23RD ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE
SYDNEY, NEW SOUTH WALES, AUSTRALIA 15TH – 18TH JANUARY 2017

Transitioning from a transaction to a recurrent tax on property

Vince Mangioni
University of Technology Sydney
Peer-reviewed paper
Vincent.mangioni@uts.edu.au

ABSTRACT

The review of Australia's tax system of 2009/10 made a number of recommendations that contribute to improving housing mobility, particularly in the capital cities of Australia. Among the recommendations is the reduction or removal of upfront transaction taxes on the purchase price of property and replacing this impost with a recurrent tax spread across the holding period of property. While this recommendation inspires the Commonwealth, it impacts the revenue of state government over the medium transition period, the recommendation replaces a one-off tax stamp duty, with a highly visible annual land tax.

This paper examines the relationship and emerging trends between State government taxes that impact property and revenues from these sources and examines options for the transition from transaction taxes to a recurrent tax on land. Through the analysis of the conveyance stamp duty currently paid on property against an annual impost on land, it is determined that options exist for the transition from a less to more efficient tax on property, while maintaining robustness of revenue during a transition. The paper defines the benefits of improving revenue robustness as the primary trade-offs for the expansion of a highly visible annual tax on land while reducing one of the barriers to improving housing mobility.

Keywords: Transaction tax, recurrent land tax, housing mobility, revenue robustness

Land and property tax reform within Australia's tax reform agenda

The reform of land and property taxation is among the key recommendations resulting from the most recent review of Australia's tax system. This review, among other reforms proffers the replacement of conveyance stamp duty with a broad based state land tax, (Commonwealth of Australia 2009, Recommendation 51), a reform that builds on the Productivity Commissions recommendation that identified stamp duty as a barrier to entering home ownership (2004:23). In more recent years, this barrier has evolved further into a mobility tax prompted by bracket creep pushing housing acquisition costs to over 5 per cent of the purchase price of property in the capital cities of Australia.

Before examining the relationship of transaction and recurrent taxes on property, we first review the tax mix and revenue collection between the tiers of government in Australia, which has underlined the need for tax reform. Table 1 sets out the ranking of tax revenue collected from personal income, consumption and recurrent land tax in Australia. It further shows Australia's overall tax effort and revenue collection among the Organisation for Economic Cooperation and Development (OECD) countries, of which Australia sits in the bottom quartile, ranked 29 of the 34 OECD members (OECD 2012). While a Warburton and Hendy (2006) state Australia is relatively low taxing country, it is faced with two challenges that compound the complexity of its tax reform. The first challenge is shared with other countries being its ageing population. The second, which is largely unique to Australia, is its Vertical Fiscal Imbalance (VFI).

We now address each of these matters in turn, which sets the scene for reforming property taxation in Australia. The ageing population and the decreasing labour participation rates within Australia, requires remedies which include fiscal reform (Productivity Commission 2006:XIII). This has resulted in governments maintaining taxation on income steady and where possible reducing taxes on labour to retain Australians in the workforce longer and to attract labour from abroad. The need for a uniform land tax as a means of raising government revenue must be seen in the context of an ageing population in Australia, particularly over the next 40 years. This situation is most aptly summarised in the following commentary when discussing the problem of funding the needs of an ageing population with a reducing number of income taxpayers.

> The *2010 Intergenerational Report* again brought into focus that, GDP growth per person is projected to slow to an average of 1.5 per cent per year over the next 40 years. An increasingly large population of older Australians is expected to contribute to a substantial rise in Commonwealth Government spending as well, (Heferen 2011:1).

As increases in tax revenue from income has slowed over the past decade, so has the ability for the Commonwealth to increase funding to State and local government in Australia. This has intensified the importance for State and local government to grow their own source tax revenues from property, as well as reforming less efficient taxes including conveyance stamp duty.

Table 1. Australia's Tax Mix as a Percentage of GDP.

2012	**Income tax**	**GST/VAT**	**Recurrent land tax**	**Overall tax effort**
Australia	5th 15.9%	29th 7.7%	9th 1.4%	29th 27.3%
OECD Ave	11.4%	10.8%	1.0%	33.7%

Source: OECD Tax statistics 2012.

