets was estimated at $180.5 billion out of a total of $524.6 billion (Callen, 1991, p 15), which indicates the importance of keeping in mind that the tax base of Australian land includes Australian land owned by non-resident commercial enterprises. Finally, Callen (1991, p 21) notes that

Treasury's estimates of private wealth had excluded rural wealth and excluded the value of land from non-dwelling construction.

Appendix C

(REF FOOTNOTE 30)

In relation to the issue of non-useful or exhausted or recouped improvements, Scott (1986, p 5) notes: "The rates levied by local governments are based on official valuations of land and/or land and improvements. Valuation concepts and methods have changed over the years but valuation concepts were constant for long periods and, indeed, until recent decades.... However, after the middle of our own century, it became evident that the concept of unimproved capital value presented grave difficulties in application and contained a growing element of artificiality. This, and other considerations, led to official inquiries in various States into valuation concepts and practices. The outcome has been the widespread adoption of a concept of site value (sometimes designated land value) to displace the concept of unimproved capital value." As Scott (1986, pp 5-6) explains: "The difficulty which had emerged in application of the concept of unimproved capital value was the virtual disappearance from land markets, as time passed, of land as defined in accordance with that concept. The definition excluded 'the improvements if any thereon or appertaining thereto, and made or acquired by the owner or his predecessor in title'... The difficulty was twofold – to determine whether any such improvements had been made and to find any comparable land without them which had recently been marketed. No difficulty was necessarily encountered where clearly visible improvements existed but not all improvements remained visible to succeeding generations (for example, tree felling, long regarded as a necessary improvement for maximising monetary returns). Equally, as the country was settled, land in its virgin state became scarce and even non-existent in many localities, thus often denying to the valuer any basis for valuation of a parcel of land by comparison with transactions in land in the required, unimproved condition. Site value is a concept whose adoption can preclude the emergence of these problems. It differs from unimproved capital value by limitation of the exclusion of improvements. Improvements, under the new concept, exclude and site value (or land value) includes such things as clearing (of timber etc); reclamation (including draining);

excavating and grading; and so on.... Doing so eliminated, in principle, the two problems of identifying and allowing for what had often been called 'invisible improvements' (Garland, 1934). Nevertheless, there were still some important interpretations of the legislation governing valuation left resting on case law." (For example, the determination of unimproved value or, now, site or land value as well, taking into account the influence of surrounding improvements (see Garland, 1934)).

While the adoption of site value or land value gets rid of the impossible hypothetical valuation problem, one may note that it may not go far enough. Some improvements, such as tree felling, might now be seen as having detracted from the long-term productiveness of land and this is equally true of urban areas where buildings that have outlived their usefulness have to be demolished before one can obtain a clear site for construction. If a developer pays $4 million for a property with a building which would take $2 million to reproduce and then spends $1 million demolishing the building, what is the value of the land? Is it $2 million, the value of the parcel less the costs of reproducing the (unwanted) building or is it $4 million (the total paid for the parcel) or is it $5 million (the cost of getting the clear land)? In other words, it is tempting, but wrong to assume that everything on the land or done to it always and forever is a valuable improvement and the re-use value of land is its site value, see Gaffney (1970, p 173). Most structures outlive their usefulness but the value of land as a site may grow on. Buildings depreciate in the sense of being worn out or unsuited for use or location but location value does not physically wear out: the value of location rests on a spatial relationship, it may become more or less valuable depending on propinquity but it does not wear out in same sense as improvements.

In this connexion Scott (1986, p 12) argues that: "There are also some special problems which valuers encounter (as well as that of allowing for differences in value due to changes in use). One of them is estimation of an unimproved or site (or land) value of a parcel of land in a fully built-up area. The problem can only be resolved by deduction of an estimated value of its improvements from the price obtained in the market for some parcel of land together with its improvements. The practice is not favoured and only in these particular circumstances is the deductive method accepted in Australia in the mainland States." However, one may well argue that a deduction of valuations of

improvements approach is incorrect for it assumes the improvements are always wanted in their present state and that the traditional Australian valuation approach of valuing on the basis of the highest and best use available for the site rather than its present use is the theoretically correct approach.

Appendix I

Notes on Table 4: Australian Taxation Receipts compared to Land and Resource Values 1910-11 to 1998-99

These notes relate only to Table 4 as reproduced here. Due to space limitations only some columns are printed in this article (some of the omitted columns were for computational checks only such as checking smoothing of raw data. Notes relating to land data issues have been retained here). A full version of Table 4 with accompanying notes is available on request from the author.

The table is largely based on RBA figures from *Australian Economic Statistics 1949-50 to 1994-95* p 92 Table 2.17 with figures from Scott (1986) and Scott (1969) and ABS value of land estimates. However, additional data has been introduced as detailed below. (Tables 1, 2 and 3 also are sourced largely from the same RBA publication.)

Notes on data columns

(1) Total Australian taxation

1909-1910 to 1948-49 from Wray Vamplew ed (1987) *Australians: Historical Statistics*, p 256, Table GF1-7

Data from 1949-50 to 1994-95 is taken from RBA *Australian Economic Statistics 1949-50 to 1994-95* Table 2.8, Column 1. The RBA series measures total Commonwealth, State and local taxes fees and fines and therefore is slightly higher over the period 1949-50 to 1981-82 than the corresponding figures from Wray Vamplew. The difference in 1949-50 and the 1950s and 1960s is, however very slight and the slightly greater divergence in the 1980s may be due to the greater tendency of governments to use fines as tax collection devices, a tendency which justifies a more comprehensive measure of total taxation.

Data from 1995/96 for individual income tax taken from ABS Cat. No. 5506.0 *Taxation Revenue Australia 1997-98* Table 1. The figure for 1998-99 is not absolutely comparable with earlier years due to the

introduction of accrual accounting (which has its merits and demerits): differences would be due to taxes accrued but unpaid and the like.

(2) Taxation as % of GDP

1909-1910 to 1948-49 from Wray Vamplew ed (1987) *Australians: Historical Statistics*, p 256, Table GF1-7

Data from 1949-50 to 1994-95 is taken from RBA *Australian Economic Statistics 1949-50 to 1994-95* Table 2.8, Column 2.

(3) Commonwealth Government Taxation Receipts: Individual income tax

Between 1949-50 to 1994-95 Commonwealth taxation revenue data taken from Reserve Bank of Australia compilation, Australian Economic Statistics, p 92 Table 2.17

Consistent with RBA practice in its published Lotus spreadsheets, Commonwealth taxation data from 1995/96 onwards for individual income tax is taken from Commonwealth Treasury *Budget Statements 2000: Budget Paper No 5* Appendix D Revenue Statistics p 5-30 and revisions to earlier years have been ignored on the basis that they may include classification differences to ABS 5506.

(4) Company tax

Between 1949-50 to 1994-95 Commonwealth taxation revenue data taken from Reserve Bank of Australia compilation, Australian Economic Statistics, p 92 Table 2.17

Consistent with RBA practice in its published Lotus spreadsheets, Commonwealth taxation data from 1995/96 onwards for company tax is taken from Commonwealth Treasury *Budget Statements 2000: Budget Paper No 5* Appendix D Revenue Statistics p 5-30 and revisions to earlier years have been ignored on the basis that they may include classification differences to ABS 5506.

(16) Unlagged Land Values Mid Year

1910-11 to 1959-60

Unimproved land value data from 1909-1910 to 1959-60 is taken from Scott (1969, p 27 and Appendix). Scott states (Appendix p 1) that these figures "are presented in terms of calendar years" which is taken to mean as at the usual mid fiscal year December valuation date. These pre 1960-61 figures exclude the ACT but, as the ACT figure was only

$21.0 million out of an Australia-wide total of $6,517.8 in Scott (1986, p 23) for 1960-61, the omission is not serious for earlier years.

1960-61 to 1981-82

Land value data from 1960-61 to 1981-82 is unlagged valuation data from Scott (1986, Table 5, p 23).

There are some overlap years between Scott (1969, p 27) and Scott (1986, p 27). The relevant figures are as follows:

Year	**Scott (1969, p 27)**	**Year**	**Scott (1986, Table 5, p 23)**
Dec	**$m**		**$ m**
1960	6421	1960-61	6517.8
1961	7414	1961-62	7326.9
1962	8163	1962-63	8168.3
1963	9263	1963-64	9363.8
1964	10082	1964-65	9933.0

Scott (1986, p 22) explains that the lower figures for these years in his later study are due to "subsequent downward revisions of published figures". We have adopted his later estimates for these years.

1983-84 to 1987-89

Figures for land values from 1983-84 to 1987-89 are taken from ABS 5241.0 *Australian National Accounts: National Balance Sheet 30 June 1995* Table 3.2 page 31 and are based on M R Coleman *Report on Land Valuation Data*, Commonwealth Grants Commission *Report on General Revenue Grant Relativities* 1993 Volume 3.

1989-90 to 1997-98

Figures for land values from 1989-90 are taken from ABS 5241.0.40.001 *Australian National Accounts, National Balance Sheet 1998-99 Table 28 Value of Land* and previous issues. Although the rate of growth of land values may seem high, it is explicable if rental values are growing. In this regard, one notes that a circular distributed for the Investa Property Syndicate in the Australian Financial Review in May 2001 for its prospectus dated 30 April 2001 stated that "Prime net effective [office] rentals have grown at an average rate of 12.6% per annum over the 4 years to December 2000."

