A Plan to Ease Rents and House Prices

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Abstract
The plan put forward in this paper aims to moderate rents and house prices in New Zealand by increasing the supply of affordable housing at no cost to the taxpayer. Housing supply could be increased by selling 10 percent of the government rental housing stock each year and replacing it with the same number of new units. To minimise land costs the replacement units would be medium density housing sited on land already owned by the government. Consequential flow on cost savings in rental subsidies are also possible if the government rental housing portfolio is rationalised to provide a better fit between tenant needs and housing types. Similarly, moderating house price increases is likely to save the taxpayer money spent on existing demand based subsidies aimed at encouraging home ownership.
Introduction

Changes in the level of house prices are frequently reported in the media because they are of interest to the general population, property professionals and policy makers. With few exceptions, people either rent or own houses. Since 2000 the Economist (2007) has reported on an unprecedented increase in house prices in a number of western countries, including New Zealand. From June 2000 to June 2006 the Quotable Value NZ (2006) house price index increased by 92 percent representing an annual compound rate of growth of 11.5 percent. During this same period average wages increased by 23 percent, an annual compound rate of growth of 3.5 percent.

The disconnection between wages and house prices is not a new problem but it does seem to be getting steadily worse. The National Housing Commission (1988) expressed concerns to government about rental and ownership affordability. More recently Hargreaves and Histen (2007) showed home affordability had deteriorated to levels last seen in 1989 when mortgage interest rates were over 15 percent, compared to around 8 percent in 2007. Perhaps more importantly in August 1989 it took 3.65 years of average wages to purchase the median house and by November 2006 this ratio had deteriorated to 7.5 years of average wages. From a national perspective unless increases in house prices can be justified by increased labour market productivity leading to higher incomes then house price increases represent an intergenerational transfer payment between existing and aspiring home owners.

Another significant consequence of declining affordability has been a reduction in the rate of home ownership, particularly in the under 35 age bracket. Census figures from Statistics New Zealand (2007), with time series adjustments based on Briggs (2006), show the annual decline in home ownership over the last decade at around 0.6 percent per year. The 2006 level was 66.8 percent. In the main cities home ownership is most problematical in Auckland City where census figures show it is now down to 56.1 percent of households.

House price increases have also impacted both on the interest rate policy adopted by the Reserve Bank of New Zealand to contain inflation within the 0-3 percent band. Both residential rents and the cost of building new houses are included in the consumer price index. The so called “wealth effect” brought about by increased property values has also led to increased levels of consumer spending. The dilemma for the central bank has been that raising
interest rates to slow down the housing boom has an adverse effect on the productive sector of the economy because it increases the cost of doing business. Exporters are particularly vulnerable with a floating exchange rate as high interest rates are attractive to overseas investors and increase the value of the New Zealand dollar thereby lowering returns to the export sector.

To date policy makers have devoted most of their attention concerning moderating house price increases to concentrating on the demand side of the housing equation. For example, Bollard and Whitehead (2007) wrote to the Minister of Finance, Dr Cullen, with a report dealing with possible Supplementary Stabilisation Instruments. Measures investigated included various forms of taxation and a mortgage interest levy. The report concluded there did not appear to be any easy short term solutions.

This paper explores the idea of moderating rental and house price increases by adding to the total stock of houses by way of a Central Government initiative that finances the supply of new houses by selling off the equivalent number of existing state houses.

**The Supply Side of Housing**

Conventional economic theory says (all other factors remaining constant) that increasing the supply of houses will moderate prices. The important question is how to best achieve this increase. The supply curve for land available for residential housing is relatively inelastic because although most cities are not constrained in spreading outwards by geographical barriers they are constrained by regulatory barriers. Advocates of a more market driven solution, such as McShane (1998), argue that the obvious solution is to relax planning restrictions, thereby encouraging more greenfields subdivision which will then lower the price of residential sections and result in more new houses being built.

However, the idea of unleashing market forces on the city boundaries, while attractive from a libertarian viewpoint, does have its drawbacks. Clawson (1971) noted that it is not at all clear that what is best for land owners and property developers on the fringe is also best for the collective consumer. He concluded that in the USA there was strong case for a public agency to purchase land in advance of development along similar lines to the approach used in some European countries. A study by the Motu project team (2006) of housing in the Nelson Marlborough area pointed out the planning conflicts that can arise when urban expansion onto
prime agricultural and horticultural land is contemplated. In the property market urban land uses can normally outbid rural land uses but the long term cost to the nation of paving over land suitable for viticulture may not be taken into account in terms of the loss of export revenue. This same study highlighted the unintended consequences of local authority zoning changes that released rural land for subdivision. In this case the developers opted for a low density but more profitable large lot subdivision when in the public interest subdivision into standard residential sections was the desired outcome.