The second issue for Australia is VFI, under Australia's highly centralised tax system the states have the highest vertical fiscal imbalance. Table 2 sets out the extent of VFI in Australia, which has the second most centralised tax system in the OECD, with close to 82 per cent of tax revenue collected by the Commonwealth, being only marginally second to Mexico, with the OECD average at 54.5 per cent (OECD 2012). The Commonwealth of Australia sought to commence remedying VFI during 2016 by allowing the States to collect a percentage of income tax (Coorey 2016). The revenue collected by the states would correspondingly reduce the amount of grant revenue the Commonwealth would make to the States. In essence, Australia would revert back to its income tax collection arrangement it had in place with the states between 1901 and 1942.

In 1942, Mangioni (2016) highlights the rationale for the Commonwealth taking control of income taxes in order to fund the war effort, in which the federal government became the sole collector of income tax. It did this by passing laws which raised the federal tax rate and gave some of the proceeds back to the states on the condition they drop their income tax. States receive this money in the form of funding grants. Warren (2004) explains that technically, a state could still collect its own income tax from 1942, but this would mean its people would be taxed twice and the state would forfeit its funding grants from the Commonwealth. While faced with significant VFI and the opportunity to re-enter collection of income tax revenue, Coorey (2016) defines the reluctance of the States to recommence a shared income tax impost with the Commonwealth as proposed by the Commonwealth during 2016.

Table 2: Taxes raised and spent by level of government

	Commonwealth	State	Local
Total taxation raised (A)	81.7%	15.3%	3.0%
Total tax-funded own-purpose expenses (B)	40.3%	55.2%	4.5%
Degree of VFI (=A/B)	2.03	0.27	0.71

Source: ABS Cat No. 55120 2012

The final point to be addressed is in the tax expenditure debate, of which revenue foregone may contribute to reducing less efficient taxes such as transaction taxes on property. Table 3 lists the range of taxes currently applicable to property in one form or another in Australia and those which could be applicable to housing, but not imposed. Of particular note in Table 3 are taxes expended on negative gearing applicable to investment housing and capital gains tax expended on owner occupied residences. While income tax offsets resulting from negative gearing on investor rental housing is often cited for reform, it accounts for less than 20 per cent of the tax revenue expended compared with owner occupied housing through land tax and capital gains tax exemptions (Yates 2010).

Of the $45bn tax expended on the owner occupied residence, 25 per cent is attributable to expenditure on land tax while approximately 75 per cent is expended on the capital gains tax exemption, (Yates 2010:48). It is further suggested by Freebain (2010:203) that tax expenditure on the principle place of residence has contributed to over-investment on owner occupied housing, further contributing to pressures on housing affordability. In contrast, tax expended on negative gearing is approximately $4bn p.a. being less than 10 percent of the combined revenue expended from capital gains tax forfeited by the Commonwealth and land tax forfeited by the states on the owner occupied residence.

Table 3: Taxation across tiers of government

Tax	Local	State	Commonwealth	Current in Australia
Conveyance Stamp duty		X		Yes
Developer contributions	X			Yes
Planning / betterment				**No**
Council rates	X			Yes
Land tax†		X		Yes
Income tax offsets on property available for rent^			X	Yes
Vendor duty (paid on sale)				**No**
GST on sale of new & non-residential property			X	Yes
Income tax on capital gains† (investment only)			X	Yes
Estate tax / inheritance tax				**No**
GST on non-residential rents			X	Yes

†Tax expended on the principle place of residence, ^Tax offset afforded through negative gearing

Tax Reform Options

The case for the reform of property taxes is made on a number of bases, of which the two main tax expenditures relate to the tax exemption of the owner-occupied residence for capital gains tax and land tax. This section considers a recurrent land tax in contrast to a potential capital gains tax on the home and more specifically as a replacement for less efficient conveyance stamp duty. It then examines the amortised cost of a land tax to home buyers determined on the average holding periods of housing in the capital cities of Australia.

Land tax as a capital gains tax

As highlighted recently, the tax expended on property is predominantly attributed to the principle place of residence in the absence of land tax and capital gains tax. Under the Capital Gains Tax (CGT) provisions of the Income Tax Assessment Act 1997, s118-110, the main residence is exempt from income tax on any capital gain made while maintained as the principle residence of the taxpayer. Arguably this exemption has led to the over capitalisation of the main residence at the expense of more productive investment, a situation that exists in New Zealand and in Australia, (Barrett & Veal 2012:584).