(17) Scott's Lagged Land Values

These are taken from Scott (1986, Table 7a, p28). Because inflation increased in the post World War II period and there were increasing lags in making valuations, Scott (1986, pp 24-25) adjusted his data. The effect was to set back in time the years to which valuations applied. Scott's adjustments took account of the differing lags in different States and between city and other areas. Lags were neither uniform over time or between States or parts of States. Valuation lags varied from an 8 year period in Queensland outside Brisbane but shortened to about 12 months to NSW capital city areas.

Because Scott's lagged data covered only a part of the time period this data was not used and a more naive lag adjustment was used as described in (18). The result appears not greatly different.

(18) Lag-Adjusted Land Values

As noted above, Scott (1986) drew attention to the sometimes long lags in valuation data.

A naive 3 year lag produces results similar to his more detailed lag adjustments and seems robust for the post World War II period. A 3 year lag is therefore applied to the Scott (1986) and (1969) figures in column (16) back to mid World War II, resulting in interpolating the missing valuation years (a 2 year lag is applied to the figure for 1943-44).

No adjustment for valuation lags is made to the raw figures prior to 1940-41 as inflation was lower or non-existent over most of that period. The monetary situation changed after adoption of Keynesian policies after World War II and valuation lags would have become more significant over that period.

No lag adjustment is made to the land value figures from ABS from 1983-84 onwards.

This results in a gap for lag-adjusted land values for the years 1979-80 to 1982-83.

1979-80 to 1982-83

The figures for these years are computed in the following manner,

From Herps (1982, p 31) and Herps (1981, p 68) we have the following figures for urban land values

Estimated Site Value of Urban Land

State or Territory	At 1.7.78	At 1.7.79	At 1.7.80
	$m	$m	$m
New South Wales	34 000	39 000	52 000
Victoria	27 000	27 000	29 000
Queensland	8 000	8 400	11 000
South Australia	4 600	4 900	5 300
Western Australia	6 100	6 700	6 900
Tasmania	1 400	1 520	1 520
Northern Territory	n. a.	n. a.	n. a.
[Totals ex-NT	81 100	87 520	105 720]

From Herps (1985, p 30) we have the following figures for urban land values

Estimated Site Values of Urban Land

State or Territory	At 1.7.81	At 1.7.82	At 1.7.83
	$m	$m	$m
New South Wales	71 000	76 000	73 000
Victoria	33 000	35 500	38 500
Queensland	14 000	18 000	19 000
South Australia	6 500	6 800	6 900
Western Australia	8 000	8 900	9 300
Tasmania	1 800	1 900	2 100
Northern Territory	735	850	980
[Totals	135 035	147 950	149 780]
[Totals ex-NT	134 300	147 000	148 800]

From Herps (1988, p 76) we have the following figures for urban land values

Estimated Site Values of Urban Land

State or Territory	At 1.7.84	At 1.7.85	At 1.7.86
	$m	$m	$m
New South Wales	92 268	102 000	108 000
Victoria	50 403	63 500	71 500
Queensland	26 550	28 560	29 500
South Australia	14 010	17 500	19 000
Western Australia	13 907	15 200	15 500
Tasmania	2 676	2 870	2 950
Northern Territory	1 223	1 440	1 550
[Totals	135 035	147 950	149 780]
[Totals ex-NT	134 300	147 000	148 800]

We may thus compare the Herps figures for a subset of land values (ie excluding NT, ACT and rural values) with the ABS/Coleman figures for all land values for the 1984 to 1986 years and derive a markup factor which may be applied to the earlier Herps figures to derive full estimates of all Australian land values for the 1979-80 to 1982-83 years. The results are as follows:

	Herps	ABS	Scott (1986)	Ratio	Interpolated Figures
1.7.78	81 100		91259.5	113%	
78-79					
1.7.79	87 520				144 215
79-80					
1.7.80	105 720				174 205
80-81					
1.7.81	134 300				221 300
81-82					
1.7.82	147 000				242 227
82-83					
1.7.83	148 800	245200		164.78%	
83-84					
1.7.84	134 300	279700		208.27%	
84-85					
1.7.85	147 000	302600		205.85%	
85-86					
1.7.86	148 800	357600		240.32%	
86-87					

Interpolated figures are calculated by applying a factor of 164.78% to Herps' figures. In theory the difference should represent rural lands and the land values for the ACT and NT and any residual lag effects.

(19) Value of Subsoil Assets

Figures for value of subsoil assets from 1989/90 are taken from ABS 5241.0.40.001 Australian National Accounts, National Balance Sheet 1998-99 Table 29 Value of demonstrated Sub-soil Assets.

(20) Value of other Resource Assets

This includes the value of other resource assets such as spectrum rights, fishing rights and native forests. For 1998-99, an estimate has been made of spectrum licence values plus fisheries and these have been used to produce a land income figure for that year only. The use of an accrual

yield figure derived from non-depletable land to derive an income figure for depletable or renewable resources may involve some bias upwards, though for minerals this could be offset by undiscovered reserves coming on stream.

(21) Value of Land Resources

These are ultimately derived from columns (16) and following (notes on which are above). It is the sum of columns (18) *Lag-Adjusted Land Values,* (19) *Value of Subsoil Assets* and (20) *Value of other Resource Assets*.

(22) Annual increment

This is the increase in (21) *Land and Resource Values* over the corresponding value for the previous year.

(23) Rate of Increase

This is (22) *Annual increment* expressed as a percentage increase over (21) *Land and Resource Values* for the previous year.

(24) Current Yield

A current yield factor of 5% is applied to the *Land and Resource Value* for each year. As the valuation figures relate to the year used for rating, they are taken as the estimated values at the beginning of the fiscal year to which current yield and accrual factors may then be applied to compute accruing land income for that fiscal year.

(25) Accrual Yield

Because there is a long series for unimproved land (or site) values, accrual yield factors are computed from the growth of (18) *Lag-Adjusted Land Values*. Note that they are not calculated using the value of other land resources such as sub-soil assets but this should not cause an over-estimate of land and resource income as the rate of growth of these assets has been greater than site values over the years for which the ABS has provided data.

Because of different monetary conditions, accrual factors are computed separately for the 3 periods: pre-WW II up to 1939-40 and after; War and post War-boom; the post-War economy.

1910-11 to 1939-40

The long term rate of growth of land values is given by 1707 = 862(1 + g)^30, that is 2.304% compound over the 30 years from 1910-11 to 1939-40 inclusive. However, rather than using this growth rate or an internal rate of return (both of which would involve smoothing the actual recorded land values) an iterative process has been used to compute that rate of growth which, if applied to the *actual* land values recorded, would generate sufficient total increments over the 30 years to take the total from $862 million to the actual $1,707 million for the opening of the 1940-41 year. This accrual factor applied to the land value for each given year gives the accruing increment for each year which is termed the "accrual yield". The accrual factor for this period is 1.9679%.

1940-41 to 1956-57

The long term rate of growth of land values is given by 6517.8 = 1707(1 + g)^17, that is 8.200% compound over the 17 years from 1940-41 to 1957-58 inclusive. This period is chosen because it covers War and post-War recovery and ends with the first year derived from Scott's (1986) data. The corresponding accrual factor is 9.3648%.

1957-58 to 1998-99

The long term rate of growth of land values is given by 822700 = 6517.8(1 + g)^41, that is 12.525% compound over the 41 years from 1957-58 to 1998-99 inclusive. The corresponding accrual factor is 8.2582%.

Gaffney (1970a, pp 182-187) discusses why increments of land value represent accruals of land income. There are various ways this accrual might be measured - for example, the dollar change in value from year to year; an increment based on arithmetic average growth rate or an internal rate of return. In effect we are trying to level out a growing annuity. We have chosen the method set out here of accrual factors as a reasonable smoothed rate of return. It differs somewhat from compound growth rates depending on how the actual pattern of land values over the period differs from a compounding growth curve.

To the extent that earlier year valuations are underestimates, accrual factors may be overstated, but there would be a correspondingly reduced current running yield. Conversely, adjusting for valuation lags has the opposite effects. Given the length of the series, there does not seem to be cause for great concern on these counts.

The accrual factors are applied to the total figure for all land and natural resource assets to derive a figure for accruing land income to be added to the running yield to give total land income for each year. As only site or unimproved land values are available before 1989-90, for years before then land income is necessarily incomplete in that it omits returns from sub-soil assets, natural forests, fisheries, spectrum rights or statutory easements owned by utilities. Of course not all these natural resource assets are included even in later years. Only sub-soil assets are included before 1998-99.

(26) Total Crude land Income

This is the sum of (24) *Current Yield* plus (22) *Annual increment*.

(27) Total Smoothed land Income

This is the sum of (24) *Current Yield* plus (25) *Accrual Yield*.

(30) Personal Income Tax as % of smoothed land income

This is (3) *Commonwealth Government Taxation Receipts: Individual income tax* divided by (27) *Total Smoothed land Income*.

(33) Company tax as % of smoothed land income

This is (4) *Company tax* divided by (27) *Total Smoothed land Income*.

(35) Total Australian taxes as % of smoothed land income

This is (1) *Total Australian taxation* divided by (27) *Total Smoothed land Income*.

(36) Company and personal income tax as % of smoothed land income

This is (30) *Personal Income Tax as % of smoothed land income* plus (33) *Company tax as % of smoothed land income*.

(37) Smoothed land income as % of company and personal income tax

This is the reciprocal of (36)

References

Arnott, Richard J and Joseph E Stiglitz, 1979, *Aggregate land rents, expenditure on public goods and optimal city size* **Quarterly Journal of Economics** vol XCIII No 4, November, pp 471-500

Australian Bureau of Statistics, various years, *Taxation Revenue Australia* Catalogue No 5506.0, Canberra.

