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Limitations in orthodox economic analysis of urban realty

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ABSTRACT

Orthodox economic analysis cannot identify how to provide affordable housing on a sustainable basis because it: (i) Considers the nature of property rights as a given rather than as a policy variable; (ii) Focuses its analysis on the production and exchange of goods and services to neglect values that arise from the ownership and control of assets and liabilities; (iii) Does not identify Surplus Profits; (iv) Neglects how government investment in urban infrastructure creates private profits for land owners and so also neglects, (v) How windfall gains and surplus profits can be used to cross subsidize housing and commercial investors. Duplex property rights are described that separate the value of buildings from the values created in their land by neighboring infrastructure investment. This allows uplift in land values created by infrastructure expenditure to be used to make all neighborhood sites self-financing to halve the cost of urban housing and eliminate the cost of land for commercial developments. The resulting increase in economic efficiency improves equity by providing eight ways to distribute wealth to citizens without government taxes or welfare. The paper recommends that approval for public infrastructure expenditure and/or development be made conditional upon adopting duplex ownership of urban realty.

Key words: Cash-flow analysis, Housing affordability, Property rights, Self-financing suburbs, Surplus profits

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Limitations in orthodox economic analysis of urban realty

1. Introduction

This paper illustrates limitations in orthodox economic analysis by showing how affordable housing can be provided on a sustainable basis by allowing the nature of property rights to become a public policy variable. The need to consider a different system of property rights arises because urban land obtains value from two sources: (i) the use value of buildings on the site (ii) value provided to the site by external services such as water, sewerage, roads, power, transport, communications and opportunities for employment, custom and recreation facilities and other external site specific amenities.

Economic inefficiency and inequity is created by value being captured from these difference sources in a single property right to urban land. This paper argues that efficient resource allocation and equity can be increased by introducing two separate but associated negotiable property rights. One title deed would be site specific and the other would provide pro-rata equity in the values created external to the site such as community investment in infrastructures services.

All home owners would obtain (i) a long term lease or what is described in Australia as a "strata[1]" title together with (ii) pro-rata equity in an entity that owned all land in an urban precinct. The precinct would be sufficiently large to capture most of the values created externally to most sites in the precinct. The land owning entity of the precinct is described as a Community or Cooperative Land Bank (CLB).

The CLB captures uplift in value from all sites from infrastructure investment servicing the precinct. This allows CLBs to fund community sites and services on a self-financing basis to eliminate the cost of land for both first home buyers and commercial developers. As the cost of land is typically half the cost of a house, CLBs provides pioneer home owners with half cost housing.

Because the value of urban land is determined by external factors it makes more sense not talk about "land" value but "site" value. Words are the tools of thinking and changing the words introduces a different way of analysis and thus different solutions.

Section three provides evidence of how the cost of urban sites can be made self-financing. Section four describes the operations of a CLB system of property rights with the concluding section considering its wider economic, social and political implications. Eight mechanisms are identified of how a CLB can distribute wealth to citizens without government taxes or welfare to democratise the wealth of cities with affordable housing.

However, orthodox economic analysis fails to identify the inefficiencies and inequity in the current system of property rights or the means for ameliorating the problem of housing not being affordable. The limitations of orthodox economic analysis are discussed in the following Section.

2. Limitations in orthodox analysis

This Section identifies five reasons why orthodox economic analysis cannot identify the problems created by the existing system of owning urban land. The limitations arise because orthodox economic analysis:

[1] Refer to http://www.lawsociety.com.au/page.asp?partid=6692

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(i) Assumes that the nature of property rights is fixed and not a policy variable;
(ii) Neglects to take into account variations in the values of assets and liabilities;
(iii) Ignores how government infrastructure investment creates private profits for land owners;
(iv) Does not recognize "surplus profits" that are mistaken to be a form of "economic rent";
(v) Fails to recognize how surplus profits and windfall gains can be used to cross subsidize housing and commercial investors to democratise the wealth of cites without taxes or welfare.

To overcome these limitations, this paper augments orthodox economics with cash-flow analysis (Turnbull 2006) to provide new insights as included in the discussion below.

2.1 Nature property rights considered fixed not variable

Property rights were a variable in 18th century England with thousands of private acts of Parliament converting community land into private ownership. To counter this development, Thomas Spence[2] (1775) proposed that all land be owned by a Parish based corporation with its citizens as members. Unlike Spence, John Stuart Mill (1848), Henry George (1912) and Kate Barker (2004) did not consider changing the nature of property rights that created the problem of windfall or "unearned" gains being captured by private land owners. Mill (1848) noted that the gains were created from the investment by others in community infrastructure, as indicated in Figure 1, Duplex Tenure.

Like Mill (1848), George (1912) and Barker (2004) proposed taxing away the unearned gains. But greater benefits for the community and the host economy can be achieved by the community sharing and preserving the gains rather than taxing them away. One benefit is that the gains allow urban land to become self-financing to eliminate its cost from the price of housing and commercial developments. Land Value Tax (LVT) on the unimproved value of land as proposed by George can still be applied but on all community land. As noted by Friedman (1978) a LVT is "the least bad tax". A LVT on individual sites only ameliorate the effect, not the cause, of the current inequities and inefficiencies of maintaining individual ownership of urban sites.

2.2 Neglect or omission of value changes in assets and liabilities

The neglect of changes in the value of assets and liabilities by orthodox economic analysis is illustrated by Peter Abelson (2005). His paper on 'Taxation and Subsidies for Housing and Land' was consistent with the traditional remit of economics, based on the production and exchange of goods and services. This could explain why Abelson did not consider the interdependency of land costs and house prices with the level of taxes and welfare that was the subject of his study. Such omission can lead to counter-productive policies, such as government assistance to make housing more affordable increasing the price of rental housing and sites.

Changes in the cost of acquiring housing sites and thus the value of housing can be many times greater than changes in tax and welfare payments. The cash flows arising from changes in the tenure of assets and liabilities can be orders of magnitude greater than that of incomes and expenses (Turnbull 1992).