However, if a land tax was introduced that addressed both vertical and horizontal equity of taxpayers, the concession for owner-occupied housing can be tolerated (Yates 2010).Tax on land overcomes any problems associated with the CGT exemption and the non-taxation of unrealised capital gains. The following provides a summary of the benefits of a land tax which incrementally accounts for increases in value:

> In taxing economic rent, or the unearned incremental increases in the land values arising from increasing demand in light of restricted land supply, land taxes can be used as an alternative to replace capital gains tax on owner-occupied housing. As such, they are beneficial in helping to reduce the demand pressures that drive housing affordability problems. Also, by broadening the base and applying the tax on a per holding basis, rather than on aggregate land holding, the recommendation should result in a reduced land tax burden on rental investments properties and should remove one of the disincentives for large-scale (including institutional) investments in rental housing (Yates 2010:258).

A tax on all land including owner occupied homes is in effect a tax on the unrealised capital gain on the land. As the value of land increases so does the amount of land tax paid by the landowner as the tax incrementally captures the unrealised capital gain on the land. As the tax is levied on land value, houses and other improvements may still be over or under capitalised however, additional revenue would be collected from the increase in the value of the land.

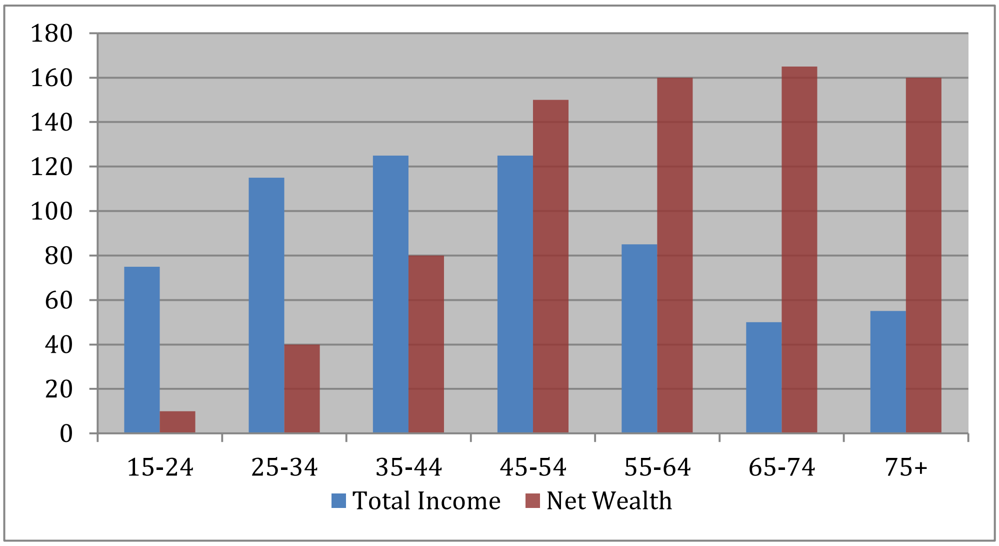
It is contended that capital gains are mostly land gains misnamed and as such are a form of taxable rent, Gaffney (2009), in quoting Harry Kahn economist, it is estimated that unrealised capital gains are ten times the value of realised gains. This may well be the case in Australia where some residents are holding assets that have vast unrealised capital gains that will not be realised for many years to come, even though the 50 percent discount may apply (Div 115 Income Tax and Assessment Act 1979), or in the case of the main residence, will never be subject to capital gains tax.

It is argued that a comprehensive tax system recognised unrealised ‘monetised’ gains as income and is capable of being subject to income tax (Cooper cited in Gaffney 2009). On this basis Gaffney (2009:347) argues for a land tax based on the accrual of value each financial year as a means of gaining ‘huge amounts of revenue that largely escapes taxation’. Accordingly, a ‘property tax based on land value, taxes both the current rent and the current unearned increment as it accrues’, (Ibid). From this perspective, a land tax is very effective because the economic rent from land, as advanced by Ricardo is the economic rent, as a result of increased land values. By having progressive rates of tax applying to the unimproved land value, both forms of rent are subject to tax, namely the rent from owning the land and the economic rent from increases in value.

One of the main objections for the imposition of land tax at progressive rates on all property owners is that some residents may be asset rich but income poor. This aspect of a land tax was recognised by the Commonwealth (2009). In the ACT property owners that are unable to pay their general rates are allowed to defer payment until the property is finally sold, a provision which further exists in the Local Government Act in Victoria. As has been stated above, the main group of land owners that are most disadvantaged by a higher tax on land are the self-funded retirees and recipients of the Age Pension (Kelly 2003). However, it is timely to note that the Commonwealth is aware of the problems facing those elderly Australians receiving an Age Pension and living in their own home.