Australian Bureau of Statistics, 1998, *Radio and Television Services, Australia* Catalogue No 8680.0, 9 November, Canberra.

Australian Bureau of Statistics, 1999, *Telecommunications Services, Australia* Catalogue No 8145.0, 15 January, Canberra.

Australian Bureau of Statistics, 2001, *Australian National Accounts: National Income Expenditure and Product* (Cat No 5206.0) *Special article – Treatment of 3G Spectrum licences*, March quarter, Canberra.

Australian Valuation Office, 1998, *Consultant's Report: Land Valuation Data* in Commonwealth Grants Commission (1999) *Report on General Revenue Grant Relativities* 1999, Volume III, pp 372-413, AusInfo, Canberra.

Callen, Tim, 1991, *Estimates of Private Sector Wealth*, Research Discussion Paper RDP 9109, Economic Research Department, Reserve Bank of Australia.

Commonwealth Treasury, 2000, *Australian Net Private Wealth* **Economic Roundup**, pp 17-34, Summer, Canberra.

Commonwealth Treasury 2000, *Budget Statements 2000: Budget Paper No 5*, Canberra.

Dwyer, T M, 1980, *A History of the Theory of Land-Value Taxation*, doctoral dissertation, Harvard University, University Microfilms, Ann Arbor, Michigan.

Dwyer, Terry, 2000, *'Harmful' tax competition and the future of offshore financial centres, such as Vanuatu*, **Pacific Economic Bulletin**, vol 15, No 1, pp 48-69

Dwyer, Terry, 2002, *Information exchange and global economic regulation – for whose benefit?*, **Pacific Economic Bulletin**, vol 17, No 1, pp 63-78

Feldstein, Martin, 1976, *On the theory of tax reform*, **Journal of Public Economics**, 6 July-August: 77–104.

Gaffney, Mason, 1970-71, *Tax-Induced Slow Turnover of Capital I, II, III, IV, V* **American Journal of Economics and Sociology** vols 29-30 pp 24-32, 178-197, 276-287, 408-424, 104-111.

Gaffney, Mason, 1970, *Adequacy of Land as a Tax Base* pp 157-212 in Holland, Daniel (editor) **The Assessment of Land Value**, University of Wisconsin Press, Madison.

Harris, C Lowell, ed., 1973, *Government Spending & Land Values: Public Money & Private Gain* University of Wisconsin Press, Madison.

Harvey, John, (Chairman), 2001, State Business Tax Review Committee *Full Report* Victorian Department of Treasury and Finance, Melbourne, February

Herps, M D, 1988, *Review of General Revenue Grant Relativities: Relative Capacities of States and Northern Territory to Raise Land Revenues: Advice to the Commonwealth Grants Commission*, in Commonwealth Grants Commission (1988) *Report on General Revenue Grant Relativities 1988*, Volume II *Appendixes and Consultants' Reports*, Canberra.

Hotelling, Harold, 1938, *The general welfare in relation to problems of taxation and of railway and utility rates*, **Econometrica** 6 (1938), pp 242-269 reprinted in K. J. Arrow and T Scitovsky **Readings in Welfare Economics**, AEA and Allen & Unwin, London, 1969, pp 284-308.

OECD, 1998, *Harmful Tax Competition: An Emerging Global Issue*, Organisation for economic Co-operation and Development, Paris

Piggott, J, 1987, *The Nation's Private Wealth - Some New Calculations for Australia* **Economic Record** v 63, pp 61-79.

Prest, A R, 1983, *Some Issues in Australian Land Taxation*, Reprint Series No 55, Centre for Research on Federal Financial Relations, Australian National University, Canberra.

Productivity Commission, 2000, *Broadcasting*, Inquiry Report No 11, 3 March, Ausinfo, Canberra.

Reserve Bank of Australia, 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Occasional Paper No 8, edited R A Foster, Sydney, June.

Scott, Robert Harden, 1986, *The Value of Land in Australia*, Centre for Research on Federal Financial Relations, Research Monograph No. 47, Australian National University, Canberra.

Scott, Robert Harden, 1969, *The Value of Land in Australia*, paper presented to Australian and New Zealand Association for the Advancement of Science (ANZAAS), 41st Congress, Section 24, Adelaide, 18-22 August, Reserve Bank of Australia.

Telstra Corporation, 2000, *Annual Report 2000*, Melbourne.

Vickrey, William, 1977, *The City as a Firm* in Feldstein, Martin et al editors *The Economics of Public Services: Proceedings of a Conference held by the International Economic Association at Turin*, Macmillan, London, pp 334-343 reprinted in Arnott, Richard et al editors (1994) *Public Economics: Selected papers by William Vickrey*, Cambridge University Press, pp 339-349.

Wray Vamplew ed., 1987, *Australians: Historical Statistics*, Sydney.

Table 1: General Government Sector Receipts: All taxes as a percentage of land values, 1967/68 to 1977/78 ($million)

	Taxes, fees and fines	Total revenue	Land Values	Annual Increment	Rate of Increase	Current Yield	Total Land Income	Taxes as % of land value	Taxes as % of land income
1967/68	6047	6527	25766			1288		23.47%	
1968/69	6760	7288	27429	1662.7	6.45%	1371	3034	24.65%	222.80%
1969/70	7742	8336	27534	105.8	0.39%	1377	1483	28.12%	522.22%
1970/71	8631	9320	30347	2812.3	10.21%	1517	4330	28.44%	199.35%
1971/72	9863	10606	36707	6359.9	20.96%	1835	8195	26.87%	120.35%
1972/73	10819	11637	44563	7856.4	21.40%	2228	10085	24.28%	107.28%
1973/74	13761	14666	49061	4498	10.09%	2453	6951	28.05%	197.97%
1974/75	17774	18884	57235	8173.7	16.66%	2862	11035	31.05%	161.06%
1975/76	21420	22734	73139	15904	27.79%	3657	19561	29.29%	109.50%
1976/77	24906	26580	80110	6971	9.53%	4005	10976	31.09%	226.90%
1977/78	27077	29197	88049	7939.5	9.91%	4402	12342	30.75%	219.39%

Sources: Reserve Bank of Australia, Australian Economic Statistics 1949-50 to 1994-95, Table 2.8 page 78

R. H Scott, The Value of Land in Australia, Table 9, p 31

Table 2: Commonwealth Government Taxation Receipts compared to Land Values, 1967/68 to 1977/78 ($million)

	Individual income tax	Company tax	Total taxes, fees etc.	Land Values	Annual Increment	Rate of Increase	Current Yield	Total Land Income	Personal Income tax % of land value	Personal Income tax % of land income	Company tax % of land value	Company tax % of land income
1967/68	2175	823	4954	25766			1288		8.44%		3.19%	
1968/69	2377	986	5533	27429	1662.7	6.45%	1371	3034	8.67%	78.34%	3.59%	32.50%
1969/70	2855	1122	6389	27534	105.8	0.39%	1377	1483	10.37%	192.58%	4.07%	75.68%
1970/71	3175	1358	7199	30347	2812.3	10.21%	1517	4330	10.46%	73.33%	4.47%	31.37%
1971/72	3765	1436	7983	36707	6359.9	20.96%	1835	8195	10.26%	45.94%	3.91%	17.52%
1972/73	4084	1520	8522	44563	7856.4	21.40%	2228	10085	9.16%	40.50%	3.41%	15.07%
1973/74	5485	1907	10955	49061	4498	10.09%	2453	6951	11.18%	78.91%	3.89%	27.43%
1974/75	7709	2306	14232	57235	8173.7	16.66%	2862	11035	13.47%	69.86%	4.03%	20.90%
1975/76	9213	2463	17003	73139	15904	27.79%	3657	19561	12.60%	47.10%	3.37%	12.59%
1976/77	11047	2753	19813	80110	6971	9.53%	4005	10976	13.79%	100.64%	3.44%	25.08%
1977/78	12118	3010	21549	88049	7939.5	9.91%	4402	12342	13.76%	98.19%	3.42%	24.39%

Sources: Reserve Bank of Australia, Australian Economic Statistics 1949-50 to 1994-95, Table 2.17 page 92
R. H Scott, The Value of Land in Australia, Table 9, p 31

Table 3: Commonwealth Government Taxation Receipts compared to Land Values, 1964/65 to 1977/78 ($million)

	Individual income tax	Company tax	Total taxes, fees etc.	Land Values	Annual Increment	Rate of Increase	Current Yield	Total Land Income	Personal Income tax as % of land value	Personal Income tax as % of land income	Company tax as % of land value	Company tax as % of land income
1964/65	1569	700	3816	13851			693		11.33%		5.05%	
1965/66	1729	791	4219	15441	1590.7	11.48%	772	2363	11.20%	73.18%	5.12%	33.48%
1966/67	1921	774	4491	16522	1080.8	7.00%	826	1907	11.63%	100.74%	4.68%	40.59%
1967/68	2175	823	4954	18232	1710.3	10.35%	912	2622	11.93%	82.95%	4.51%	31.39%
1968/69	2377	986	5533	19756	1523.3	8.35%	988	2511	12.03%	94.66%	4.99%	39.27%
1969/70	2855	1122	6389	20929	1173.5	5.94%	1046	2220	13.64%	128.61%	5.36%	50.54%
1970/71	3175	1358	7199	22386	1457.2	6.96%	1119	2577	14.18%	123.23%	6.07%	52.71%
1971/72	3765	1436	7983	27801	5414.2	24.19%	1390	6804	13.54%	55.33%	5.17%	21.10%
1972/73	4084	1520	8522	35213	7412	26.66%	1761	9173	11.60%	44.52%	4.32%	16.57%
1973/74	5485	1907	10955	41095	5882.6	16.71%	2055	7937	13.35%	69.10%	4.64%	24.03%
1974/75	7709	2306	14232	48091	6996.2	17.02%	2405	9401	16.03%	82.00%	4.80%	24.53%
1975/76	9213	2463	17003	61583	13491.6	28.05%	3079	16571	14.96%	55.60%	4.00%	14.86%
1976/77	11047	2753	19813	68413	6829.8	11.09%	3421	10250	16.15%	107.77%	4.02%	26.86%
1977/78	12118	3010	21549	73613	5200.7	7.60%	3681	8881	16.46%	136.44%	4.09%	33.89%

