How might the funding of infrastructure from land taxes affect housing affordability?

Shann Turnbull PhD, sturnbull@mba1963.hbs.edu
Founding member: New Garden Cities Alliance

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ABSTRACT

Increasing land tax to finance infrastructure increases the cost of rental housing while the value of housing serviced by the infrastructure increases the cost of buying a house. Instead of making housing less affordable the uplift in land values created by infrastructure investment can be used to make housing highly affordable by introducing mutual ownership of urban sites and services but not the dwelling that is owned privately. Mutual ownership of sites and services in a Real Estate Investment Trust creates a compelling political incentive for resident to vote in local referendums to introduce it to create a duplex system of property rights.

Key Words: Duplex tenure, Housing affordability, Infrastructure funding, Land taxes, Residents referendums

JEL Codes: D02, K11, P14, R10, R21, R53

In October 2015 the Australian Prime Minister raised the possibility of funding infrastructure from land taxes (Greber 2015). The purpose of this note is to inform economists and politicians about the unintended consequences of raising land taxes to fund infrastructure and outline a process for using infrastructure investment to make housing affordable.

The attraction of raising land taxes to fund infrastructure are: (i) “Introduce integrated infrastructure and land use planning” as recommended by Infrastructure Australia (2015: 3), (ii) Capture the uplift in land values from infrastructure investment (Greber 2015) and (iii) “Well-structured taxes on land and natural resources are a highly efficient means of raising revenue” (Treasury 2010). However, Treasury use the word “efficiency” in a narrow sense of “raising revenue” without taking into account how it might affect housing affordability.

Any increase in land taxes would be passed on to renters to make housing less affordable. Owner occupied houses are exempt from land taxes (NSW 2015). However, the affordability of owner occupied houses would also be reduced from price increases arising from new infrastructure increasing land values. In considering the idea of taxing land to finance infrastructure, Macken and Williams (2015:15) concluded that it was “A great model that will not work in Sydney”.

The land value of Australian homes is typically around half the cost of house. In Sydney land can becomes 60% of the cost of buying a house (Moran 2006: 60). Urban land values are not determined by what is built on the site but how well the sited is serviced by infrastructure and other improvements. It is investment in roads, water, sewerage, power, transport, shops, schools, hospitals, recreation amenities and places of employment that uplifts the value of green field sites by over a hundred times.

The uplift in land value from infrastructure investment can make urban sites and services self-financing and so bankable. Self-financing urban development becomes possible when the ownership of all the sites and services supporting a sufficiently large community is separated from the ownership of all the buildings in the precinct (Angel et. al 1983, Doebele 1987, Johnson 1987, Lewis 2011,Turnbull 1984, 2008).

The First Garden City of Letchworth located 35 miles of London provides an example of the self-financing process. It was achieved by separating the ownership of sites and services from buildings to create a duplex system of property rights.

Letchworth only had a population of 96 residents when it obtained its first railway station in 1901 (Purdom 1963). In 1903 the First Garden City Ltd (FGC) issued a prospectus to acquire 15 square kilometres of farmland.. FGC would be described today as Real Estate Investment Trust (REIT). While the population of Letchworth has grown to 35,000 it has lost its duplex property rights and so its ability to provide affordable housing.

However, FGC demonstrated how the uplift in land values from adding services to land augmented by the value added by private investment in leasehold improvements makes urban development self-financing. The services funded by FGC included: land, roads, water works, sewerage, gasworks, electricity, swimming baths, parks and other amenities (Purdom 1913: 233-234). The total cost of these investments on September 30 1903 was £287,057 but their value rose 32% to £379,500 by 26 November 1907 (Purdom 1913: 238). Around half the funding was obtained by mortgages and debentures with the latter supported by a floating charge over all the estate. The value of borrowed money was 46% of the total cost or 35% of the valuation. FGC only made an operating loss before interest in its second and third year with profits being reported from 1911.

Because the initial sites and services of Letchworth became self-financing, the cost of buying land was eliminated for both homebuyers and investors in rental properties, shops, office buildings, schools, hospitals and other amenities. Eliminating the need to buy land makes the cost of buying a house highly affordable. It also creates a compelling magnet to attract commercial developments. The commercial investments, in turn generate a ground rent to service the debt used to fund the sites and services. In addition, both housing and commercial investments increase the uplift in land values to create a virtuous self-reinforcing self-financing process.

The potential for new infrastructure investment to increase, rather decrease housing affordability in *existing* sites and services, is illustrated by the extension of the London Jubilee Underground in the 1990s. While this example may appear to be impractical before considering the political approach suggested later, it highlights the financial inefficiency and inequity of the current system of property rights. It illustrates not only the self-financing potential of infrastructure projects but also how taxes paid by voters can create largely hidden private windfall profits for the few, many of who are not voting citizens (Collison 2015, Edward 2015, Lizieri, Reinhert & Baum 2015).

The 11 new Jubilee stations cost the taxpayer £3.5 billion. The aggregate windfall uplift in land values within 1000 yards of each station was £13 billion (Riley 2002). Even if the landowners collectively borrowed £3.5billion to privately fund the new Underground they would still enjoy a largely hidden and untaxed £9.5billion increase in net worth. If duplex ownership had been introduced, no public funding would have been required and in addition the windfall profits could have been used to support affordable housing.