Capacity to pay principle may be measured either on the wealth or income of the tax payer. In the case of land tax, it is determined on the value of land which reflects wealth, rather than the actual income of the taxpayer. It is highlighted by Kelly (2003:8) that over the lifetime of a taxpayer, the relativity between income and wealth may vary significantly. As highlighted in Figure 1, in the age bracket of 15-24 income is high relative to wealth, which changes in the mid-life bracket of 45-54 where net wealth exceeds income for the first time. In contrast, in the later age brackets of 65-74 and 75+, income is low relative to net wealth where mortgage debt on property has reduced or has been paid off and income reduces in retirement.

Figure 1: Changing relativity between income and net wealth over taxpayer's lifecycle



Source: Kelly 2003 (cited by South Australian Centre for Economic Studies, 8) (Y axis = $000)

Conveyance stamp duty and land tax: trends and future directions

Home Purchasers

Conveyance stamp duty has been identified as one of the most inefficient taxes with high deadweight tax loss impacting entry to housing and decisions to trade up or down (Australia's Future Tax System 2009). The First Home Owners Grant (FHOG) was introduced in July 2000 to offset the impact of the Goods and Services Tax on new dwellings, and primarily focused on new home owners who had not previously been in the market, (Office of State Revenue 2009:1). This grant is administered by the States under their respective Duties legislation as set out in Table 4, which highlights that in three states the grant is applicable to new dwellings only, while in the other three States the legislation is silent on the type of housing the grant applies to.

Given the additional costs of construction resulting from the introduction of the GST, the focus of the FHOG scheme, was in fact to offset impacts of the higher cost of housing and encourage developers to continue to build. The increased cost of housing would be offset by the FHOG for the first home buyer segment and hence would not be impacted by the higher price resulting from the GST. However at the time of introducing the FHOG scheme, it applied to first home owners regardless of whether the housing was new or existing housing. The grant was amended in New South Wales, Queensland and Victoria during 2009 when the FHOG applied to new dwellings only.

Shortly after its introduction Kupke and Murano (2002) studied the impact of FHOG and identified that it was the single largest factor contributing to first home owners purchasing property. Subsequently, Irvine (2009) in citing surveys carried out by Bankwest and the Mortgage Finance Association of Australia found that only 6.2 per cent of first home buyers cited FHOG as the reason behind their home purchase. This is supported by Chancellor (2013:1) who states that currently only 20 percent of first home buyers purchase new property, removing access to this incentive for first-home purchaser in New South Wales, Victoria and Queensland.

While some relief is provided through First Home Owners Grants (FHOG) and some exemptions to stamp duty, the replacement of transaction taxes with a broad based land tax applicable to the principle place of residence, is a tax option currently expended by all States of Australia (Yates 2010:48). In line with the Commonwealths tax reform recommendations, Wood, Ong, Cigdem & Taylor (2012:24) have modelled the impact of replacing stamp duty with an annual land tax on property in Melbourne City. They found that land values would drop outside a 10 km radius of the city centre resulting from the capitalised cost of a recurrent land tax in contrast to upfront conveyance stamp duty. The transition from stamp duty to a land tax on the home has not been broadly adopted in Australia, however the ACT recently commenced this transition from 1 July 2014 (Quinlan, Smithies & Duncan 2012).

Table 4: Concessions for pensioners and first home buyers

State	Legislation	Provision	Housing Type
Victoria	Duties Act 2000 – Division 5	Pensioner and first home owner exemptions and concessions	New
New South Wales	Duties Act 1997 – Pt 8 Div 1	First New Home	New
Queensland	Duties Act 2001 – Div 3	Concessions for homes and first homes	New
Western Australia	Duties Act 2008 – Div 3	First home owners concession	Not specified
South Australia	Stamp Duties Act 1923	s71c Concessional rates of duty in respect of purchase of first home	Not specified
Tasmania	Duties Act 2001	s36G Exemptions and concessions	New from 2014

Source: Various State Duties / Stamp Duties Acts

Government

In addressing the need for State and local government to increase own source tax revenue in Australia, the Commonwealth (2009) has identified land tax and in particular, expansion of this tax to include the principle place of residence. At present 15 per cent of residential housing across Australia attracts State land tax, which is primarily due to the exemption applied to the principle place of residence and the land tax threshold applied to investment property expended by each State (NSW Treasury 2005/06). While the Commonwealth (2009) has recommended expanding land state land tax to include the principle place of residence, this recommendation has been opposed by local government across Australia, whose primary source of revenue is from council rates (Local Government Association NSW 2007).