In the short term zoning agricultural land for residential development does not necessarily result in more houses being built. Evans (2004) utilised UK experience to point out property developers may try to exert a monopoly influence onto the market by strategies such as land banking. He noted one form of land banking is where the control (as distinct from the ownership) of agricultural land may be acquired at a low cost by the use of an option to buy which is only exercised if the appropriate planning permission is granted. Using this strategy a developer does not need to expend very much capital to control large areas of land, but in order to get land owners to sign options developers may have to agree to pay quite high asking prices. Maximising development returns may also be contingent on a staged development which involves drip feeding sections onto the market. Evans (2004) also argued that developers needed to land bank because they require an ongoing supply of land to stay in business and suitable “off the shelf” sites may not be available from the market when needed.

Both planners and developers are also faced with all the usual NIMBY (not in my back yard) problems associated with existing owners located next to proposed new low cost housing. In addition to the obvious concerns about preserving property values Graaskamp (1981) identified more subtle reasons why existing residents may vote against the residential use of greenfields space. He used the example of Palo Alto in California to explain the rationale behind community pressure to use vacant land for parks and open space with some industrial uses, rather than housing. According to Graaskamp such exclusionary behaviour avoided the need for costly new infrastructure and allowed existing residents to continue to pass more of the rating burden to the industrial and business land users, while at the same time enhancing residential property values.
The Cost of Sprawl

Traditionally residential developers concentrated on building new housing on the city fringe because large tracts of land were available and raw land and development costs were lower than the option of infilling existing suburbs. But there were hidden subsidies with greenfields developments as Councils (existing ratepayers) picked up a large percentage of the tab for extending infrastructure to connect with new developments. In the current climate of more transparent and user pays driven local government greenfields subsidies are not a popular option with existing ratepayers and most of the costs associated with extending infrastructure will have to be paid for by developers and then passed on to section buyers.

Of course housing decisions are not just about land costs. Commuting from the fringe has both the direct hard costs (running a car) and indirect costs (spending long periods each day in traffic). The New Zealand Business Council for Sustainable Development (2007) estimate Auckland traffic delays cost the regional economy around $1 billion annually. Extending sprawl is almost certain to add to overall commuting time and hardest hit will be the people living in low cost housing on the fringe. Since there aren’t many jobs on the city fringe and public transportation is generally lacking most residents commute in cars. In an era of increasing public concerns about peak oil, global warming and carbon taxes questions about the financial and environmental sustainability of uncontrolled urban sprawl cannot be ignored. A likely future scenario for motorists is likely to be some form of electronic tolling regime based on models used in Singapore.

Land Values

When cities with increasing populations constrain urban sprawl the most likely effect will be to increase the price of land within the city boundaries. This is one of the trade offs that planners and policy makers have to make. When a city gets short of vacant land suitable for building on the next step is to redevelop existing built up sites. In the residential situation a developer will often purchase the least expensive house in the street, or a house on an extra large section. The developer may simply plan to replace an old house with a new house but a more likely scenario will be an intensification of land to a higher and better use with multiple units being built.

In most cases the acquisition costs of the land and buildings will then set a new benchmark for land values in the street. In some cases there may be a residual value for timber framed
houses if the structure can be moved or the materials recycled. This succession of land uses driven by the market demonstrates the concept of highest and best use as outlined by Pyhrr and Cooper (1982). From an economic point of view increasing the price of land is not necessarily a bad thing if price acts as a rationing device and forces more efficient use of this resource.

**An Alternative Solution**

If sprawl is bad and constraining outward growth drives up land prices then what other options are there? One solution would be for central government to take a lead role in increasing the supply of affordable housing within the confines of our existing cities. By international standards New Zealand towns and cities have a very low density of population per square kilometre (km²). Statistics New Zealand (2001) reported the population density in the main urban areas averaged 522/km². At this time Auckland was at 989/km², Wellington 765/km² and Christchurch 549/km².

These New Zealand densities are shown to be less than half those found in Sydney and Melbourne, when compared with the Australian Department of Environment (2007) data. Similarly US Census (2007) data shows the “little boxes on the hillsides” in San Francisco achieve a density of more than four times the Auckland density. Even sprawling Los Angeles with all its freeways is relatively densely settled at over 3000/km² compared with New Zealand cities.