Sources: Reserve Bank of Australia, Australian Economic Statistics 1949-50 to 1994-95, Table 2.17 pages 92-93
R H Scott, The Value of Land in Australia, Table 7a, p 28

Table 4: Australian Taxation Receipts compared to Land and Resource Values, 1910-11 to 1998-99 ($million)

Fiscal Year	(1) Total Australian Taxation	(2) Total Taxation as % of GDP	(3) Individual income tax	(4) Company tax	(21) Value of Land Resources	(24) Current Yield	(25) Accrual Yield	(27) Total Smoothed Land Income	(30) Personal Income tax as % of smoothed land income	(33) Company tax as % of smoothed land income	(35) Total Aust taxes as % of smoothed land income	(36) Company and personal income tax as % of smoothed land income	(37) Smoothed land income as % of company and personal income tax
	$m		$m	$m	$m	$m	$m	$m					
1910/11	44	6.49			862	43	17.0						
1911/12	51	6.92			914	46	18.0	63.7	0.0%	0.0%	79.9%	0.0%	
1912/13	53	6.61			958	48	18.9	66.8	0.0%	0.0%	79.5%	0.0%	
1913/14	55	6.40			980	49	19.3	68.3	0.0%	0.0%	81.0%	0.0%	
1914/15	56	6.68			1030	52	20.3	71.8	0.0%	0.0%	78.1%	0.0%	
1915/16	68	7.05			1048	52	20.6	73.0	0.0%	0.0%	93.7%	0.0%	
1916/17	67	6.58			1067	53	21.0	74.3	0.0%	0.0%	90.4%	0.0%	
1917/18	73	6.88			1096	55	21.6	76.4	0.0%	0.0%	95.7%	0.0%	
1918/19	91	7.98			1108	55	21.8	77.2	0.0%	0.0%	118.4%	0.0%	
1919/20	117	9.34			1132	57	22.3	78.9	0.0%	0.0%	148.5%	0.0%	
1920/21	149	10.78			1216	61	23.9	84.7	0.0%	0.0%	176.0%	0.0%	
1921/22	149	10.78			1297	65	25.5	90.4	0.0%	0.0%	164.5%	0.0%	
1922/23	155	10.26			1343	67	26.4	93.6	0.0%	0.0%	165.7%	0.0%	

Fiscal Year	(1) Total Australian Taxation	(2) Total Taxation as % of GDP	(3) Individual income tax	(4) Company tax	(21) Value of Land Resources	(24) Current Yield	(25) Accrual Yield	(27) Total Smoothed Land Income	(30) Personal Income tax as % of smoothed land income	(33) Company tax as % of smoothed land income	(35) Total Aust taxes as % of smoothed land income	(36) Company and personal income tax as % of smoothed land income	(37) Smoothed land income as % of company and personal income tax
	$m		$m	$m	$m	$m	$m	$m					
1923/24	161	10.29			1419	71	27.9	98.9	0.0%	0.0%	163.3%	0.0%	
1924/25	171	9.91			1500	75	29.5	104.5	0.0%	0.0%	163.3%	0.0%	
1925/26	180	10.85			1578	79	31.1	110.0	0.0%	0.0%	163.7%	0.0%	
1926/27	199	11.49			1665	83	32.8	116.0	0.0%	0.0%	171.3%	0.0%	
1927/28	201	11.57			1773	89	34.9	123.5	0.0%	0.0%	162.9%	0.0%	
1928/29	204	11.90			1862	93	36.6	129.7	0.0%	0.0%	157.1%	0.0%	
1929/30	209	13.36			1933	97	38.0	134.7	0.0%	0.0%	155.4%	0.0%	
1930/31	197	15.30			1954	98	38.5	136.2	0.0%	0.0%	144.7%	0.0%	
1931/32	196	16.18			1893	95	37.3	131.9	0.0%	0.0%	148.5%	0.0%	
1932/33	207	16.41			1713	86	33.7	119.4	0.0%	0.0%	173.8%	0.0%	
1933/34	202	14.93			1672	84	32.9	116.5	0.0%	0.0%	173.8%	0.0%	
1934/35	211	14.73			1636	82	32.2	114.0	0.0%	0.0%	185.1%	0.0%	
1935/36	232	14.76			1618	81	31.8	112.7	0.0%	0.0%	206.1%	0.0%	
1936/37	242	14.09			1630	82	32.1	113.6	0.0%	0.0%	213.1%	0.0%	
1937/38	264	14.22			1647	82	32.4	114.8	0.0%	0.0%	230.2%	0.0%	
1938/39	276	15.19			1686	84	33.2	117.5	0.0%	0.0%	235.3%	0.0%	
1939/40	318	16.06			1711	86	33.7	119.2	0.0%	0.0%	266.8%	0.0%	

Fiscal Year	(1) Total Australian Taxation	(2) Total Taxation as % of GDP	(3) Individual income tax	(4) Company tax	(21) Value of Land Resources	(24) Current Yield	(25) Accrual Yield	(27) Total Smoothed Land Income	(30) Personal Income tax as % of smoothed land income	(33) Company tax as % of smoothed land income	(35) Total Aust taxes as % of smoothed land income	(36) Company and personal income tax as % of smoothed land income	(37) Smoothed land income as % of company and personal income tax
	$m		$m	$m	$m	$m	$m	$m					
1940/41	364	16.94			1707	85	159.9	245.2	0.0%	0.0%	148.3%	0.0%	
1941/42	474	18.96			1729	86	161.9	248.4	0.0%	0.0%	190.7%	0.0%	
1942/43	567	19.84			1792	90	167.8	257.4	0.0%	0.0%	220.3%	0.0%	
1943/44	650	22.38			1807	90	169.2	259.6	0.0%	0.0%	250.5%	0.0%	
1944/45	749	26.37			1831	92	171.5	263.0	0.0%	0.0%	285.0%	0.0%	
1945/46	782	26.65			1930	97	180.7	277.2	0.0%	0.0%	282.2%	0.0%	
1946/47	863	27.64			2049	102	191.9	294.3	0.0%	0.0%	293.1%	0.0%	
1947/48	947	25.28			2219	111	207.8	318.8	0.0%	0.0%	297.2%	0.0%	
1948/49	1098	25.38			2418	121	226.4	347.3	0.0%	0.0%	316.0%	0.0%	
1949/50	1160	21.90	392	167	2758	138	258.3	396.2	98.9%	42.2%	292.8%	141.1%	70.9%
1950/51	1620	23.00	722	181	3219	161	301.5	462.4	156.1%	39.1%	350.3%	195.3%	51.2%
1951/52	2058	27.10	800	302	3578	179	335.1	514.0	155.7%	58.8%	400.4%	214.4%	46.6%
1952/53	2029	23.60	775	334	3856	193	361.1	553.9	139.9%	60.3%	366.3%	200.2%	49.9%
1953/54	2085	22.20	788	268	4388	219	410.9	630.3	125.0%	42.5%	330.8%	167.5%	59.7%
1954/55	2184	21.80	720	343	4885	244	457.5	701.7	102.6%	48.9%	311.2%	151.5%	66.0%
1955/56	2346	21.70	773	373	5321	266	498.3	764.4	101.1%	48.8%	306.9%	149.9%	66.7%