In monitoring the trends in tax revenue collected by State and local government across Australia over the past decade, data has been sourced from the Offices of State Revenue Annual Reports and tax revenue statistics compiled by the Australian Bureau of Statistics between 2001 and 2012. The tax revenues examined are state land tax, conveyance stamp duty and local government rates. These revenues are set out collectively in Figure 2 and are compared individually over a twelve year period of 2001 to 2012.

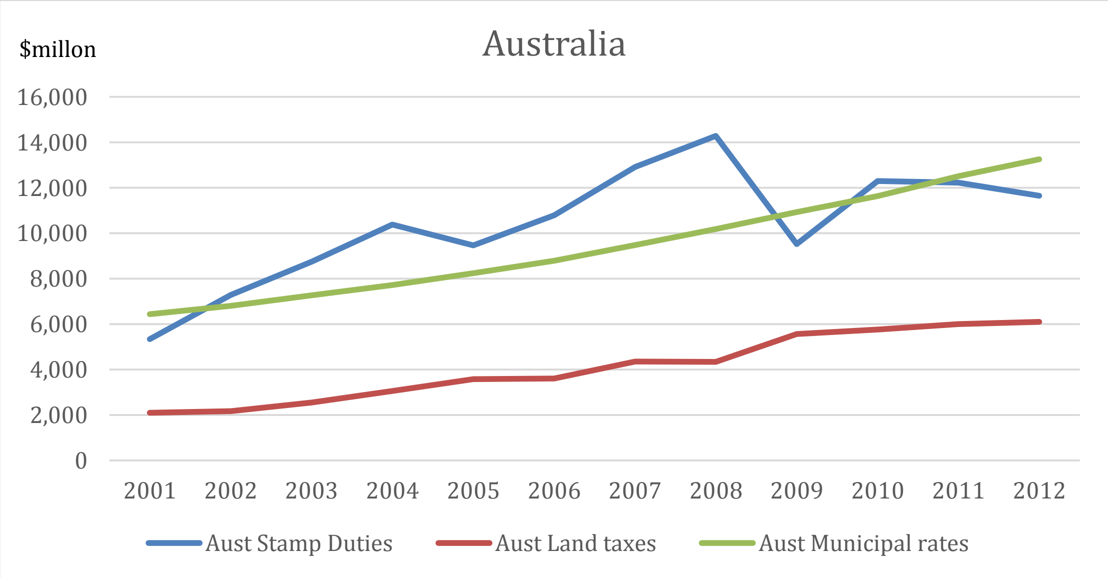
The overall trend across Australia and in each State is that conveyance stamp duty is an important revenue source for State government. Further noted from trends in stamp duty is the volatility and fluctuations in revenue compared with rates and land tax. It is impacted by turnover and trends in the property market. While it has distinct advantages in that its assessment is simple as it is determined on the transaction price of property, this revenue is subject to more volatility than State land tax which are re-determined annually.

Of the three sources of revenue, State land tax raises the lowest amount of tax and is applied to the narrowest range of property due to the exemption of the principle place of residence and the threshold applicable to all other property holdings, both exemptions apply across all States. The total land tax revenue derived from state land tax across Australia for residential property is less than 25 per cent of the State land tax collected (Treasury NSW 2005/06). Local government rates in contrast to land tax are paid on over ninety eight per cent of all property in Australia, it has the broadest base and lowest tax expenditure (Productivity Commission 2008:38)

Revenue from rates and land tax are the least volatile of the three sources as shown in Figure 2, as these revenues are tied to land values which are assessed annually for land tax and assessed three yearly for council rates. Annual adjustments to rate revenue are made by adjusting the rate in the dollar applied to the land value. In contrast, land values used to assess state land tax are reassessed annually except in Victoria, where they are assessed bi-annually, (Australian Centre of Excellence for Local Government 2013:33). While land value is used in each state to assess land tax, council rates are determined on a number of different bases in each State, which include land value, improved value and assessed annual value.

In contrast to other OECD countries Australia has capacity to improve its tax effort derived from recurrent land taxes, particularly in light of its overall lower ranking in total taxes collected. This provides an opportunity for the States to progressively increase land tax while reducing conveyance stamp duty and marginally increase their total tax effort as a percentage of GDP and as a percentage of total tax collected.

