

### Value Capture and Transport Infrastructure -Public Policy Issues

Never Stand Still Business School Centre for Applied Economic Research

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# Value Capture – Issues

- 1. What drives the profitability of new transport infrastructure?
- 2. Why is investing in transport infrastructure crucial for growing cities? Who Wins ? Who Loses?
- 3. What do we mean by Value Capture?
- 4. Why is land tax the most efficient tax
- 5. Other value capture taxes
- 6. History ancient and modern
- Melbourne rail network in 19<sup>th</sup> century in part built by private rail companies based on making a
  profit from the sale of land. These companies failed. But the land they developed(/created) kept
  land prices low for a long time.
- Melbourne-Sydney-Brisbane Hi-Speed Rail proposal purports to use value capture. Problem is relies on government to give the new cities a population.



## The Profitability of Transport Infrastructure

- 1. Profitability of the new infrastructure (rail line, motorway)
  - Profitability a function of density number of passengers.
    - NB: higher frequency adds to value to commuters
  - Outside of Tokyo and HK, most public transport heavily subsidised
  - Australia has a high level of subsidy of public transport due to low density increased density reduces subsidy which is a benefit to all taxpayers in the city.

Minimum densities to support Public Transport - people per hectare of urban use				
For commuter- based lifestyle	Low Bus Service	Intermediate Bus Service	Light Rail	Heavy Rail
30-40	21	31	37	50
Sydney	Melbourne	Brisbane	Perth	Adelaide
27.6	21.1	16.6	17.0	18.0



### Transport Infrastructure and the Value it Adds

- 1. Transport infrastructure and land values
  - Transport infrastructure is a NET benefit to the residents and businesses in a city
  - Because in aggregate it lowers land values (rents/prices)
  - For specific areas it increases land values <u>some</u> substantially
  - A land tax will 'capture' that variation
- 2. Case of a New Train Station
  - NSW Government investing heavily in new heavy and light rail lines.
  - In vicinity of new stations value of land rises substantially it is this windfall profit to landowner that governments seek to 'capture'
  - Rise in value contingent on density allowed (by local government)



# Figure 1: Urban Land Rent and Prices and a Decrease in Commuting Costs





# Figure 2: Urban Land Rent and Prices and Growth with Inadequate Investment in Transport





### Figure 3: Change in Land Prices with a New Station







## Figure 4: Change in Land Prices with a New Station and Restricted Rezoning#



#### Land Prices in Vicinity of a New Station



### Value Capture – What do we mean?

- 1. Value capture refers to a broad range of user charges linked to, or taxes on, the rise in land value.
  - Seen as a source of funding for transport infrastructure
- 2. Includes: land tax (incl. local government taxes), special zone levies (extra land tax or fee), stamp duties, capital gains tax, development fees, betterment taxes.
  - Other than land taxes and special levies, most are transaction taxes
- 3. Hong Kong Model government owns all the land. How relevant to Australia where government does not...??
- 4. Players
- · Landowners
  - IF capital gains tax applies, a portion of gain taxed exemption of owner-occupiers the issue here.
  - IF land tax applied, a portion of gain taxed incentive to sell if 'higher value' use taxed
- Governments
- Local Government
  - potentially benefits as rates based on land value BUT revenue capped
  - · decides rezoning lack of incentive for density
- State
  - · Owner of transport -incentive for density
- Developers
  - Intermediaries transform land to higher use.
  - Development companies as such also own land but most land not owned by developers.



## Value Capture – Land Tax

- 1. Land Tax tax on value of land "naturally' captures value uplift with new transport infrastructure.
  - Henry Tax Review recommended land tax principally in context of replacing stamp duty on transactions
  - A more efficient tax.
  - Freebairn (2016) 'Taxation of Housing' AusER vol. 49, no. 3 also supports.
  - UK Crossrail 'hypothecates' a portion of business land tax to new London rail.
- 2. Current Land Tax a tiered system which only applies to investor residential and business properties, i.e. exempts owner-occupiers.
  - Henry Tax Review narrow base makes it inefficient
  - Need to broaden it.
  - A broad-based land tax would lower price of land narrow base means it adds to rents.
- 3. Local Government Rates
  - In NSW based on value of land a form of land tax.
  - Revenue cap means that do not benefit from rise in value
  - Allan (2006) Report on Local Government need to fix LG incentives = BIG issue
- 4. State/Local Government.
  - Both 'collect' land taxes -
  - Joint collection modelled on Alberta, Canada
- 5. Local Government taxes some observations
  - As proportion of land value highly variable across LGAs
  - Low in high value LGAs high in low value LGAs
  - Refer Figures 5-7