A profile of the population densities of the four main cities in the Auckland City region is taken from Statistics New Zealand (2007) latest census data and shown in Figure 1. Densities are charted by area units which Statistics New Zealand defines as “generally containing populations of 3000-5000 people”. Data on the horizontal axis in Figure 1 is ordered by the highest density area units on the left hand side and the lowest density on the right hand side. The size of the area units varies. For example, in Auckland City the average size is 1.51 km² with a range of 0.46 km² to 6.8 km². There are very high densities associated with inner city apartments and low densities in the outer suburbs and some area units containing non residential land uses including, commercial, industrial and recreational. Also, some area units contain greenfields land designated for future housing. From the chart there appears to be considerable potential in many of the Auckland regions area units to increase the density of population.
This plan simply involves utilising the state housing portfolio to increase the supply of low cost housing at no cost to the taxpayer. Here is how it works. Housing New Zealand (HNZ) (2006) currently has around 67,000 state houses rented. Using conservative values we assume these houses are worth on average $200,000 each giving a total value of $13.4 billion. If the government was to sell 10 percent these each year over the next five years this would generate $1.34 billion annually. First option to buy would be given to the existing HNZ tenants and next option to other qualifying first time buyers. The sale proceeds to HNZ would come either directly from the purchasers’ deposits and private sector mortgages, or the HNZ could offer vendor financing and then securitize the debt. Sale proceeds of $1.34 billion per annum would then be applied to building 6700 new medium density rental units in the areas of greatest need. This would mostly likely mean building more medium density units (up to three stories) mainly in Auckland and having a range of bedroom types to cater for the increasing number of small families.

The land costs for each new rental unit would be minimised by clever infill, re arrangement of existing state owned houses on land already owned by the Crown and some comprehensive redevelopment of prime sites. For example, area units containing a high percentage of HNZ
single family homes situated the eastern suburbs of Auckland City typically have a ratio of the land component being valued at three times the value of improvements and the appropriate zoning for medium density redevelopment. If we assume the residual value of a house suitable for relocation equals the costs of obtaining the necessary consents for subdivision, reserve contributions and building on the vacant site then the only cost to the taxpayer is the cost of building the new medium density units. Taking building costs of approximately $1,500m² and the average size of a new unit at 100m² results in a cost to the taxpayer per unit of $150,000. The average sale price of existing HNZ units (house and land) is $200,000 which is more than sufficient to cover the cost of a new 100m² replacement unit. The net result might be that instead of adding say the current rate of 1500 units to the housing stock per year HNZ could add 8200 units.

Smith (1971) identified the need for what he called “swing land” to accommodate displaced tenants while new accommodation is constructed. Again, HNZ is well placed in this respect since their well constructed wooden bungalows can be moved and the Crown has areas of vacant land where these houses could be reinstated.

There is a concern that increasing the supply of government housing might result in the private sector withdrawing from the market. However, a study in the USA by Dipasquale (1999) concluded that building public housing for low income families generated an increase in the overall stock of houses and did not displace private construction.

The key points with this plan are first it will cost the taxpayer nothing, second it adds 6700 additional units to the housing stock each year and third increasing supply is likely to apply significant downward pressure on house prices and rents at the lower end of the market. The number of new dwelling units (houses and apartments) built each year since 2005 has averaged around 25000. Thus an additional 6700 dwellings per year is a significant number, but must be viewed in the context of a housing stock of about 1.4 million dwelling units. In common with most plans there are advantages and disadvantages and the main ones are as follows:

**Advantages**

1. Selling 6700 houses each year into the first home buyer market will help to slow down the declining rate of home ownership revealed by the Statistics NZ (2007) in the 2006 census and in earlier census figures.
2. There will be 6700 tenants (state and private sector) who become home owners in well built state houses, most of them will not have to move and without the need for real estate agents their transaction costs would be minimised.

3. Other would be first time buyers will benefit because of the moderating effect on house prices of 6700 additional houses being added each year to the housing stock. A Master thesis by Cullen (2005) made a tentative conclusion that: “no measurable relationship between urban intensification and the lack of affordable housing exists, both internationally and in an Auckland context”. Using Auckland data Sanderson (2006) also concluded (with the usual caveats) that using higher density housing to reduce the land price per resident can result in increased household net income as other basic living costs (transportation) can be reduced.

4. People on the HNZ waiting lists for rental houses are likely to have their waiting time reduced because the construction of new rental units would occur in localities in greatest need. HNZ also benefits because selling 10 percent of their house stock each year gives them the opportunity to revitalise their rental housing stock and reduce maintenance costs in a portfolio presently dominated by houses in the second half of their economic life.