Figure 2: Comparison between tax revenues from land taxes and conveyance stamp duty Australia



Source: ABS Taxation Statistics 2001 – 2012

From conveyance stamp duty to land tax: A framework for change

In assessing the replacement of conveyance stamp duty on the purchase price of property, with a recurrent tax on land, a comparison of each tax is now made. In undertaking this analysis, a before and after approach is used to compare the amount of stamp duty paid in each of the six capital cities based on the average purchase price as at 2012 compared with the proposed regime of a 1 per cent annual tax on land value as proposed by the Productivity Commission (2004:100).

In undertaking this comparison, the average cost of housing in each capital city as at September 2012 is used to assess stamp duty. This is then compared with the average residential land value for housing in each capital city, to which the Productivity Commissions recommendation of a 1 per cent rate should be applied. The proposed annual land tax paid on 1 per cent is divided into the amount of stamp duty paid for the average dwelling in each capital city to equate the number of years it takes the land tax to equal the amount of stamp duty paid. This is set out in column 6 of Table 5 for each capital city.

The second observation is of the number of years the proposed land tax takes to equal the stamp duty currently paid compared against the actual average holding period of residential housing in each capital city. This is carried out by comparing the number of years in Column 6 with the actual average holding periods (No of years) for houses and units in each capital city shown in Columns 8 and 10 of Table 5. The holding periods are also shown as at 2002 for each houses and units, see Columns 7 and 9, which further highlight the emerging trend in holding patterns of housing in each city over a 10 year period.

The information used in Table 5 is derived from several sources which include, holding periods of houses and units are sourced from RP Data, Lawless Property Analysts (2013). The median cost of housing is determined from ABS housing data (2012) and the average land values are determined from the Valuers-General land value benchmarks. There are limitations acknowledged in the approach used, the main limitation being the use of the average cost of housing which is used to account for a broad and diverse range of housing in each city. Another limitation is that the land tax is determined on land value as at 2012 and does not account for annual growth or changes over the holding periods.

As set out in Table 5, the equivalent years in column 6 as at 2012 varies across the capital cities with Brisbane recording the lowest equivalent years at 7.85 and Melbourne recording the highest equivalent years at 10.73. In the case of the holding periods of houses in Column 8, compared with the equivalent years in Column 6, four of the six capital cities have holding periods within 10 per cent of the equivalent years, with Brisbane and Adelaide being the exceptions. In these two cases Brisbane is more than 15 percent higher than the Equivalent Years, with Adelaide being 20 percent lower than the Equivalent Years.

The second point of note is the differential between houses and units, with the holding periods of units in all capital cities resulting in a lower equivalent years based on the current stamp duty below the equivalent years at 2012. While the analysis undertaken in Columns 2, 3, 4 & 5 is based on 2012 average housing prices and land values, a direct comparison cannot be made between 2002 and 2012, however it is noted that as at 2002, no city recorded houses or units having equivalent years above the 2012 equivalent years of a one percent land tax. A further observation noted in Table 5, is the increasing trend in the holding period of both units and houses in all capital cities. This is a consistent trend noted from 2002 to 2012 in each city.

While it may be argued that amortising the cost of stamp duty over the holding period of housing as a recurrent land tax it is still a cost to the purchaser, being an upfront cost accounting for up to 5 per cent of the average cost of housing. Further, an up-front stamp duty reduces the relativity of a home buyers deposit against the purchase price and requiring more home buyers to pay mortgage insurance where the cost of housing exceeds 80 percent of the purchase price (APRA 2005).

Further, as was discussed under the previous section, only 20 per cent of first home buyers purchase new property and qualify for the state’s first home owner’s grant, in NSW, Victoria and Queensland. Tasmania moved its FHOG to new dwellings in 2014. On this basis the analysis in Table 5 is undertaken exclusive of the First Home Owners Grant, of which this grant sits within the legislative provisions of each State’s duties Act shown in Table 4.

Conclusion

In summary, the states have ridden the wave of stamp duty windfall revenues as a short term fix over the past five years, while choosing to remain highly dependent on the Commonwealth for shortfall revenues from income tax and GST revenues, both collected by the Commonwealth. With this dilemma in mind, the challenge of confronting reforms to transaction taxes on property and progressively replacing transaction tax revenue with a recurrent tax on land, is one that the States are required to address (Commonwealth 2009 and Ong and Wood 2016).