### Figure 5: NSW Property Taxes





### Figure 6: NSW Property Taxes



NSW Taxes as % of Land Value



Figure 7: NSW Local Government Rates 2012/13

# Sydney LGA Rates applied to Residential Property

Rate per unit of land value

### Sydney LGA Rates applied to Business Property



#### Rate per unit of land value





### Value Capture – Stamp Duty

- 1. Stamp duty as tax on transfer of land based on value of property (land + structure) will capture a proportion of value uplift
  - Like all transaction taxes, a disincentive to transact.
  - Henry Tax Review, almost every one wants it gone.
  - However, in the absence of land tax on owner-occupiers a second best form of value capture
- 2. ACT Government IS replacing stamp duty with broader land tax.
  - Unique position as State/LG in one body fewer political obstacles.
- 3. History
  - In US and elsewhere, land taxes were more significant in the first half of the 20<sup>th</sup> century
  - Anti-Land Tax movements emerged in the 1930s....



### Value Capture – Development Contributions

- 1. State Government
  - On greenfield State Infrastructure Contribution (SIC) applies to developers.
  - In the case of Parramatta light rail, an SIC of \$200 per  $m^2$  of floorspace (equates to \$16-20,000 per dwelling unit) is being mooted would be a form of density tax
- 2. Local Government.
  - LG imposes s94 development contributions on developers.
  - Also impose voluntary agreements.
  - Notionally linked to the extra services which new households would require the LG to provide.
- 3. Henry Tax Report
  - Argued that OK if related to the extra cost which a new development imposed. Otherwise it was a tax.
  - Development tax to extent passed down to landowners, does not lift costs. But, Henry Tax Review did not fully accept this proposition.
  - At the margin it will restrict development;
- 4. Development Tax vs Quantitative Restrictions on Development
  - Quantitative restrictions (density controls in inner areas, urban growth boundaries in outer) impose high equivalent "development taxes" on development larger deadweight losses than with taxes.
  - Relative to these quantitative controls, a development tax would be a better second best option.



### Figure 8: Land Value and the Players with a New Station



Higher Density Development with a New Station



### Figure 9: Development Contributions and Development





## Value Capture – Betterment Taxes

- 1. Betterment Tax
  - Simple concept tax on the difference between value of land in current use and value if rezoned to a higher use.
  - Also referred to as a planning gain tax.
  - An indirect capital gains tax on landowner BUT charged through the developer.
  - Parramatta LG proposing a 50% betterment tax if it stops development,.....
- 2. Long History of Failure
  - UK four attempts. In each case led to a blockage in development.
  - Sydney betterment tax briefly circa 1970.
- 3. Why failed?
  - Landowners not forced to sell. Want recompense for property (land <u>plus</u> structure), cost of moving, plus some share of the gain. If not, will not sell.
  - Development process not costless. Costs will use up some of the "planning gain".
  - Final value of land a function of market conditions and how much land is approved for development by the authorities for developers this a degree of uncertainty. Development is a risky business.
- 4. Henry Tax Report
  - Argued that OK in concept as tax on economic rent but in practice, increased uncertainty, generated lengthy disputes and encouraged governments to "create economic rent" through restrictions on development.
  - (Failure by governments to recognise link between restrictions on development and housing affordability.)



### Figure 10: A Betterment Tax in Theory





### Figure 11: Betterment Tax in Practice



New Station and a 50% Planning Gain Tax



### Figure 12: Betterment Tax if Costs Allowed For

#### New Station and a 50% Betterment Tax, allowing for costs