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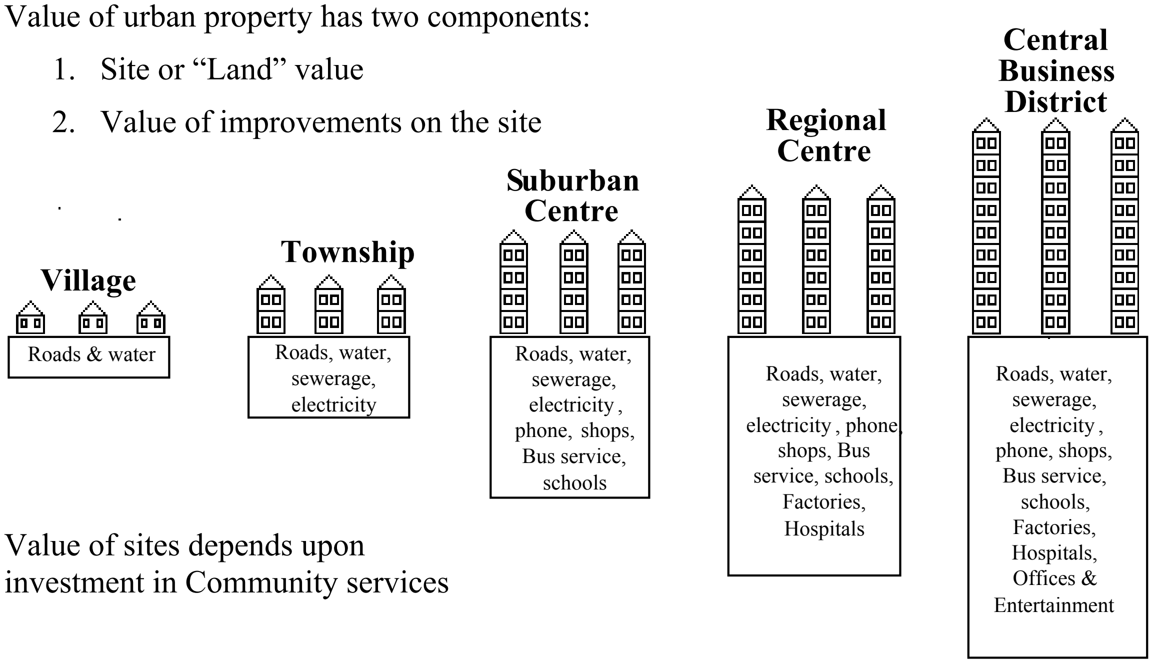
[2] Parish members would elect members of Parliament with the government funded by the Parishes from the rents collected from their residents. As Parliament was elected at that time by only 5% of all males this proposal would have made all males eligible to vote with an interest in land through their Parish consistent with the views of John Locke (1632-1704).

Figure 1, Duplex Tenure

Value of urban property has two components:

1. Site or “Land” value
2. Value of improvements on the site



Value of sites depends upon investment in Community services

Two different types of property rights are required to create efficient equitable markets for the private ownership of urban property:

1. Dynamic Leases (DLs) or "Strata Title" for improvements on the site/land
2. Shares in the co-operative which owns all sites/land in the community

Dynamic Lease (DL) "Strata Title" captures value of improvements on a specific site.	Value of DL determined by market value of improvements, (not by windfall gains from community investment in services)
Shares in Community Land Bank (CLB) capture pro-rata value of all sites and community assets.	Issue value of CLB shares determined by average market price for all community land. Buyback price from DL vendors proportionally discounted for rates not paid over 25 year period.

CLB captures for all resident home owners and tenants:

- Equity values in all land not occupied by dwellings including all commercial and industrial sites;
- Windfall gains in all sites from public investment in infrastructures services;
- Windfall gains from private investment in local amenities and facilities servicing the site;
- Surplus profits from private investment in buildings and other improvements;
- Profits from buying back its own shares at a discount from short term residents;
- Market value of quality of life created by community sites, services and governance.

To take these values into account, this paper extends the remit of orthodox analysis on income and expenditures to cash flows – an approach commonly used by individuals, business people and financial analysts (Turnbull 2006).

2.3 Neglects or omits how government expenditure creates private profits

Orthodox analysis typically neglects windfalls and wipeouts described by Hagman and Misczynski (1978) that arise from changes in tenure and planning policies or development activities. As a result of this omission, public policy initiatives can become counterproductive. For example, Governments may increase their investment in roads, water, sewerage, and transport to make more new housing sites available but the result is to increase the price of sites to make housing *less* affordable. The substantial up-lift in house prices from either public or private sector investment in community services, facilities and infrastructure was neglected in the analysis by Abelson (2005).

2.4 Failure to recognize surplus profits

Orthodox analysis does not recognize how investors can get over-paid, not just from the unearned or windfall profits of owning land referred to above but also from "surplus profits" arising from productive activities. Surplus profits only arise after the completion of the investor's time horizon. Thus by definition surplus profits represent cash returns in excess of the incentive to invest to create a surplus incentive. The capture of surplus cash by investors is inconsistent with the purpose of a market economy to efficiently allocate resources. It is also inequitable when the surplus is not shared with those making a contribution to its creation through their custom and involvement such as being customers, employees and/or suppliers.

Whereas profits that may be considered "excessive", are measured and reported by accountants surplus profits are not identified. This failure arises because accountants do not concern themselves with investment time horizons. Surplus profits are not recognized by economists who confuse the concept with notions of "economic rent" which are included in accounting reports. Surplus profits can be thought of as being complementary to the concept of economic rent as they involve values *not* required to bring forth production.

Without the concept of surplus profit it is not possible to identify a significant cause of wealth concentration and so policies for its amelioration as put forward in this paper and in others (Turnbull 1975; 1992; 2008).

An indication of the size and significance of surplus profits is provided in Turnbull (2006). Their size is also indicated by the ability of investors to obtain competitive returns from publicly traded corporations even *after massive wealth transfers* have been made to executives. BusinessWeek (2002) reported that CEOs of the 2,800 corporations traded on the New York Stock Exchange had obtained shares and options that represented over 10% in the number of *all* the shares listed on the exchange.

2.5 Neglects to consider cross subsidization through property rights

The capture and distribution of windfall and surplus profits are crucial concepts for understanding how land/sites can be made self-financing. Self-financing urban sites provides a way to eliminate the cost of land from housing that can constitute around half its cost in many locations.

Orthodox analysis fails to identify how consumer demand for housing subsidizes corporate wealth by increasing the value of their land. Affordable housing can be achieved by not just eliminating this subsidy but by capturing surplus profits from corporations to make land/sites self-financing for both housing and business investment. Section four describes how a CLB introduces cross subsidization at a local community level. The potential for making urban sites and services self-financing is illustrated in the next Section.

3. Eliminating the cost of land

This Section considers the potential to make urban land sites self-financing so as to eliminate the cost of land for buying a new home or for commercial investors constructing buildings and other structures.

A compelling example is provided by the building in 1999 of 11 new underground stations for the London Jubilee line. The cost of the public investment required to build the new stations was 3.5 billion pounds sterling. According to Riley (2002) the uplift in site values created within 1000 yards of each of the stations aggregated to 13 billion pounds sterling. This meant that the windfall gains captured by land owners were 3.7 time the cost of the public expenditure. The extraordinary size of the private windfall gains generated by public investment illustrates the extent that the current system of property rights is inefficient, inequitable and concentrates wealth in a way hidden from orthodox analysis. To the extent that foreigners are land owners, then it also means that government infrastructure expenditures can result in increases in foreign liabilities.

If all the 3.5 billion pounds cost of the investment was borrowed against the security of the land the uplift in value would have increased the net worth of the land by 13 billion less the amount borrowed of 3.5 billion. That is an increase in net worth of 9.5 billion pounds. The average population density of London in 2000 was 11,560 people per square mile[3]. One square mile is approximately the area of 1,000 yard radius around each station. Using the density figure cited above, the increase in net worth per resident would be 74,700 pounds sterling. Even if the residents had financed the project, they would still have increased their wealth by a significant amount while avoiding the use of public expenditure.

To insulate the land owners from the liability of the 3.5 billion borrowed against the value of their sites, property rights to their sites would need to be separated from the property rights to their buildings described in Figure 1 as a "Dynamic Lease" (DL). Each site owner would also obtain shares in the CLB pro-rata to the area of site occupied by their DL. Shares issued to non residents could be non-voting participating redeemable preference shares so that only residents obtaining voting shares.