It has been emphasised that conveyance stamp duty is an additional cost for home buyers and over the past 10 years a number of recommendations have been made for this impost to be replaced with a broad based recurrent land tax applicable to all residential property. It has been further shown that land tax revenue is comparatively low in Australia as a percentage of GDP, in which scope exists to increase this source of revenue while reforming less efficient conveyance stamp duty. This recommendation is particularly important in view of tax revenue stagnation from central government, which has traditionally been used to finance state and local government in Australia.

The examination of tax revenues from recurrent land tax and conveyance stamp duty between 2001 and 2012 shows that following the Global Financial Crisis, revenue from land tax has increased faster than revenue from conveyance stamp duty. In addition to the differences and changes in revenue, it is shown in Figure 2, that recurrent land taxes are a less volatile and not susceptible to the fluctuations evident in revenue from conveyance stamp duty.

The move to a tax on land has distinct advantages and challenges in the transition stage for government. As shown in Table 5 Column 6, a one per cent land tax would raise a fraction of the revenue in contrast to conveyance stamp duty in the earlier years of collection. In contrast, if it were applied to all housing from the date of imposition, it may be defined as a pure land tax capturing the incremental increases in value while removing the imposition of stamp duty and the additional cost of entering the housing market.

On this basis as was discussed under the above section on 'land tax as an alternate capital gains tax,' the imposition on land would be capitalised into the value of property and would act as an incremental capital gains tax. Tax currently expended by the commonwealth on capital gains on the principle place of residence is an important rationale for the introduction of a broad based land tax which incrementally accounts for capital gains largely attributable to the land value component of property. Further it would temper over-investment in the home, which has also been identified as a contributing factor to the cost of housing and provides a less volatile and more predictable source than conveyance stamp duty for the State.

It was further exhibited that holding periods of housing have increased between 2002 and 2012 and based on a one per cent land tax rate applied to all land including the home, the amortised cost of stamp duty is within 10 percent of stamp duty currently applied to the median cost of housing in most capital cities. This provides the opportune time to commence the transition from less efficient to more efficient tax alternatives which remove upfront barriers to entry which impact on deposits and further contribute to additional mortgage lending insurance for first home buyers.

Under an alternative land tax structure, concessions would still be available to first home buyers and if the objective were to be extended to empty nesters trading down, in which the concession may be applied in the form of a land tax free period. For first home buyers that qualify, this would be at the beginning of the holding period of the home, and for empty nesters, this would be in the form of a refund at the end of the holding period of their home.

References

Australian Prudential Regulation Authority (2005). Survey Results - Residential valuation practices by ADI's and LMI's. Sydney, Commonwealth Government.

Australian Bureau of Statistics (2012) *Housing costs and index per Capital Cities of Australia,* Series 6416

Australian Centre of Excellence for Local Government (2013), *In our hands: strengthening local government revenue in the 21st Century*, University of Technology Sydney, January 2013.

Barrett, J. and Veal, J. (2012), *Land Taxation: a New Zealand perspective*, eJournal of Tax Research 573, 584.

Chancellor, J. (2013), Victorian first home buyers grant jumps from $7000 to $10,000 but only for new houses and apartments. Property Observer 29 April 2013.

Commonwealth of Australia (2009) *Australia's Future Tax System – Final Report*, December 2009 BARTON, ACT.

Cooper, G (1994) An Optimal or Comprehensive Income Tax?, 22 *Federal Law Review* 414 Australian National University, ACT.

Coorey, P. (2016) Malcolm Turnbull says states should levy own income tax levels, Australian Financial Review, p.1, 30 March 2016.

Costello, G.J. (2006) The impact of stamp duty reductions in first home buyer markets – A Western Australian Case Study, Pacific Rim Real Estate Conference, Auckland New Zealand 22-25 January 2006.

Freebairn, J, (2012) State taxes on housing in Australia, Ch 7. Ed. Stewart, M. Australian Tax Research Foundation.

Gaffney, M. (2009) '*The Hidden taxable capacity of land: enough and to spare'*, (2009) 36(4) *International Journal of Social Economics* 328.

Heferen, R. (2011), Beyond the Tax Forum, Revenue Group Commonwealth Treasury, Speech 5 Dec 2011, Barton ACT.

Kelly, S. 2003, Self-provision in Retirement? Forecasting Future Household Wealth. Paper presented at the International Micro simulation Conference on Population Aging and Health, Canberra, 8 December.