Fiscal Year	(1) Total Australian Taxation	(2) Total Taxation as % of GDP	(3) Individual income tax	(4) Company tax	(21) Value of Land Resources	(24) Current Yield	(25) Accrual Yield	(27) Total Smoothed Land Income	(30) Personal Income tax as % of smoothed land income	(33) Company tax as % of smoothed land income	(35) Total Aust taxes as % of smoothed land income	(36) Company and personal income tax as % of smoothed land income	(37) Smoothed land income as % of company and personal income tax
	$m		$m	$m	$m	$m	$m	$m					
1956/57	2588	22.00	807	432	5884	294	551.0	845.2	95.5%	51.1%	306.2%	146.6%	68.2%
1957/58	2758	22.90	870	429	6517.8	326	581.6	907.5	95.9%	47.3%	303.9%	143.1%	69.9%
1958/59	2736	21.10	777	437	7326.9	366	653.8	1020.1	76.2%	42.8%	268.2%	119.0%	84.0%
1959/60	3030	21.20	884	456	8168.3	408	728.8	1137.3	77.7%	40.1%	266.4%	117.8%	84.9%
1960/61	3408	22.40	1037	575	9363.8	468	835.5	1303.7	79.5%	44.1%	261.4%	123.6%	80.9%
1961/62	3458	22.20	1074	560	9933.0	497	886.3	1383.0	77.7%	40.5%	250.0%	118.2%	84.6%
1962/63	3564	21.20	1083	514	11616.0	581	1036.5	1617.3	67.0%	31.8%	220.4%	98.7%	101.3%
1963/64	3976	21.30	1271	580	12589.0	629	1123.3	1752.7	72.5%	33.1%	226.8%	105.6%	94.7%
1964/65	4620	22.50	1569	700	13902.4	695	1240.5	1935.6	81.1%	36.2%	238.7%	117.2%	85.3%
1965/66	5090	23.50	1729	791	14815.1	741	1321.9	2062.7	83.8%	38.3%	246.8%	122.2%	81.9%
1966/67	5464	22.90	1921	774	16980.4	849	1515.1	2364.1	81.3%	32.7%	231.1%	114.0%	87.7%
1967/68	6047	23.70	2175	823	18308.7	915	1633.6	2549.1	85.3%	32.3%	237.2%	117.6%	85.0%
1968/69	6760	23.50	2377	986	20200.4	1010	1802.4	2812.5	84.5%	35.1%	240.4%	119.6%	83.6%
1969/70	7742	24.30	2855	1122	22450.9	1123	2003.2	3125.8	91.3%	35.9%	247.7%	127.2%	78.6%
1970/71	8631	24.60	3175	1358	25811.3	1291	2303.1	3593.7	88.4%	37.8%	240.2%	126.1%	79.3%
1971/72	9863	25.10	3765	1436	34511.6	1726	3079.4	4805.0	78.4%	29.9%	205.3%	108.2%	92.4%

Fiscal Year	(1) Total Australian Taxation	(2) Total Taxation as % of GDP	(3) Individual income tax	(4) Company tax	(21) Value of Land Resources	(24) Current Yield	(25) Accrual Yield	(27) Total Smoothed Land Income	(30) Personal Income tax as % of smoothed land income	(33) Company tax as % of smoothed land income	(35) Total Aust taxes as % of smoothed land income	(36) Company and personal income tax as % of smoothed land income	(37) Smoothed land income as % of company and personal income tax
	$m		$m	$m	$m	$m	$m	$m					
1972/73	10819	24.20	4084	1520	39883.6	1994	3558.7	5552.9	73.5%	27.4%	194.8%	100.9%	99.1%
1973/74	13761	25.70	5485	1907	43204.4	2160	3855.0	6015.3	91.2%	31.7%	228.8%	122.9%	81.4%
1974/75	17774	27.50	7709	2306	55801.3	2790	4979.0	7769.1	99.2%	29.7%	228.8%	128.9%	77.6%
1975/76	21420	28.00	9213	2463	59979.7	2999	5351.9	8350.8	110.3%	29.5%	256.5%	139.8%	71.5%
1976/77	24906	28.40	11047	2753	66001.4	3300	5889.2	9189.2	120.2%	30.0%	271.0%	150.2%	66.6%
1977/78	27077	28.40	12118	3010	72395.6	3620	6459.7	10079.5	120.2%	29.9%	268.6%	150.1%	66.6%
1978/79	29543	27.20	12791	2943	91259.5	4563	8142.9	12705.9	100.7%	23.2%	232.5%	123.8%	80.8%
1979/80	34388	27.90	15033	3303	144215	7211	12868.0	20078.7	74.9%	16.5%	171.3%	91.3%	109.5%
1980/81	40566	28.80	17532	4579	174205	8710	15543.9	24254.2	72.3%	18.9%	167.3%	91.2%	109.7%
1981/82	47098	29.70	21205	4902	221300	11065	19746.1	30811.1	68.8%	15.9%	152.9%	84.7%	118.0%
1982/83	51729	30.00	22943	4693	242227	12111	21613.4	33724.7	68.0%	13.9%	153.4%	81.9%	122.0%
1983/84	56746	29.00	24671	4471	245200	12260	21878.7	34138.7	72.3%	13.1%	166.2%	85.4%	117.1%
1984/85	66313	30.50	29256	5497	279700	13985	24957.0	38942.0	75.1%	14.1%	170.3%	89.2%	112.1%
1985/86	73608	30.50	32673	6004	302600	15130	27000.3	42130.3	77.6%	14.3%	174.7%	91.8%	108.9%
1986/87	82995	31.30	38000	6573	357600	17880	31907.9	49787.9	76.3%	13.2%	166.7%	89.5%	111.7%
1987/88	94476	31.50	41811	8648	471500	23575	42070.9	65645.9	63.7%	13.2%	143.9%	76.9%	130.1%

Fiscal Year	(1) Total Australian Taxation	(2) Total Taxation as % of GDP	(3) Individual income tax	(4) Company tax	(21) Value of Land Resources	(24) Current Yield	(25) Accrual Yield	(27) Total Smoothed Land Income	(30) Personal Income tax as % of smoothed land income	(33) Company tax as % of smoothed land income	(35) Total Aust taxes as % of smoothed land income	(36) Company and personal income tax as % of smoothed land income	(37) Smoothed land income as % of company and personal income tax
	$m		$m	$m	$m	$m	$m	$m					
1988/89	106137	31.20	47433	10106	541700	27085	48334.7	75419.7	62.9%	13.4%	140.7%	76.3%	131.1%
1989/90	115408	31.10	49928	12784	585838	29292	52273.1	81565.0	61.2%	15.7%	141.5%	76.9%	130.1%
1990/91	119179	31.50	50156	14253	602102	30105	53724.3	83829.4	59.8%	17.0%	142.2%	76.8%	130.2%
1991/92	115627	29.90	46830	14091	581976	29099	51928.5	81027.3	57.8%	17.4%	142.7%	75.2%	133.0%
1992/93	118724	29.40	47528	14237	627330	31367	55975.3	87341.8	54.4%	16.3%	135.9%	70.7%	141.4%
1993/94	126146	29.60	50571	13477	675164	33758	60243.4	94001.6	53.8%	14.3%	134.2%	68.1%	146.8%
1994/95	139350	30.70	54635	16142	723875	36194	64589.8	100783.6	54.2%	16.0%	138.3%	70.2%	142.4%
1995/96	147827		60414	18252	738025	36901	65852.4	102753.6	58.8%	17.8%	143.9%	76.6%	130.6%
1996/97	159668		66453	19173	820648	41032	73224.7	114257.1	58.2%	16.8%	139.7%	74.9%	133.4%
1997/98	167919		70822	19406	887076	44354	79151.9	123505.7	57.3%	15.7%	136.0%	73.1%	136.9%
1998/99	177884		76728	20734	952908	47645	85025.9	132671.3	57.8%	15.6%	134.1%	73.5%	136.1%

BIBLIOGRAPHY

Aaron, H J. 1974. "A New View of Property Tax Incidence." *American Economic Review (Papers and Proceedings)*, 64, pp. 212-21.

Aaron, Henry J. 1975. *Who Pays the Property Tax: A New View*. Washington: Brookings Institution.

Andelson, Robert V ed. 1979. *Critics of Henry George: A Centenary Appraisal of Their Strictures on 'Progress & Poverty'*. Cranbury, New Jersey: Fairleigh Dickinson University Press.

Archer, R W. 1972. *Site Value Taxation in Central Business District Redevelopment: Sydney, Australia*. Washington, DC: Urban Land Institute.

Archer, R W. 1977. "The Public Land and Leasehold System in Canberra, Australia: The Use of the Leasehold Land Tenure Base for Financing the Capital's Development 1958-71." *American Journal of Economics and Sociology*, 36, pp. 351-66.

Arnott, Richard. 1979. "Optimal City Size in a Spatial Economy." *Journal of Urban Economics*, 6, pp. 65-89.

Arnott, R J and J E Stiglitz. 1979. "Aggregate Land Rents, Expenditure on Public Goods and Optimal City Size." *Quarterly Journal of Economics*, 93, pp. 471-500.

Arrow, Kenneth J and Tibor Scitovsky eds. 1969. *Readings in Welfare Economics*. London: Allen and Unwin.

Becker, Arthur P ed. 1969. *Land and Building Taxes: Their Effect on Economic Development*. Madison, Wisconsin: University of Wisconsin Press.

Becker, Arthur P. 1970. "Land Value Taxation: Pro and Con - Arguments for Changing the Real Estate Tax to a Land Value Tax." *Tax Policy*, 37:9-12, pp. 15-31.

Boulding, Kenneth E and George J Stigler eds. 1953. *Readings in Price Theory*. London: Allen & Unwin.

Brennan, Frank, *Canberra in Crisis – A History of Land Tenure and Leasehold Administration*, Dalton, Canberra, 1971

Brown, H G. 1917. "The Ethics of Land-Value Taxation." *Journal of Political Economy*, 25, pp. 464-92.

Brown, Harry Gunnison. 1918. *The Theory of Earned and Unearned Incomes*. Columbia, Missouri.

Brown, H G. 1918-19. “An Oversight in the Theory of Incidence.” *Quarterly Journal of Economics*, 33, pp. 734-36.

Brown, H G. 1918-19. “An Eminent Economist Confused.” *Quarterly Journal of Economics*, 33, pp. 567-57.

Brown, Harry Gunnison. 1924. *The Economics of Taxation*.

Brown, H G. 1924. “Is a Tax on Site Value Never Shifted?” *Journal of Political Economy*, 32, pp. 375-82.

Brown, H G. 1926. “Land Rent as a Function of Population Growth.” *Journal of Political Economy*, 34, pp. 274-88.

Brown, H G. 1927. “Land Speculation and Land-Value Taxation.” *Journal of Political Economy*, 35, pp. 390-402.