As the CLB would now own the stations and any associated commercial leases it would obtain an income stream from the rail operators and leases to assist in paying the interest cost of the debt and its repayment. Additional income would also become available to service the debt as discussed below.

Besides insulating site owners from the liabilities of borrowing the project cost of 3.5 billion pounds, the introduction of CLB with a separate title deed for the property on the site would allow its owner to privately borrow against the value of her/his building. Like condominium, company and strata title

[3] This is equivalent to 18 people per acre. Statistics obtained from: http://www.demographia.com/db-ukcities.htm

arrangements the owners would need to pay a fee/rent/rate for collective maintenance costs. The size of this fee would need to be increased to pay any short fall in the cash required for servicing the 3.5 billion pound debt. However, as the amenity of the commercial properties serviced by the new underground stations would be increased, so would the rents collected by the CLB. As the increase in land values was 3.7 times the cost of the project, the increase in rents could be expected to be more than adequate to cover the cost of paying interest on the loan and paying back its principle. In this way, those who benefit from infrastructure development become responsible for its financing and maintenance. Incentives are introduced to increase efficiency while also increasing equity.

The example also illustrates how urban sites can be made self-financing to eliminate the cost of land for both home owners and commercial investors. In both the US and Australia land represents half the cost of urban houses according respectively to Morris Davis and Michael Palumbo (2006) and John Roskam (2006). The cost reduction could even be more in Sydney, where Roskam (2006) reported that "the cost of land comprises 80 per cent of the price of a house".

The cost of land could also be eliminated for commercial investors in housing or commercial developments to make the private provision of infrastructure more attractive. In this way employment opportunities could be integrated with residential areas. More importantly it provides the means for commercial investors to cross subsidize housing in a way that does not reduce their reported profits. This outcome is achieved by the CLB providing sites to commercial investors for the time period required by them to write-off their investment for tax purposes. In this way the building and any surplus profits it generates are transferred from the investor to the CLB for the benefit of residents.

A similar arrangement is commonly utilized by governments to finance major infrastructure projects where the investment is provided by the private sector and then transferred to the government. The arrangement is described as Build Own Operate and Transfer, or a BOOT project. However, in the situation being considered here, ownership is transferred not to the government but to the CLB.

For example, if investment housing, office buildings and super markets were written off for tax purposes at 4% per year, the CLB would obtain 100% ownership after 25 years. The income-producing assets could have a useful life much longer than 25 years. It is by this means that surplus profits are transferred from investors to the community to cross subsidize the cost of housing.

Like a Community Land Trust (CLT), a CLB provides affordable housing by eliminating the cost of land. A CLT eliminates the cost of land by obtaining a grant or gift to acquire the land. The need for gifts and grants limits the size and spread of CLTs. As a CLB can become self-financing, it need not require a grant or gift to become established. CLBs can be widely replicated without cost to government provided that they are established in economically viable precincts and on a sufficient scale to capture most values that would otherwise be considered "externalities". CLBs could be used to reduce the cost and/or liabilities of higher orders of government by funding local schools and hospitals. Another application of CLBs is to allow the sites and services of squatter settlements to become self-financing and so bankable (Turnbull 1976, 1983).

Descriptions of CLTs and CLBs, as well as their differences are presented in Bennello, Swann and Turnbull (1997). My co-author, Bob Swann, pioneered the creation and establishment of CLTs in the US. Differences between CLTs and CLBs are also summarized in a tabulated form in Appendix I.

Evidence of the novel contribution of the CLB concept is presented in Appendix II written by economists and international housing specialists.

Consideration of where CLBs might best be established is considered in the next Section with details of its operations.

4. Operations of a Community Land Bank

No new laws are required to create a CLB[4]. It could be formed as a land owning trust, cooperative or company. Corporate entities provide limited liability and flexibility so this particular form will be used to explain the operations of a CLB.

The CLB would own all the land/sites in a viable urban precinct that might house from, say, 5,000 to 100,000 residents. By preference the CLB would represent a political unit as envisaged by Spence (1775). Instead of being a Parish it could be a Town Council, Local Government body or a ward of a Town Council or Government body. However, its governance architecture would be consistent with it being mutually owned and controlled by its residents, as described by Turnbull (1976, 2001, 2002). The CLB would issue its shares on a pro-rata basis to the area of the site occupied by each dwelling of say one share per square meter. In this way the shares would represent the pro-rata equity value of all the land owned by the CLB.

The steps for setting up a CLB are set out in Appendix III that assumes that it is being located where rural land is being converted to urban. Existing urban areas can be converted from a unitary title system to a duplex title system in a similar way that a company on the stock exchange issues its own shares in exchange for acquiring all the shares in another. Owners of properties could exchange their unitary title deeds for the duplex title deeds provided by a CLB. In this way they would obtain ownership of their property and obtain a pro-rata share of all sites in their neighborhood to increase their net worth. CLBs could be established in this manner without using any cash, unlike a CLT. A most prospective situation for establishing a CLB is in run down inner city precincts that require redevelopment. The redevelopment process provides a way of adding value to assist in making the development self-financing.

A CLB is significantly different from what is known as "company title" for an apartment. Company title is created when an apartment block is owned by a company with one share dedicated for each apartment. Transfer of any one share/apartment depends upon the agreement of the other shareholders. This condition means that ownership of an apartment is not necessarily freely negotiable to provide liquidity for a home lender if there was a default on the purchase finance. For this reason it is difficult to obtain finance for a company title apartment unless other security is available.

Banks, building societies, savings and loans associations and other housing lenders typically accept a long term lease as security provided the lease is freely negotiable. DLs meet this test. However, the buyer of a DL is required to also acquire the CLB shares attached or "stapled" to it. Home loan lenders

[4] In the UK, an exemption is preferred from the 'Commonhold and Leasehold Reform Act 2002'. Without relief from this Act tenants could be denied obtaining pro-rata equity interests in other sites as a CLB shareholder.

would also require the borrower to provide signed transfers over the stapled CLB shares in which they had an interest.

When a home or apartment is sold on the open market, the CLB redeems the stapled shares at a price that may be discounted and issue new shares at their market value to the buyer. The market value of CLB shares is determined in the same way as any Real Estate Investment Trust (REIT). That is the value of all CLB sites, without the value of their improvements, is divided by the number of shares on issue. Like a REIT, the CLB would publish its share value. Buyers of dwellings would use this information to determine the price they would bid for a home.

The price at which the CLB would buy back its shares would be discounted from their market value according to how long the vendor has owned her/his home. The discount could be made proportional to the period over which rates had not been paid to allow the CLB to recoup its set up costs. If the CLB was paying off its set up costs over a 25 year period then a vendor selling a home after five years would obtain only 20% of the market value of their shares. After 10 years a vendor would obtain 40% of the market value of the shares and after 25 years there would be no discount.