Holding local referendums of residents in viable urban precincts provides a compelling political process for introducing duplex ownership. The UK local government Act of 1972 already has a provision for holding referendums. Australia could modify the provisions and follow the UK initiative to establish “locally led garden cities” (Clegg & Pickles 2014). While the number of voters in a prospective self-financing precinct may only be fraction of those of a Parliamentary constituency the interest of elected parliamentarians could be protected from lobbyist representing non-resident owners by requiring a 75% approval for adopting duplex tenure. The facilitating legislation would make provision for compulsory conversion of all property rights in the precinct in a similar way minorities are forced to participate in corporate acquisitions. Decision making from the bottom-up by residents, not non-resident owners, could well make reform practical in London.

Adoption would involve replacing existing title deeds with two stapled but different equity interests. One interest would be a strata-title like ownership of buildings or any other improvements on the land. The second interest would be shares in a REIT that owned all the sites and services in the precinct. One share in the REIT could be exchanged for each square meter occupied by each single title.

No lender holding a mortgage over any property would be disadvantaged. The conversion would maintain the liquidity of their interests and enhance its value. Value is enhanced because all shareholders obtain co-ownership rights of all property *external* to their site. Liquidity is maintained because all improvements are freely negotiable with shares redeemed by the REIT. The redemption value of non-resident shares would be indexed to existing values. In this way, most of any future development gains flow to resident homeowners and tenants (Lewis 2011, Turnbull 2010). In addition residents are cross-subsidized by the larger non residential sector that also services the infrastructure funding.

As non-resident owners cannot vote, residents obtain an irresistible incentive to vote for duplex tenure. None voting owners would obtain preference shares redeemable at values determined by the cost of living index. As a result the future windfall gains accruing to residents with ordinary shares could be magnified five to ten times according to if the total area of the residential sites they occupied was respectively twenty to ten percent of the total precinct.

Operational details are provided in Turnbull (1976, 2010) where resident owned REITs are described as Community or Cooperative Land Banks (CLBs). CLBs should not be confused with Community Land Trusts (CLTs). CLTs cannot provide a practical basis for providing extensive affordable housing or fund infrastructure as they rely on gifts of land to remove its cost.

CLBs need to operate on a scale that would allow them to host CLTs by providing them sites without cost. However, CLTs deny sharing windfall gains in land with their residents and so this would make it difficult for CLTs to attract homebuyers in competition with the CLB that does.

CLTs avoid gentrification by administrative control of the secondary market for homes. CLBs achieve the same result by introducing self-correcting market forces that minimises the ability of property rights to overpay investors in a way not reported by accountants and so not identified by analysts like Piketty (2014).

CLBs can eliminate the cost of land for investors in rental housing, office buildings and shopping centres, but they do so on the condition that as the investment is written off for tax purposes its ownership is transferred to the CLB. This requirement does not reduce the reported profit. But as the size of the initial investment has been reduced from not needing to purchase land, the rate of profit is increased - *even after giving away its ownership*.

It is by this means that CLBs can make private investment more attractive to generate a virtuous self-reinforcing process for magnifying uplift in land values while maintaining affordable housing. Housing is kept affordable as tenants can acquire home ownership without cost by being endowed with co-ownership equity at the depreciation rate. If buildings were depreciated at four percent a year tenants would acquire full ownership in 25 years without cost. Market forces are created to reduce all house prices, not just those in a CLT or CLB.

The REIT/CLB would obtain ownership of office buildings, supermarkets, and all other structures to cross subsidize affordable housing with "surplus profits". Accountants do not report surplus profits. This makes them different from economic rent that is reported. Surplus profits arise when the useful life of investments exceeds the time for the investment to payback its cost with a competitive return.

Up to 30% of CLTs adopt a tripartite board of 12 to 15 individuals. One third being elected by residents, one third by residents of the surrounding community and one third by public officials, local funders and non-profit providers (Sungu-Eryilmaz & Greenstein 2007: 22). A CLB/REIT would become an almost self-governing district of a suburb, city or local government body. To mitigate corruption the CLB constitution would introduce "network governance" with the power to govern separated from the power to manage (Craven, Piercy, & Shipp 1996).

Only residents can elect the governance board and the separately elected management board. The governance board nominates and remunerates the directors and determine their Key Performance Indicators (KPIs). Advise on the KPIs are provided by a Stakeholder Congress that federates separately elected advisory boards to represent the interest of businesses, workers, consumers, retirees, recreation and any other significant interest groups. In this way competition for power, status and influence in the community introduces internal markets of opposing vested interests. These create sustainable checks and balances to negotiate the common good from the bottom up to enrich democracy (Pound 1993).

The inventor of CLTs recognised the advantages of CLBs (Swann 1997, p. 51). International experts Angel et al (1983, pp. 29-30) and Doebele (1987, pp. 18-20) have favourably reviewed the CLB concept. Munro-Clark (1982) and Turnbull (2010) provide a comparative analysis between CLTs and CLBs.

Unless duplex tenure is introduced any new urban infrastructure investment or increase in land taxes will exacerbate housing affordability and wealth inequality.

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