Brown, H G. 1939. “The Incidence of a General Output or a General Sales Tax.” *Journal of Political Economy*, 47, pp. 254-62.

Brown, H G. 1946. “The Alleged Injustice of Increasing Land Value Taxation without Compensation.” *American Journal of Economics and Sociology*, 5, pp. 327-50.

Brown, H G. 1949. “The Challenge of Australian Tax Policy: Can Professional Economists Continue to Ignore Experience with Land Value Taxation?” *American Journal of Economics and Sociology*, 8, pp. 378-400.

Brown, H G, H S Buttenheim, and et al. eds. 1955. *Land-Value Taxation around the World*. New York: Robert Schalkenbach Foundation.

Buchanan, D H. 1929. “The Historical Approach to Rent and Price Theory.” *Economica*, 9, pp. 123-55.

Calvo, G A and C A Rodriguez. 1979. “The Surprising Incidence of a Tax on Pure Rent: An Old Answer in a New Container.” *Journal of Political Economy*, 87, pp. 869-74.

Churchill, Winston Spencer, *The People’s Rights*, Hodder & Stoughton, London, 1909

Clark, John Bates. 1887. *The Philosophy of Wealth*. Boston.

Clark, John Bates. 1888. *Capital and its Earnings*: American Economic Association.

Clark, John B. 1890-91. “Distribution as Determined by a Law of Rent.” *Quarterly Journal of Economics*, 5, pp. 289-318.

Clark, John B. 1894-95. “The Origin of Interest.” *Quarterly Journal of Economics*, 9, pp. 257-78.

Clark, John Bates. 1902. *The Distribution of Wealth: A Theory of Wages, Interest and Profits*. New York: Macmillan.

Clark, John Bates. 1927. *Essentials of Economic Theory*. New York.

de Jouvenal, Bertrand. 1952. *The Ethics of Redistribution*, Cambridge University Press

Dowell, Stephen. 1888. *A History of Taxation and Taxes in England*. London.

Dwyer, Terence M. 1980. *A History of the Theory of Land-Value Taxation* Harvard University, Doctoral dissertation.

Dwyer, Terence M. 1982. "Henry George's Thought in Relation to Modern Economics" *American Journal of Economics and Sociology*, October 1982

Dwyer, T M (with Jim Cox). 1988. *Income Support Policies, Taxation and Incentives* Economic Planning Advisory Council Paper no 35 Canberra, October, 1988

Dwyer, T M (with J T Larkin). 1993a. "Cascading of Indirect Taxes: Problems and Policy Issues" *Australian Tax Forum* v 10 No 2

Dwyer, T M. 1993. *Family Taxation, Participation Rates and Unemployment: A Report for the Taskforce on Employment Opportunities,* Department of the Prime Minister and Cabinet, Canberra, 31 October 1993

Dwyer, T M (with J T Larkin). 1994. *A tax relief system for Australian exports: A study of the cascading of business taxes and 'user charges' on Australian exports and the design of a tax relief system*, Business Council of Australia 1994 ISBN 0 909865 56 6

Dwyer, T M and Larkin J T. 1993. *Monopoly and the Distribution of Petroleum Products*, Submission to the Productivity Commission, Motor Trades Association of Australia, 1993

Dwyer, T M (with JT Larkin). 1995a. *Refocusing Microeconomic Reform* Business Council of Australia, Melbourne 1995, ISBN 0 909865 57 4

Dwyer, T M (with JT Larkin). 1995b. *The Taxation of Company and Business Income* Australian Tax Research Foundation Study No 25, Sydney, 1995

Dwyer, T M. 1997. "Electronic Elimination of Financial Taxes: the Future Role of the Internet and Electronic Cash" *Australian Tax Forum* vol 13 No 3, 1997 pp 361-400

Dwyer, Terry (editor). 1998a. *The Missing Tax Debate: Can Australia Afford Not to Compete on Tax?* Asia Pacific Press, National Centre for Development Studies, Australian National University 1998, ISBN 0 7315 2387 3

Dwyer, T M. 1998b. *Indirect Taxes and International Competitiveness* Paper presented to 27th Conference of Economists University of Sydney 27 September to 1 October 1998

Dwyer, Terry. 1998c. "Capital Gains Tax: Can We Afford It?" *ASX Perspective* 3rd quarter

1998 pp 8-12 ISSN 1323-5877

Dwyer, Terry. 1999a. "Can Australian Multinationals Remain Australian?" *ASX Perspective* 3nd quarter 1999 pp16-18 ISSN 1323-5877

Dwyer, Terry (editor). 1999b. *Resource Tax Policy in Countries of the Asia Pacific Region* Asia Pacific Press, National Centre for Development Studies, Australian National University 1999, ISBN 0 7315 3609 6

Dwyer, T M and Lim, R K H. 1999b. *Infrastructure Pricing Provision and Access: Implications for Rural Australia* Rural Industries Research and Development Corporation, RIRDC Publication No. 99/162, October 1999, Canberra, ISBN 0 642 58011 1

Dwyer, T M and R K H Lim. 2001a. *Some observations on economic arguments advanced on behalf of infrastructure owners in relation to the Productivity Commission inquiry into access regimes* Submission 53 to the Productivity Commission Inquiry into the National Access Regime, Canberra, March

Dwyer, T M and Lim, R K H. 2001b. *Infrastructure Regulation: Cost Methodologies and Processes for Rural and Regional Australia* Rural Industries Research and Development Corporation, Canberra, May, ISBN 0 642 58279 3

Dwyer, Terry. 2003. "The Taxable Capacity of Australian Land and Resources" *Australian Tax Forum* Vol 18 Number 1, pp 21-68 (copy attached as Appendix E)

Dwyer, Terry and Deborah Dwyer. 2003. "Tax Competition, Economic Hegemony and the Future" *Economic Analysis and Policy* Vol 33 No 2, September, pp 193-219, ISSN 0313-5926

Dwyer, Terry. 2004. *The Taxation of Shared Family Incomes*, Perspectives on Tax Reform (2), CIS Policy Monograph 61, Centre for Independent Studies, Sydney

Dwyer Terry. 2005. "Equal Rights, Competition and Monopoly: Henry George's Insight into Current Debates on Regulation of Common Use Infrastructure" pp 196-215 in John Laurent, editor, *Henry George's Legacy in Economic Thought*, Edward Elgar, Cheltenham, England, ISBN 1 84376 885 2

Dwyer, Terence. 2006. "Urban Water Policy: In Need of Economics" *Agenda: A Journal of Policy Analysis and Reform* Vol 13 No 1, pp 3-16, Australian National University ISSN 1322-1833

Eaton, B. Curtis and Richard Lipsey. 1976. "The Theory of Spatial Preemption as a Barrier to Entry." *Queen's University Economics Discussion Paper #208*.

Eaton, B. Curtis and Richard Lipsey. 1978. "Freedom of Entry and the Existence of Pure Profit." *Economic Journal*, 88, pp. 455-69.

Ellickson, Donald L. 1966. "A History of Land Taxation Theory." University of Wisconsin: Madison.

Feldstein, Martin S. 1976. “Compensation in Tax Reform.” *National Tax Journal*, 29, pp. 123-30.

Feldstein, M. 1976. “On the theory of tax reform” *Journal of Public Economics* v 6 July-August 1976 pp 77-104

Feldstein, Martin S. 1977. “The Surprising Incidence of a Tax on Pure Rent: A New Answer to an Old Question.” *Journal of Political Economy*, 85, pp. 349-60.

Flatters, F, V Henderson, and P Mieszkowski. 1974. “Public Goods, Efficiency, and Regional Fiscal Equalization.” *Journal of Public Economics*, 3, pp. 99-112.

Gaffney, Mason ed. 1967. *Extractive Resources and Taxation*. Madison: University of Wisconsin Press.

Gaffney, Mason. 1970. “Tax Induced Slow Turnover of Capital I.” *American Journal of Economics and Sociology*, 29, pp. 25-32.

Gaffney, Mason. 1970. “Tax Induced Slow Turnover of Capital II.” *American Journal of Economics and Sociology*, 29, pp. 179-97.

Gaffney, Mason. 1970. “Tax Induced Slow Turnover of Capital III.” *American Journal of Economics and Sociology*, 29, pp. 277-87.

Gaffney, Mason. 1970. “Tax Induced Slow Turnover of Capital IV.” *American Journal of Economics and Sociology*, 29, pp. 409-24.

Gaffney, Mason. 1971. “Tax Induced Slow Turnover of Capital V.” *American Journal of Economics and Sociology*, 30, pp. 105-11.

Gaffney, Mason. 1971. “The Property Tax is a Progressive Tax,” in *National Tax Association-Taxation Institute of America, Proceedings of the 64th Annual Conference on Taxation*: National Tax Association-Taxation Institute of America, pp. 408-26.

Gaffney, Mason. 1972. “Land Rent, Taxation and Public Policy: The Sources, Nature and Functions of Urban Land Rent.” *American Journal of Economics and Sociology*, 31, pp. 241-57.

Gaffney, Mason. 1972. “What is Property Tax Reform?” *American Journal of Economics and Sociology*, 31, pp. 139-52.

Gaffney, Mason. 1973. “Tax Reform to Release Land,” in *Modernizing Urban Land Policy*. Marion Clawson ed. Baltimore: Johns Hopkins.

Gaffney, Mason. 1973. “Land Rent, Taxation and Public Policy: Taxation and the Functions of Urban Land Rent.” *American Journal of Economics and Sociology*, 32, pp. 17-34.