This arrangement insures that the CLB can be self-financing from the rent/rates paid by home owners and/or from the profits accumulated by trading in its own shares from people selling their homes. However, when a CLB contains commercial sites there may be little or no need for home owners to pay a rent/rate as shown by the town of Letchworth in England (Howard 1946). Indeed it could be possible that residents would not need to pay any rent/rates while also obtaining dividends from their CLB shares.

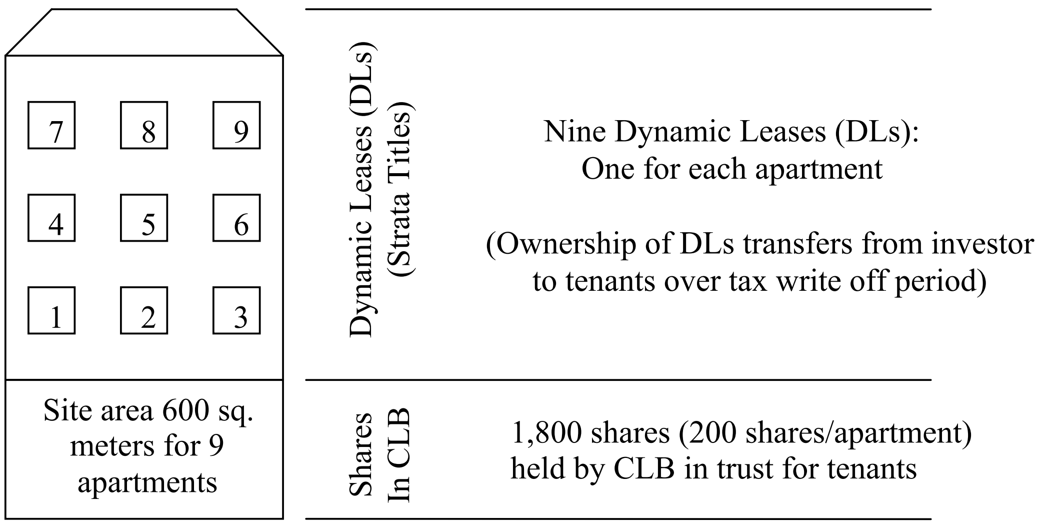
This possibility arises because CLB shares are only issued to residents be they home owners or renters. No shares are issued for sites that contain commercial and industrial developments. In a heavily commercialized precinct residents may occupy a minor portion of the land but have a pro-rata share in *all* its land. In addition, the CLB provides a way to transfer surplus profits to residents as explained below. Residents of industrial precincts would become richer than those in non-commercial areas.

One way for a CLB to capture surplus profits is to provide locations for commercial and industrial buildings without the need to invest funds in purchasing a site. In return, ownership of buildings would be transferred to the CLB as they were written off for tax purposes. Provided that the buildings and structures were depreciated in the financial accounts at the same rate as they were written off for tax purposes there would be no change in the profit reported for investors. If the tax deductible depreciation rate for commercial properties was 4% per year then complete ownership transfer from the investor would occur in 25 years. In the case of investment housing, co-ownership would transfer at this rate to the tenants, as indicated in Figure 2, Dynamic Duplex Tenure.

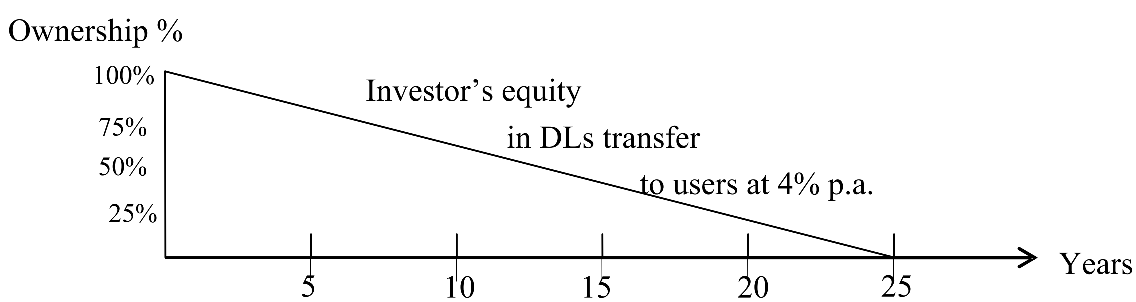
As only residents can own and vote CLB shares, none are held by commercial investors. The shares stapled to investment dwellings would also transfer without cost to the tenants at the rate of 4% p.a. In this way, long term tenants would become owners of both their dwelling and acquire a pro-rata share in all the sites owned by the CLB without the need to purchase either. Home buyers who lived in the CLB for 25 years would not suffer any discount on their shares when they sold their dwelling. The wealth of home owners would be greater in a CLB than if they owned a home at the same location without being in a CLB because they would obtain a pro-rata share of neighboring commercial land *and buildings*.

Figure 2, Dynamic Duplex Tenure

Investment accommodation: in a Community Land Bank (CLB)



Only voters residing in a CLB precinct can own and vote its shares. Non residents and corporations do not have to purchase a site (CLB shares) to make their investment much more attractive. However tenants become co-owners of their dwellings at the rate the investor writes off the cost for tax purposes. With a 4% depreciation rate the tenants acquire full ownership of both dwellings and CLB shares over 25 years. The ownership transfer provides an incentive to tenant/co-owners to minimize repair and maintenance costs to improve the return to investors.



Each tenant acquires co-ownership interest in 200 CLB shares at the rate of 4% p.a. If the tenant moves out after 5 years he/she retains a 20% co-ownership interest in both the shares and the dwelling with subsequent users acquiring residual interests.

Consider the example of a CLB where only 50% of the land was occupied by dwellings, then the CLB shares would provide pro-rata equity in the ownership of the other 50% of the sites in the CLB not occupied by dwellings. Home owners would then, in effect, capture land values that were twice that of the area they occupied. This prospect provides what could be a compelling incentive for citizens to vote for converting the tenure system of existing neighborhoods to a duplex CLB system.

The above analysis highlights one reason why it is an advantage for CLBs to include a rich mix of commercial activities. Another reason is that commercial activities provide rent/rates and surplus profits to service borrowings, finance infrastructure and/or cross subsidizes residents and/or pay dividends to residents. Ideally, the number of dwellings in the CLB would be sufficient to support educational facilities up to a basic tertiary level, with supporting health care services to sustain its mix of residents over generational changes. This scenario would typically require a population of, say, from 50,000 to 100,000 in OECD countries. With population densities of major cities in the OECD[5] countries running between 2,000 to 5,000 residents per square kilometer (8 to 20 persons per acre) this could involve urban precincts of between 10 and 50 square kilometers (or 100 times this value in hectares). The area would be equivalent to 3.9 to 19.3 square miles or between 2,471 to 12,400 acres.

Whereas increased area and population densities increases the ability of a precinct to be self-financing, a CLB can become viable for a small rural community with 80 self-built homes on 320 hectares. This possibility was shown in feasibility studies by the NSW Land Commission to create an intentional community in the North East of New South Wales, Australia (Turnbull 1984, 1985).