Irvine, J. (2009) 'First-home incentive is deterring more buyers', *Sydney Morning Herald*, 25 July.

Kupke, V. and Murano, W. (2002) 'The implications of changes in the labour market for the homeownership aspirations, housing opportunities and characteristics of first home buyers,' AHURI Final Report No. 18, pp.1-56

Lawless, T. (2013), *Australian home owners holding on to their homes for longer*. RP Data 21 March 2013. http://propertyupdate.com.au/australian-home-owners-holding-on-to-their-homes-for-longer/

Local Government Association of NSW and Shires Association of NSW (2007), Assessing Local Government Revenue Raising Capacity July, 2007, Submission to Productivity Commission Inquiry.

Mangioni, V. (2016), Land Tax in Australia: Fiscal Reform of Subnational Government, Routledge New York and London.

NSW Treasury (2005) *2005/06 Half-Yearly Budget-Review.* Premier and Treasurer of NSW Sydney.

Office of State Revenue (2009), First Home Owners Boost Fact Sheet, retrieved from http://www.finance.wa.gov.au/cms/uploadedFiles/_State_Revenue/FHOG/First_Home_Owners_Boost_fact_sheet(1).pdf

OECD 2012, *Organisation for Economic Cooperation and Development Revenue Statistics 1965-2010*, Table 22-23.

Ong, R. & Wood, G. (2016), Taxes: Turnbull should help states switch stamp duty for land tax, Australian Property Investor, 21 April 2016.

Productivity Commission (2004) *First Home Ownership*, Report No 28, Commonwealth of Australia, Melbourne.

Productivity Commission (2006) Workforce Participation Rates – How Does Australia Compare? Commonwealth of Australia, Dec 2006, Melbourne Victoria.

Productivity Commission (2008) Assessing Local Government Revenue Raising Capacity, Commonwealth of Australia, Canberra.

Quinlan, T. Smithies, M. & Duncan, A. (2012) *ACT Tax Review*, Report to the Treasurer ACT. Treasury Directorate ACT, Canberra.

Rolfe, J. (2013) *Premiums go through the roof on Lenders Mortgage Insurance*, News Limited Network, July 06, 2013.

Warburton, R.F.E. and Hendy, A.O. (2006), *International Comparison of Australia's Taxes* Commonwealth of Australia, Canberra ACT.

Warren, N. A. (2004) Tax: Facts fiction and reform, Sydney, NSW. Australian Tax Research Foundation.

Wood, G. Ong, R. Cigdem, M. and Taylor, E. (2012) The spatial and distributional impacts of the Henry Review Recommendations on stamp duty and land tax. Australian Housing and Urban Research Institute, AHURI Final Report No. 182 Feb. 2012.

Yates, J. 2010. Tax expenditures and housing, Ch 2. Housing and Tax Policy, Ed. Stewart, M. Australian Tax Research Foundation.

Yates, J. 'Housing and Tax: The Triumph of Politics over Economics' in Chris Evans, Richard Krever & Peter Mellor (eds), Australia's Future Tax System: The Prospects After Henry (Thomson Reuters 2010).

Table 5: Comparative analysis of stamp duty versus a 1 per cent land tax on housing in the capital cities of Australia

1	2	3	4	5	6	7	8	9	10
2012	2012 Ave Cost of Housing	2012 Average land value	Stamp Duty	Prod Comm Land Tax (1 per cent)	Prod Comm Equivalent Years (1.0 per cent)	Ave Hold Period House 2002	Ave Hold Period House 2012	Ave Hold Period Unit 2002	Ave Hold Period Unit 2012
Sydney	$580,000	$232,000	$21,590	$2,320	9.31	6.60	10.10	5.70	8.20
Melbourne	$470,900	$188,360	$20,224	$1,884	10.73	8.40	10.80	6.80	9.2
Brisbane	$437,000	$174,800	$13,720	$1,748	7.85	7.20	9.20	6.10	7.7
Adelaide	$386,000	$154,400	$15,630	$1,544	10.12	4.50	8.10	4.20	7.9
Perth	$491,000	$196,400	$17,338	$1,964	8.83	5.60	8.20	5.00	7.7
Hobart	$320,000	$128,000	$10,735	$1,280	8.39	6.10	8.70	6.10	8.1
				Average Yrs	9.20	6.40	9.18	5.65	8.13