Gaffney, Mason. 1978. “Review of H.J. Aaron 'Who Pays the Property Tax: A New View'.” *Journal of Economic Literature*, 16, pp. 131-33.

Gaffney, Mason, and Fred Harrison. 1994. *The Corruption of Economics*, Shepheard-Walwyn (Publishers) Ltd, London.

Garland, John Manson. 1934. *Economic Aspects of Australian Land Taxation*: Melbourne University Press.

Garland, J M. 1935. “The Incidence of a Progressive Land Tax.” *Economic Record*, 11, pp. 45-156.

Garnaut, R and A Clunies Ross. 1975. “Uncertainty, Risk Aversion and the Taxing of Natural Resource Projects.” *Economic Journal*, 85, pp. 272-87.

Garnaut, R and A Clunies Ross. 1979. “The Neutrality of the Resource Rent Tax.” *Economic Record*, 55, pp. 193-201.

George, Henry. 1879. *Progress and Poverty – An inquiry into the cause of industrial depressions and of increase of want with increase of wealth …The Remedy*, Robert Schalkenbach Foundation, New York, reprint 1979

George, Henry. 1891. *The Condition of Labour: An Open Letter to Pope Leo XIII*. New York.

George, Henry. 1892. *A Perplexed Philosopher*.

Gould, J R. 1973. “Meade on External Economics: Should the Beneficiaries be Taxed?” *Journal of Law and Economics*, 16, pp. 53-66.

Graham, A Douglas. 1939. *The Life of the Right Honourable Sir Samuel Walker Griffith GCMG, PC* John Murtagh Macrossan lecture for 1938. University of Queensland, Law Book Company.

Gray, Lewis Cecil. 1913-14. “Rent Under the Assumption of Exhaustibility.” *Quarterly Journal of Economics*, 28, pp. 466-89.

Groves, Harold M and D J Curran, editor. 1974. *Tax Philosophers*. Madison: University of Wisconsin Press.

Harriss, C. Lowell. 1970. “Equity of Heavier Reliance on Land Taxation (Location Value) and Less on Improvements.” *Tax Policy*, 37:9-12, pp. 3-13.

Harriss, C. Lowell ed. 1973. *Government Spending and Land Values*. Madison: University of Wisconsin Press.

Hartwick, J M. 1977. “Intergenerational Equity and the Investing of Rents from Exhaustible Resources.” *American Economic Review*, 67, pp. 972-74.

(Harvey) State Business Tax Review Committee (2001) *Full Report*, Melbourne, Victoria,

February

Hay, D A. 1976. “Sequential Entry and Entry-Deterring Strategies in Spatial Competition.” *Oxford Economic Papers*, 28, pp. 240-57.

Hayes, Harry Gordon. 1916-17. “Tax Exemption Through Tax Capitalization.” *National Tax Association Bulletin*, 2, pp. 69-73.

Hayes, Harry Gordon. 1919-20. “The Capitalization of the Land Tax.” *Quarterly Journal of Economics*, 34, pp. 373-80.

Heaton, H. 1924-25. “The Taxation of Unimproved Land in Australia.” *Quarterly Journal of Economics*, 39, pp. 410-49.

Henderson, J V. 1977. “Externalities in a Spatial Context: The Case of Air Pollution.” *Journal of Public Economics*, 7, pp. 89-110.

Holland, Daniel M ed. 1970. *The Assessment of Land Value*. Madison: University of Wisconsin Press.

Hollander, J H. 1894-95. “The Concept of Marginal Rent.” *Quarterly Journal of Economics*, 9, pp. 175-87.

Hotelling, H. 1931. “The Economics of Exhaustible Resources.” *Journal of Political Economy*, 39, pp. 137-75.

Hotelling, Harold (1938) *The general welfare in relation to problems of taxation and of railway and utility rates*, **Econometrica** 6 (1938), pp 242-269 reprinted in K. J. Arrow and T Scitovsky **Readings in Welfare Economics**, AEA and Allen & Unwin, London, 1969, pp 284-308

Hutchinson, A R. 1979. *Land Rent as Public Revenue in Australia-1976*. Melbourne: Land Values Research Group.

Industry Commission (1992) *Water Resources and Waste Water Disposal*, Report No. 26, 17 July 1992, AGPS, Canberra

Jaffe, W. 1975. “Leon Walras: An Economic Adviser *Manqué*.” *Economic Journal*, 85, pp. 810-23.

Kanemoto, Yoshitsugu. 1984. “Pricing and Investment Policies in a System of Competitive Commuter Railways” *Review of Economic Studies* vol LI pp 665-681

Kavanagh, Bryan, *Unlocking the Riches of Oz: a case study of the social and economic costs of real estate bubbles 1972 to 2006*, The Land Values Research Group, Melbourne, 2007

Kennedy, William. 1913. *English Taxation 1640-1799: An Essay on Policy and Opinion*.

Keynes, John Maynard. 1931. “Am I a Liberal? (1925),” in *Essays in Persuasion*. London: Macmillan, pp. 323-38.

Keynes, John Maynard. 1936. *The General Theory of Employment, Interest and Money*.

Kirzner, Israel M. 1978. *Competition and Entrepreneurship*. Chicago: University of Chicago Press.

Krelove, Russell. 1992. “Efficient tax exporting” *Canadian Journal of Economics* vol XXV No 1, February, pp 145-155

Lent, George E. 1967. “The Taxation of Land Value.” *IMF Staff Papers*, 14, pp. 89-121.

Lerner, Abba P. 1952. *The Economics of Control*. New York.

Lind, R C. 1973. “Spatial Equilibrium, the Theory of Rents and the Measurement of Benefits from Public Programs.” *Quarterly Journal of Economics*, 87, pp. 188-207.

Marshall, Alfred (1920) *Principles of Economics* Ninth (variorum) edition edited by C W Guillebaud, Macmillan 1961

Mieszkowski, P and Zodrow, G R. 1989. “Taxation and the Tiebout Model: The Differential Effects of Head Taxes, Taxes on Land Rents and Property Taxes” *Journal of Economic Literature* v 27 September 1989 pp 1098-1146

Mill, John Stuart. 1848-1871. *Principles of Political Economy: With Some of Their Applications to Social Philosophy*. Toronto Edition, 1965, Edited V. W. Bladen

Mill, John Stuart. 1875. “Papers on Land Tenure,” in *Dissertations and Discussions: Political, Philosophical and Historical*. New York, pp. 226-94.

Musgrave, Richard A. 1959. *The Theory of Public Finance: A Study in Public Economy* . New York: McGraw-Hill.

Musgrave, Richard A and Carl S Shoup. 1959. *Readings in the Economics of Taxation*. London:: Allen & Unwin.

Netzer, Dick. 1966. *Economics of the Property Tax*. Washington, D.C.: Brookings Institution.

Nozick, Robert. 1974. *Anarchy, State and Utopia*. New York: Basic Books.

Peterson, Frederick M and Anthony C Fisher. 1977. “The Exploitation of Extractive Resources: A Survey.” *Economic Journal*, 87, pp. 681-721.

Pigou, A C. 1947. *A Study in Public Finance*. London: Macmillan.

Pines, D and Y Weiss. 1976. “Land Improvement Projects and Land Values.” *Journal of Urban Economics*, 3, pp. 1-13.

Quick, John. 1883. “A History of Land Tenure in the Colony of Victoria.” Bendigo, Victoria.

Quick, Sir John. 1926. *Sir John Quick's Notebook* (Edited L. E. Fredman, Newcastle, New South Wales 1965, a reprint of Sir John Quick's recollections published in the Melbourne Herald as Sir John Quick's Notebook in nine parts between January 4 and 13, 1926)

Rabushka, A. 1979 *Hong Kong: A Study in Economic Freedom* University of Chicago Press

Ricardo, David. 1821. *The Principles of Political Economy and Taxation*. London.

Scheftel, Yetta. 1916. *The Taxation of Land Value*. Boston: Houghton Mifflin.

Schlatter, Richard. 1951. *Private Property: The History of an Idea*.

Schumpeter, Joseph A. 1954. *History of Economic Analysis*. New York: Oxford University Press.

Scott, R H. 1969. *The Value of Land in Australia*. Sydney: Reserve Bank of Australia.

Seligman, Edwin R A. 1927. *The Shifting and Incidence of Taxation*.

Shoup, Carl S. 1960. *Ricardo on Taxation*. New York: Columbia University Press.

Simons, Henry C. 1938. *Personal Income Taxation*. Chicago: University of Chicago Press.

Skouras, A. 1974. "The Allocation of Land Between Speculators and Users under a Land Ownership Tax: A Comment." *Economic Record*, 50, pp. 449-50.

Skouras, A. 1977. *Land and its Taxation in Recent Economic Theory*. Athens, Greece: Papazissis Publishers.

Skouras, A. 1978. "The Non-Neutrality of Land Taxation." *Public Finance*, 33, pp. 113-34.

Smith, Adam. 1776-1784. *An Inquiry into the Nature and Causes of the Wealth of Nations*.

Spencer, Herbert. 1850. *Social Statics*. London.

Stiglitz, Joseph E. 1977. "The Theory of Local Public Goods," in *The Economics of Public Services*. M S Feldstein and R P Inman eds. London, pp. 274-333.

Tiebout, Charles M. 1956. "A Pure Theory of Local Expenditure." *Journal of Political Economy*, 64, pp. 416-24.

Vickrey, William. 1969. "The Impact on Land Values of Taxing Buildings." *National Tax Association, Proceedings of 62nd Annual Conference (1969)*, pp. 86-89.