Even though home buyers typically obtain housing finance that requires from 20 to 30 years for its repayment, home owners typically only live in the same house on average for around six or seven years. The tenure rules in a CLB are similar to those in squatter settlements. The basic rule is 'if you do not use it you lose it'. This explains the naming of DLs. In practice it means that if a home owner rented out her/his property the user would obtain co-ownership rights of the DL and the associated CLB shares at 4% p.a. The owner and tenants would, in effect, become equity partners in the dwelling. This arrangement provides a strong incentive for home owners to sell their property. It also provides an incentive for tenants to invest sweat equity in maintaining their dwellings. This feature provides an additional incentive for private investment in CLB rental properties. Politically, it ensures control of the CLB only by its residents because the voting rights of non residents would fade out.

Similar arrangements would apply to tenants in investment properties. The average tenure of tenants is typically even less than the average tenure of a home owner. Each tenant would obtain a pro-rata share in the equity of their dwelling and the shares in the CLB stapled to it at the rate of 4% p.a. Liquidation of co-ownership rights in the DL could be undertaken by the CLB purchasing the apartment at its market value on request by the co-owners or in any event after 25 years. Individuals would obtain the right to transfer their CLB equities to their nominated pension fund provided that voting rights remained with them.

As well as providing a neighborhood building block for local government, a CLB can also be viewed as a micro economic system that provides a basis to minimize the drain of economic value out of a community. The tenure system of a CLB minimizes the export of cash in the form of rents, some surplus profits and realized windfall gains. This feature increases the ability of a community to be self-

[5] Non OECD cities have densities up to five times higher as reported at http://www.citymayors.com/statistics/largest-cities-density-125.html. Sydney and New York City have similar densities of around 2,100 people per square kilometer.

financing and minimizes the export of rents, windfall gains and surplus profits to foreign investors to reduce the drain on foreign exchange reserves. Some of the economic implications of the widespread adoption of CLBs are considered in the concluding Section.

5. Wider implications

The land tenure system created by CLBs should not be considered as just a way for making housing affordable but as a way to increase the economic efficiency, equity and the sustainability of capitalism.

CLBs increase the efficiency of a market economy by eliminating the ability of firms to subsidize their operations with unearned wealth. The extent of this phenomenon is hidden from orthodox economists who neglect to compare temporal changes in urban land values with the balance sheet of firms.

As council rates in Sydney are based on the unimproved value of land, the land value of whole suburbs is published. In preparing data for a Real Estate prospectus in 1966 the author found that the average annual compound growth in unimproved land values in a number of suburbs exceeded 20% p.a. over the previous 20 years[6]. At this time the author was also comparing the market value of land owned by most of the firms listed on Australian Stock Exchanges with the market capitalization of the firm. This work was undertaken as a partner in a private equity syndicate that acquired a dozen publicly traded corporations from 1967 to 1974.

The work revealed that in many cases the value of the land owned by a firm was greater than the value of the firm. Acquiring the company on the stock exchange became a way to acquire urban land at deeply discounted values. By not revealing the full value of their land holdings firms could hide the fact they were not providing a competitive return on the assets they employed. Nevertheless, the source of shareholder funds reported in many balances sheets revealed that revaluation of land had created the largest proportion of their shareholders funds. The funds paid in by shareholders were the next most significant component of their net worth with retained earnings representing the smallest component. In other words, many firms were obtaining more wealth from land speculation than through their trading activities.

The problem of inefficient resource allocation by such processes also exists in private firms and can result in more foreign exchange reserves being exported than would be required in an efficient market economy. A notable example in this regard was the export of windfall and surplus profits from the wholly owned Australian subsidiary of US based General Motors Corporation (GMC). As reported by Turnbull (1973) “Even after making allowances for changes in the real value of money over the 47 years, the original cash equity investment has been repaid over 100 times”.

The only cash invested in the subsidiary that became General Motors Holden (GMH) was $A2 million in 1926. GMH became the first automobile manufacturer in Australia in 1945 with the nominal value of its shares being $A3.5 million. During the 1950’s GMH was remitting dividends two to three times greater than the nominal value of its shares. To avoid the political embarrassment of such high returns GMH increased the value of its shares on issue 7.7 times to $A27 million in 1962 when its net worth had become $A136 million. The newly created shares issued as a dividend to the parent were created from the tax free profit that arose from recognizing the windfall gains in the land that GMH owned in a

[6] During the period the average increase in value of all land in Australia was over 10% p.a. (Dwyer 2003).

rapidly growing Melbourne suburb. By 1971 GMH had paid over $A250 million in cash dividends to its parent while increasing its net worth to $A219 million.

The GMH story illustrates how surplus profits can grow to become many times the value of the original investment. The foreign investment time horizon used by US corporations was only 10 years in 1962 when the author was working in an affiliate of Standard Oil (Turnbull 1992). Besides illustrating the size of surplus profits, the GHM story also reveals the foreign exchange costs arising from corporate property rights that provide "unlimited, unknown and uncontrollable foreign liabilities" (Penrose 1957).

CLBs can provide one way to avoid the unnecessary export of value and living standards. Another way is to limit the power of corporations to own land, as adopted in some countries and/or the introduction of dynamic property rights to corporations (Turnbull 1975, 2000a). Besides being a feature of CLBs, dynamic property rights are also a feature of Ownership Transfer Corporations (Turnbull 2000a) and demurrage currencies (Fisher 1933). When used together, dynamic property rights that die, as occurs with all life forms and intellectual property rights, would introduce a sustainable "ecological" form of capitalism (Turnbull 2007, 2008). In these ways ecological property rights to money, realty and corporations would make capitalism more efficient, sustainable, equitable, responsive and democratic. The enrichment of democracy arises from the introduction of network governance as found in all biota (Turnbull 2002, 2007, 2008). Network governance is a condition precedent for self-governance (Turnbull 2000b: 119).

At a macro-economic level, CLBs increase efficiency by reducing the need for governments to raise taxes or loans to finance urban infrastructure consistent with the ideas of Spence (1775). Much of urban infrastructure investment can become self-financing at the local level on a sustainable self-reinforcing basis. Compare the financing of the US transcontinental railway that was in part financed by sale of land adjacent to the track.

The ability of CLBs to provide affordable housing is because dynamic duplex tenure represents a more efficient mechanism for owning realty (Turnbull 1983). This result is revealed by the feasibility studies of Turnbull (1984, 1985) and the applicability of the concept to squatter settlements as described in 'Land Leases without Land Lords' (Turnbull 1976). A CLB also provides a way for residents of a company owned town to own their homes and manage their community like any other civil society settlement. The result of a feasibility study for the five multinational corporations that owned the Western Australian Mt. Newman town with 5,000 residents servicing the largest iron ore mine in the world is included in Turnbull (1976).

The increased efficiency in financing settlements created by a CLB also creates increased equity by reducing the concentration of wealth through windfall and surplus profits that is endemic in the existing system. In particular, equity is increased by limiting the ability of commercial investors and other large land owners obtaining windfall gains from public expenditure on urban infrastructure.

The creation of windfall gains from consumer demand for realty is also reduced through dynamic co-ownership property rights that allow the windfall gains to be shared with those creating the value from their demand and/or usage. In this way the credo of "Social Capitalism" is achieved: "From each according to their interest, to each according to their contribution to production *or consumption*, provided the basic needs of all are fulfilled" (Turnbull 1975: 2).

Limitations in orthodox economic analysis of urban realty

There are eight mechanisms by which CLBs contribute to *Democratising the Wealth of Nations* (Turnbull 1975): (i) Pioneer home owners acquire shares without cost; (ii) Tenants acquire co-ownership of their dwelling without the need to make a purchase; (iii) Tenants acquire co-ownership of CLB shares without cost; (iv) All owners and tenants capture a proportion of any windfall gains in their dwellings; (v) All owners and tenants capture a share of the market value of any improvements that they may make to their dwellings; (vi) All owners and tenants capture a share in ownership values of all non residential land values in the CLB precinct through ownership of CLB shares; (vii) All owners and tenants capture a share in ownership values of all depreciated improvements in the CLB and so the surplus profits of enterprises in their precinct through ownership of CLB shares; (viii) All owners and tenants acquire a proportion of the gains captured by the CLB when it buys back its shares at a discount from residents selling their dwellings before CLB set up costs have be paid.

Another important outcome obtained by a community sharing all the ownership of its sites is that the economic, social and political interdependency of households and the productive sector can be integrated at the lowest practical level in accordance with the Principal of Subsidiarity. The integration of the various interests is indicated by the eight mechanisms for democratising the wealth of cities as described above.

The cross subsidization of the household sector by the productive sector is achieved without taxes or welfare to reduce the dead weight cost of their collection and distribution.

The separation of property rights to sites from improvements on the sites provides a way to eliminate the capture of windfall gains by local, external and foreign owned enterprises that distort the efficient allocation of productive resources – illustrated by the GMH example. It also eliminates the export of realized windfall gains to non-resident owners to avoid cash leaking out of the community. In addition it eliminates increases in foreign liabilities by the host economy when ownership is held by foreign interests.

The ability of a community to acquire ownership of all improvements on its sites after they have been written off by their owners provides a way to make the economy more efficient by reducing the over payment of investors with surplus profits. There exists the opportunity for a CLB to increase the surplus profits captured directly by its members through offering concessional access to its sites and services to firms that convert to an Ownership Transfer Corporation (Turnbull 1992, 2001, 2002, 2007, 2008). The cost/benefits for corporate investors who discount the future and CLB members who do not discount the value of their pensions create a win/win outcome for both (Turnbull 1975, 2000a). Surplus profits captured by a CLB provide an additional source of community income to pay the cost of servicing sites, services, tax to higher levels of government and/or a dividend to residents. A CLB provides an institutional structure to distribute a "citizen" or community dividend (Turnbull 1975: 83).

While a CLB limits the capture and export of windfall gains from sites by non residents and the export of rents to external parties, interest payment on home mortgages and commercial debt to external parties can create a significant loss of value from the community. The drain of value by interest payments can be minimized with a community currency such as "energy dollars" (Turnbull 2008). Locally generated sustainable energy and/or energy saving measures provide another way of reducing loss of community income to promote self-financing neighborhoods, suburbs, cities and nations.

All the above benefits are compatible with a LVT if the unit of taxation is the CLB rather than individual sites. A LVT on individual sites has been promoted as way to tax away unearned "windfall" gains in land and encourage underdeveloped sites to be developed. When a tax on the unearned values of urban land is used to finance additional infrastructure it can exacerbate inequity by generating even more unearned values. Although the tax collected would increase, it would also increase the size and role of government to increase dead weight costs and tax churn.

Communities are increasingly resisting development to preserve their culture, heritage and traditional amenities. While a LVT on individual sites can be designed to give exemptions to cultural and heritage sites to avoid or limit their development, the exemptions would be administered by a higher level of government that would have competing demands for exemptions from other regions. A CLB allows the local community to determine directly its own balance between development and preserving its icons of culture and heritage. The balance would be negotiated by internal democratic processes rather than relying on market forces created by a tax applied to individual sites by bureaucratic edict by a higher level of government in a way that the local community might have little influence.

All communities are likely to contain some sites that are relatively less developed than others. Residents with kitchen gardens and/or solar panels that increase the self-reliance and sustainability of the community could be discouraged with a tax on their single specific sites. A single site tax creates a treadmill for ever more development on a perpetual basis. The result would be inconsistent with building sustainable communities.

The use of a CLB to introduce a LVT removes the problem of windfall gains being captured privately as private ownership of sites no longer exists. In this way a CLB eliminates the cause of the problem that concerned J.S. Mill and Henry George. By eliminating the problem, CLBs eliminates the need for a remedy as proposed by Mill and George.

The CLB concept illustrates why and how capitalism can be reformed to automatically involve all citizens in the ownership and control of land and its improvements. The resulting gains in economic efficiency make housing affordable for all citizens. The manifold benefits described above provide compelling arguments for requiring that approval for public infrastructure expenditure and/or urban development be made conditional upon adopting duplex ownership of urban realty as is inherent in a CLB system.

6. References:

Abelson, P. (2004), 'Taxation and Subsidies for Housing and Land: Market Impact and Economic Efficiency Implications', presented to 34th Australian Conference of Economists. Melbourne, http://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=ACE2005&paper_id=93.

Angel, Archer, Tanphiphat and Wegelin eds. (1983), *Land for Housing the Poor*, Singapore: Select Books.

Barker, K. (2004), *Delivering stability: securing our future housing needs, Final Report*, London: HM Treasury, http://www.hm-treasury.gov.uk/media/E/3/barker_review_report_494.pdf.

Bennello C.G, Swann R, and Turnbull S. (1997 [1989]) *Building Sustainable Communities: Tools and Concepts for Self-Reliant Economic Change* – Ward Morehouse ed. revised second edition New York: Bootstrap Press.

BusinessWeek (2002), Online Special Report, BusinessWeek Online Special Report, April 15, http://www.businessweek.com/magazine/content/02_15/b3778012.htm.

Davis A.M, and Palumbo M.G. (2006), *The Price of Residential Land in Large US Cities*, Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs, Washington DC: Federal Reserve Board. http://www.federalreserve.gov/Pubs/feds/2006/200625/200625pap.pdf.

Dwyer T. (2003), *The Taxable Capacity of Australian Land and Resources*, Australian Tax Forum, 18:1 http://www.lvrg.org.au/Text/1124864122358-5260/uploadedFiles/1125217371937-4327.pdf .

Fisher I. (1933), *Stamp Script*, New York: Adelphi Press.

Friedman M. (1978), 'Milton Friedman Interviewed', *The Times Herald*, Norristown Pennsylvania Friday 1 December, http://www.cooperativeindividualism.org/friedman-milton_interview-1978.html.

George H. (1912 [1879]), *Progress and Poverty: An Inquiry into the Cause of Industrial Depressions and of Increase of Want with Increases of Wealth: The Remedy*, New York: Doubleday Page & Co. http://www.econlib.org/library/YPDBooks/George/grgPPContents.html.

Hagman D. and Misczynski D. eds. (1978), *Windfalls for Wipeouts: Land value capture and compensation,* Chicago: American Society of Planning Officials.

Howard E. (1946 [1902]), *Garden Cities of To-morrow*, London: Faber and Faber.

Mill J.S. (1848), *Principles of Political Economy*, Book V chap. II http://www.econlib.org/library/Mill/mlP.html.