Vickrey, William. 1947. *Agenda for Progressive Taxation*, New York.

Vickrey, William. 1948. "Some Objections to Marginal-Cost Pricing" *Journal of Political Economy* v 56 pp 218-238 reprinted in Arnott, Richard et al editors (1994) *Public Economics: Selected papers by William Vickrey*, Cambridge University Press, pp 216-239

Vickrey, William. 1977. "The City as a Firm" in Feldstein, Martin et al editors *The Economics of Public Services: Proceedings of a Conference held by the International Economic Association at Turin*, Macmillan, London, pp 334-343 reprinted in Arnott, Richard et al editors (1994) *Public Economics: Selected papers by William Vickrey*, Cambridge University
Press, pp 339-349

Vickrey, William (1987) *Marginal- and Average- Cost Pricing* in Eatwell et al editors, **The New Palgrave**, v III, Macmillan, pp 311-318 reprinted in Arnott, Richard et al editors (1994) *Public Economics: Selected papers by William Vickrey*, Cambridge University Press, pp 197-215

Vickrey, William. 1994. *Public Economics*, Arnott, Richard et al editors, Cambridge University Press

von Böhm-Bawerk, E. 1894-95. "The Positive Theory of Capital and Its Critics: Part I." *Quarterly Journal of Economics*, 9, pp. 113-31.

von Böhm-Bawerk, E. 1894-95. "The Positive Theory of Capital and Its Critics: Part II." *Quarterly Journal of Economics*, 9, pp. 235.

von Böhm-Bawerk, E. 1894-95. "The Origin of Interest." *Quarterly Journal of Economics*, 9, pp. 380-87.

von Böhm-Bawerk, E. 1907-08. "The Nature of Capital: A Rejoinder." *Quarterly Journal of Economics*, 22, pp. 28-47.

von Böhm-Bawerk, Eugen. 1921. *Capital and Interest*.

Yandle, Bruce and Andy H Barnett. 1974. "Henry George, Property Rights and Environmental Quality: Classical Answers to 'New' Problems." *American Journal of Economics and Sociology*, 33, pp. 393-400.

ENDNOTES

---

[1] Adam Smith *An Inquiry into the Nature and Causes of the Wealth of Nations*, 1776, Glasgow Edition, Oxford, 1976, Page 844 Chapter V.ii.e

[2] See also Musgrave (1959) p 158.

[3] Mr Putin seems to have understood the importance of land revenues from oil and gas as a means for rebuilding the Russian State's fiscal base.

[4] Which is why it is the more distressing to have seen Australia abandon its superior rate-based funding of network infrastructure to take up inferior American and UK models of naive "user pays" which have delivered spiralling prices and shortages of water and electricity, inter alia. Australia's international investment attractiveness has been reduced by such rising infrastructure costs and shortages.

[5] Scheftel p 18.

[6] While sunk capital cannot be physically removed, depreciation need not be re-invested. Financial capital can be moved by bankers and portfolio managers with a click at the computer. (Financial capital is not, of course, real physical capital but represents the fluid command over resources which can be spent on consumption, creating real physical capital or purchasing existing assets such as land.)

[7] Land rent is to be distinguished from monopoly rent which arises where a barrier to entry or legislative fiat creates an arbitrary price, the excess of which over cost of production is capitalized as a monopoly rent.

[8] Some writers use "amortized", since we are talking of a tax reducing the market value of land, not increasing it. However, common usage has made "capitalized" the prevailing term and reflects the idea that the tax affects the capitalized market price of the asset.

[9] The term "effective marginal tax rate" is reserved for expressing the tax taken after allowing for relevant base adjustments. The term "equivalent marginal tax rate" is used where we are not only looking at taxes properly so described but the withdrawal of assistance. To lose a benefit of 50 cents for a dollar earned is not to pay a tax (one may still remain a net recipient) but the marginal incentive effect is equivalent to a taxpayer paying 50 cents on a dollar earned.

[10] The replacement of stamp duties by a "broad based, low rate" tax on financial institutions was a remarkably short-lived "tax reform". The tax is already happily forgotten but it is a nice demonstration that a broad based low rate tax on a mobile tax base is not such a good tax, after all. Tax competition killed the financial institutions duty quite effectively.

[11] By an actual elasticity of supply, I mean the ability to move the factor in reality. By a formal elasticity of supply, I mean the ability to supply the factor as before but change its fiscal appearance. For example, a tax on personal exertion income can be avoided by incorporating as a business and paying out earnings as dividends. A reduced formal elasticity of supply may in some cases be denounced as "tax avoidance" although, curiously, it does less economic damage than actual avoidance by real factor movement out of the jurisdiction. Barry Bracewell-Milnes was one of the first writers to make this point. In fact, one can look at tax planning as a means whereby the owners of mobile factors arrange for them to be supplied to the economy at their reservation prices, instead of being withdrawn altogether. A major advantage of land value taxation is that tax planning and tax avoidance simply do not work.

[12] Rabushka (1979) pp 62-63 quoting Lord Aberdeen's instructions of 4 January 1843 to Sir Henry Pottinger.

[13] Indeed, section 260 of the 1936 Income Tax Assessment Act owes its origins to attempts in earlier legislation to counteract "dummying" by squatters.

[14] Mill, John Stuart (1849-1872) *Principles of Political Economy with Some of their Applications to Social Philosophy*, Toronto Edition, 1965, Edited V. W. Bladen, Book 5, Chapter 5, Section 1, pp 858-859.

[15] Sir Winston Churchill, speech delivered at King's Theatre Edinburgh, July 17 1909. Alfred Marshall (1920) also discussed this issue in his Appendix G on onerous versus beneficial rates

[16] See Vickrey (1977). Vickrey was a professor at Columbia University and a Nobel Prize winner as well as a President of the American Economic Association. This article demonstrates a version of the George-Hotelling-Vickrey Theorem on how and when it is efficient to tax land values to fund public works and how the revenue may be adequate. Arnott and Stiglitz (1979) examine the generality of the Henry George Theorem that, in cities of optimal size, aggregate land rents equal expenditures on public goods. Stiglitz was formerly Chairman of the US Council of Economic Advisers, World Bank chief economist and is now at Columbia University. Both Vickrey and Stiglitz were Nobel prize winners in economics. Krelove (1992) examines the efficiency of land rent taxes and concludes that "in Henry George economies, an optimal allocation is an equilibrium outcome."

[17] See Hotelling (1938), Vickrey (1977) and Kanemoto (1984).

[18] The argument is that in a non-tax world the disadvantages of a non-urban business location are compensated for through lower non-urban land rents. However, after an income tax is introduced on labour and capital, the required reduction in non-urban rents may mean they should be negative to compensate for the post-tax disadvantages of a non-urban location. But since land rents can never go to zero (land has other, rural, uses), the effect is that

location decisions are now biased towards urban locations. The writer is not aware of a formal proof of this conjecture but it seems intuitively to accord with the stylized facts.

[19] It is interesting to observe that the pace of mergers and industry consolidation has proceeded even as Australia has implemented a "National Competition Policy". Curiously, the rise in profitability of monopoly utilities has even been blessed by regulators and Tribunals who seem to suffer from the notion that economic efficiency is best served by making sure consumers are charged a rate of return on the replacement cost of assets they paid for decades ago. It is hard to see how any sane theory of economic efficiency could countenance a result where consumers are charged two or three times for the same original capital investment merely because it has been corporatized or privatized. If making customers pay more than once to recover your capital investment is not the exercise of monopoly power what is?

[20] Industry Commission (1992) *Water Resources and Waste Water Disposal*, Report No. 26, 17 July 1992, AGPS, Canberra, p 93 note 2

[21] Dwyer, T M and Larkin, J T (1995), *Refocusing Microeconomic Reform* Business Council of Australia, Melbourne 1995, p 78

[22] Sir John Quick's Notebook Page 14.

[23] Scheftel p 32.

[24] Quoted in The Australasian, September 17, 1878, p 305, Scheftel p 25.

[25] Scheftel pp 26, 29.

[26] Graham writes of Griffith at p 49 "One bill, however, which he brought forward in 1890, but did not attempt to pass, calls for a special mention. This was a remarkable measure, which he termed the Elementary Law of Property, and in which were laid down certain principles of Natural Law, which declared that all persons should have equal right to life and freedom of opportunity, that the right to take advantage of natural forces belonged equally to all members of the community, that all land is by Natural Law the common property of the community and that every man is entitled to the full value of his labour. ... Some thirty years later he again brought the principles declared in the bill before the public. Shortly after his retirement from the bench, he published an article upon what he termed 'the fundamental error' of all social life .... and he suggested that if the community at large could be taught to regard the principles of Natural Law as set out in his elementary law of property as axiomatic, in the same way as they regarded many other rules of right and wrong, the world might at length attain to a fraternity rule ..."

[27] This is, of course, perfectly correct. The beauty of land value taxation is that it helps uncover the "right" price for parting with resources. As Henry rightly remarks, no

government should be so foolish as to throw away rents (the free allocation of property rights in irrigation licences is a recent example – which taxpayers now have to buy back!). On the other hand, no government should be so conservative or eco-fundamentalist as to lock up resources forever without valuing alternative uses from time to time. The Saudis understand perfectly well that to lock up their resources forever risks giving them current poverty with possible obsolescence of the resource (cheap and safe nuclear or solar power could render oil far less valuable). Land value taxation helps set a regularly updated price on resources so an informed decision can be made from time to time between depletion and conservation uses.