Penrose E. (1996), 'Foreign investment and the growth of the firm', *Economic Journal*, June vol. LXVI: 220–35.

Riley, D. (2002), *Taken for a Ride*, London: Centre for Land Policy Studies.

Roskam J. (2006), 'Home truths and politics', *Australian Financial Review*, Sydney: August 11:90 reproduced at http://www.henrythornton.com/article.asp?article_id=4221.

Spence T. (1775), 'Property in Land is Every One's Right' presented to The Philosophical Society Newcastle upon Tyne November 8th, published in 1793 as *The Rights of Man* http://thomas-spence-society.co.uk/7.html.

Turnbull S. (1973), 'Time Limited Corporations', *ABACUS: A Journal of Accounting and Business Studies,* June 9:1, 1−28.

Turnbull S. (1975), *Democratising the Wealth of Nations*, Sydney: The Company Directors' Association of Australia. http://cog.kent.edu/lib/TurnbullBook/TurnbullBook.htm.

Turnbull S. (1976), 'Land Leases without Landlords' presented to United Nations Habitat Forum Vancouver, June 8, http://papers.ssrn.com/abstract_id=630861.

Turnbull S. (1983), 'Co-operative Land Banks for Low-Income Housing' in *Land for Housing the Poor,* Shlomo Angel, Raymond W. Archer, Sidhijai Tanphiphat and Emiel A. Wegelin, eds. Singapore: Select Books, 511–26. http://papers.ssrn.com/abstract_id=649642.

Turnbull S. (1984), *Multiple Occupancy Development: Feasibility Study by the Land Commission of NSW*, June, Sydney on file with the author.

Turnbull S. (1985), *Pilot Multiple Occupancy at Wadeville: Acquisition Feasibility Report for the Land Commission of NSW*, July Sydney on file with the author.

Turnbull S. (1992), 'New Strategies for Structuring Society from a Cash flow Paradigm' presented to the Society for the Advancement of Socio-Economics Irvine California, March 27, http://ssrn.com/abstract=936868.

Turnbull S. (2000a), 'Stakeholder Governance: A cybernetic and property rights analysis', in *Corporate Governance: The History of Management Thought*, R.I. Tricker ed. London: Ashgate Publishing, 401–13.

Turnbull S. 'The governance of firms controlled by more than one board: Theory development and examples' (2000b) PhD dissertation Macquarie University Sydney, http://ssrn.com/abstract=858244.

Turnbull S. (2001), 'The competitive advantage of stakeholder mutuals', *The New Mutualism in Public Policy,* J. Birchall ed. Chapter 9, London: Routledge,171–201. http://ssrn.com/abstract=242779.

Turnbull S. (2002), *A New Way to Govern: Organizations and society after Enron*, London: The New Economics Foundation, http://ssrn.com/abstract_id=319867.

Turnbull S. (2006), 'Grounding economics in commercial reality: A cash-flow paradigm', in *Essays in Heterodox Economics: Proceedings refereed papers Fifth conference of Heterodox Economics University of New South Wales Australia*, Kreisler P, Johnson M, and Lodewijks J. eds. 438–61, http://ssrn.com/abstract=946033.

Turnbull S. (2007), 'A framework for designing sustainable urban communities', *Kybernetes: The international journal of systems, cybernetics and management science*, Special Issue on "Cybernetics and Design", October: 1543–57, http://papers.ssrn.com/abstract_id=960193.

Turnbull S. (2008), 'Financing urban communities with sustainable energy dollars', in *Urban Energy Transition*, Peter Droege ed. Oxford: Elsevier Science Publishers, 121–40. http://papers.ssrn.com/abstract_id=980027**.**

APPENDIX I

*Differences between CLTs and CLBs
(Community Land Trusts and Cooperative Land Banks)

	Features	CLT	CLB
1	Much easier to set up	✓	
2	Best suited for urban areas		✓
3	Best suited for rural areas	✓	
4	Best suited for non-contiguous sites	✓	
5	Suited for communities with less than 5,000 tenants and home owners	✓	
6	Depends on gift of land sites and/or cash for their acquisition	✓	
7	Can tailor design and issue its own securities for acquiring sites		✓
8	Can expand over large areas without requiring cash		✓
9	Captures value of planning approvals for residents as private equity		✓
10	Captures development values for residents as private equity		✓
11	Captures values of public investment for residents as private equity		✓
12	Captures for residents value of neighboring private services & facilities		✓
13	Captures for residents profits in excess of the incentive to invest		✓
14	Tenants capture privately increments in value from sites not occupied		✓
15	Superior subsidies for home ownership and rental housing		✓
16	Higher incentives for tenants to maintain and improve dwellings		✓
17	Incentive for both home owners and tenants to improve public assets		✓
18	Market forces harnessed to promote equity and further social goals		✓
19	Distributes wealth without taxes or bureaucracy		✓
20	Allows low income families to acquire greater equity values		✓
21	Introduces a systemic change in the nature of capitalism		✓

* Features common to both CLTs and CLBs are excluded, like (i) reducing the cost of acquiring dwellings by separating the value of the land site from the value of the dwelling constructed on the site and (ii) allowing low income families to live in and service expensive locations.

<u>Explanations</u>

1. CLTs are much easier to establish because they can operate on a smaller scale noted in item 5.
2. CLTs home owners and tenants (residents) cannot privately capture values generated by sites external to their dwellings within the CLT as no collective equity interest is provided as exists in a CLB. However, most CLTs in the US are located in urban areas.
3. The ability of a CLB to average and distribute all windfall gains and wipe-outs in all sites within its precincts is far less relevant in rural arrears.
4. The ability of a CLB to capture the value added by neighbouring sites is reduced when neighbouring sites are not part of the CLB precinct.
5. CLBs requires sufficient residents to allow (i) each site to capture significant added value from all other sites in the precinct of the CLB and (ii) a non-trivial number of residents continuing re-locating outside the CLB with the entry of new residents into the CLB so as to establish a realistic market value for its shares (Stock Exchanges require listed companies to have a minimum number of shareholders for the same reason so as to establish a reasonably liquid market for company shares).

6. CLTs are constructed as a charity or non profit trust or company that do not issue securities, a CLB can be company that issues shares of varies types or a trust that issues varies types of equity units.
7. CLBs can design its securities to issue to property owners in exchange for their title deeds to land/or buildings, etc to avoid the need to raise cash for the formation of a CLB.
8. CLT leases begin to acquire the characteristics of conventional private ownership in urban areas as the area of their land increases as illustrated in London and Canberra.
9. CLTs do not issue shares that capture privately for their residents increments in their land sites.
10. CLTs do not issue shares that capture value of improvements to their land for all residents.
11. CLTs do not issue shares that capture the value of transport, health and education services and other facilities for their residents for their residents as a private equity.
12. CLTs do not issue shares that capture the value of having shopping and recreational facilities or convenience of local employment in commercial and industrial activities, etc.
13. Ownership of all non residential commercial improvements becomes owned by the CLB after they have been fully depreciated. Both CLTs and CLBs can attract commercial and industrial investors by eliminating the cost of the land site that typically reduces the investment cost by 10% to 50%. Loss of ownership value of fully depreciated assets in a CLB becomes insignificant with investment analysis that discounts future values on a compounding basis and ignored them after the investment time horizon.
14. In this way tenants can share in the value of neighbouring sites and services created to some extent by their demand for them. Wealth transfers created by rules of ownership in a CLB not by taxes and rents/rates.
15. Superior CLB subsidies arise for reasons noted in items 9, 10, 11, 12, 13 and 14 above and the ability of the CLB to obtain profits from buying back its shares at a lower price from departing residents then they are sold to incoming residents. Exiting residents could have their discount reduced by say 5% for each they resided in the CLB as compensation for contributing to share values by their rents/rates and demand for services and facilities while they were residents.
16. CLB tenants automatically become co-owners of dwelling and community assets with home owners automatically losing say 5% of their equity in both their dwelling and community assets when they are not owner occupiers. This creates an incentive for owners to sell rather than rent their homes when they are not owner occupied. CLT tenants cannot capture privately any increases in the value of community assets.
17. Incentive from CLB providing private equity for all residents (owners or tenants) in all community assets. This is not available in a CLT that does not issue shares to reflect value of its public assets.
18. CLTs are not directly exposed to market forces for community assets as these are not recognised in a negotiable form.
19. Wealth transfers created by rules of ownership in a CLB not by taxes and rents/rates that create a disincentive for investors in rental properties, commercial or industrial properties.
20. CLBs provide greater equity values because they provide all residents be they home owners or tenants with two types of private equities while a CLT only provides a private equity in dwellings to home buyers.
21. CLBs introduce the concept of dynamic property rights with "use it or lose it" characteristics that allow market forces to allocate value more equitably, efficiently and economically then current concepts of ownership that are maintained in CLTs.

APPENDIX II

"There are even alternatives to private or public land ownership"

Introduction to Section IX of *Land for Housing the Poor*, Select Books, Singapore, 1983 by its four Editors that contained only one contribution by Turnbull (1983). The four editors were: Shlomo Angel, Professor of Human Settlements Planning and Raymon W. Archer, Associate Professor of Human Settlements Planning at the Asian Institute of Technology, Bangkok, Thailand; Sidihijai Tanphinphat, Deputy Director, Office of Policy and Planning, National Housing Authority of Thailand, and Emiel A. Weglin in the Social Infrastructure Division of the Asian Development Bank.

Most of the articles in this book deal with incremental changes in the existing structures of institutions and do not postulate revolutionary upheavals as preconditions to effective action on the land issue. Yet it is worthwhile to contemplate far-reaching changes in the ways that we commonly perceive land ownership. The thinking along that dimension has unfortunately been rather sterile and there appears to be ample room for further development of new concepts and new ideas.

An interesting scheme for restructuring the ownership of land in residential communities is given by Turnbull. Turnbull criticizes the conventional methods of owning land and housing by private individuals and corporations on the one hand and by the public authorities on the other as either inequitable or inefficient or both. The rampant exploitation generated by private ownership of land is not mitigated by government efforts at taxation and regulation. Government ownership of land and housing, on the other hand, is grossly inefficient and many socialist countries are turning towards home ownership schemes to combat the growing inefficiencies.

Turnbull sees the value of introducing a new duplex tenure system to remedy this situation. In this system, the ownership of structures and improvements on land is separate from the ownership of the land itself, and the land is collectively owned by the community as a whole. Each individual owns his house as well as shares in the community land corresponding to the size of his plot. He is free to sell his house and his shares, but his shares ares sold to the community land bank, which in turn sells them to the new buyer at a higher price. In this manner, the community captures the increased land value, using the proceeds for infrastructure development and other community improvements. As only individual community members are allowed to own shares in land, additional revenue is generated from the leasing of community land to commercial and public enterprises. Turnbull discusses a number of mechanisms for creating cooperative land banks, the simplest one being the creation of a new community on virgin land. In areas occupied by tenants or squatters, he proposes a dynamic tenure scheme whereby, through regular payments, the tenants gradually gain equity to the land and structures they occupy and in the long run become owner-occupiers. Turnbull believes that using such mechanisms, communities varying in size from 3,000 to 50,000 people can be self-financed and self-managed, improving gradually over time in an equitable manner without resorting to central government subsidies.

The thinking on appropriate forms of land ownership and land tenure systems has by no means been exhausted, and there are inherent problems in existing systems which may require fundamental changes before they can be adequately resolved. Our current perception of land tenure is inherently bound up in the historical period we live in and in the existing relationships within the societies of which we are a part. Both are in a process of dynamic change and do not contain, in the last analysis, any patterns or rules of a permanent nature. As these patterns change, concepts and ideas which were considered completely unrealistic may emerge as new paradigms for a new order.

APPENDIX III

Establishing a Community Land Bank (CLB)

1. A Company is registered for the purpose of operating a community land bank. (A Corporation rather than a co-operative is required in order to allow the issue of preference shares which can be redeemed at prices other than at their par value.)

2. An option is obtained to purchase a viable area of land for development or redevelopment at existing use value (ideally with vendor finance on exercise of the option).

3. The company obtains a re-zoning of the land and uses the windfall gains in values created to enhance its ability for raising loans for development.

4. The land is mortgaged to fund the costs of sub-division, development and/or associated infrastructure development costs, together with capitalized interest and operating costs for the initial phase of operations. The value of the land should increase accordingly to maintain the equity created in points 2 and 3 above.

5. Two types of lease are created: (a) Residential perpetual lease of home sites, subject to agreed residential development, (b) Commercial/Industrial leases for the duration of the period provided by the tax department to write-off all the costs of improvements (eg. 25 years with a 4% depreciation rate). Ownership of the improvements would revert to the CLB with ownership of investment housing reverting occupants to further enhance the equity base of the CLB and its residents.

6. The Company admits residential members from government housing waiting lists and/or other acceptable applicants, who are assigned shares in the CLB on the basis of one share for every square meter of the site leased. But each household has only one vote irrespective of the number of shares held (Co-operative principle). All shares issues are restricted to residents to eliminate any external or corporate ownership and control, or claims to windfall profits on commercial leases by non-residents.

7. Members raise first mortgage finance for home purchase against the security of the perpetual leases from traditional sources of housing finance.

8. Company derives cash flow from: (a) Site rents from commercial/industrial leases; (b) Rent/rates for residential leases; and (c) Buy back of shares at lower price than they are sold to purchases of residential leases when residents move.

9. If residential leases (houses) are not sold when owner ceases to be a resident, then co-ownership rights in the house is obtained by the tenant on the basis of 4% per year of occupancy. The discount applied by the CLB to determine the price at which it redeems its shares from residents selling their house is reduced according to their length of ownership. There would be no discount if the ownership were for a sufficient period so that the rent/rates paid from all sources over the period (e.g. 25 years) were sufficient to amortize the pro-rata costs of establishing the CLB. The issue price of the CLB shares to purchases of houses (perpetual leases) is determined by market prices in the same manner as unlisted unit trusts. That is, the value of all the land held by the CLB, (this would include streets, parks and land occupied by public buildings, commercial or industrial interests) would be divided by the total number of shares on issue.