5. The taxpayer would be better off because income from property sales would balance expenditure on building new units. These new units would have a range of bedroom types but on average sized smaller than the units being sold off. Smaller units are more appropriate for single people, solo parents and medium density living. Statistics New Zealand (2007) reported New Zealand women had an average of 1.9 live births in 2003, which was less than replacement and less than half the comparable figure from 1961. There is also an obvious cost saving in building costs that translates into improved affordability. A supply of new smaller and affordable units overcomes the current “filtering” problems associated second hand housing. New stand alone houses today are at least 50 percent larger than they were 50 years ago. This fact makes it unlikely they will be affordable to first time buyers on the second hand market.

6. Increasing the housing stock is also very likely to moderate the taxpayer subsidies ($1.2 billion per year in 2005 and rising fast) presently applied to rental housing. These subsidies could also be moderated if the turnover rate of tenants in state houses was increased. The HNZ annual report for 2006 shows the turnover rate at around 15 percent per annum, which is very low compared with the private sector.
where turnover rates are typically at least double this. No doubt the income related
rents policy (rents at no more than 25 percent of income) is a big factor in
discouraging state tenants to move. It is not unknown for a long time single
occupant of a 3 bedroom state house valued at $400,000 to be paying around $50 per
week rent. Using market rents this represents a taxpayer subsidy of $300 per week.
In fairness, the average level of subsidy per house is probably less than half this
amount.

7. Increasing the supply of affordable houses also offers considerable potential for
reducing or eliminating demand based housing subsidies. The experience both in
New Zealand and Australia is that subsidies targeted at encouraging home
ownership tend to fuel increases in house prices by increasing demand.

8. The building industry also benefits since ongoing HNZ work would help to smooth
out market fluctuations and keep builders from leaving the country. In addition,
designing medium density offers opportunities for architects. Perhaps an
international design contest could be used to identify and then implement
outstanding design concepts.

9. With medium density housing the residents “environmental footprints” are
minimised in terms of land usage, energy efficient housing and commuting costs.
Energy efficiency housing and reduced commuting costs translate into long term
savings for both the tenant and the nation.

10. The convenience of being able to walk or bicycle to work and shops offers a health
benefits for residents in higher density areas.

11. Central government has significant advantages over private developers in
assembling land for medium density development because it already owns whole
neighbourhoods of aging rental houses in areas that are both ripe for redevelopment
and zoned appropriately. Furthermore central government has the necessary
“political clout” to drive change.

12. Building over 8200 (1500+6700) new houses each year would provide HNZ with
significant economies of scale and place them in a powerful negotiating position
when dealing with contractors and building suppliers. This should result in driving
building costs down.
Disadvantages

1. Since this plan involves a change in government policy it would take some time to implement and by that time perhaps the housing market might have self corrected.
2. There would be some relocation of existing tenants from neighbourhoods scheduled for redevelopment and from sales where tenants who did not take up the option to purchase.
3. Decisions would have to be made about demolishing, selling or relocating single family houses in areas scheduled for comprehensive redevelopment. If the houses are relocated and retained then is there sufficient lower density Crown land available to move them to?
4. Land speculators and property investors who have based their investment decisions on high rates of capital appreciation may be disappointed.
5. Moderating increases in house prices and rents may reduce consumer spending and reduce economic growth.
6. The majority of NZ families with children prefer to live in stand alone houses in the suburbs rather than in medium density housing.
7. There are risks of getting the design wrong and ending up with undesirable housing outcomes.
8. Moderating rents and house prices also implies higher vacancy rates which could result in increased levels of private sector mortgagee sales if residential investors experience cash flow difficulties.
9. There is a danger the houses will be sold too cheaply in neighbourhoods stigmatised by a bad reputation and a lack of sales evidence. Past experience shows changing a neighbourhood from rental housing to owner occupied housing can rapidly reduce the stigma effect.
10. For the plan to gain traction politicians would need to be convinced that it had the support of existing home owners who form the majority of the voting population.

The Lessons From The Past

Some elements of this plan have been used before. For example, New Zealand has a long history of the state buying land in advance of development, building rental housing under a Labour government and selling it under a National government. Schrader (2005) notes these flip flops in policy were driven partly by a renting for life philosophy under Labour versus home ownership under National. Schrader charts periods after both World Wars when large
numbers of rental houses were built. In the early 1950s tenants were given the option to purchase state houses and by 1957 he notes 30 percent of the state housing stock had been sold. Sales occurred again in the 1990s.

The inevitable tension between landlords and tenants makes formulating housing policy a highly politicised activity. In the process sound economics is sometimes ignored. For example, it is obvious that a heavily subsidised income related rents policy will increase state house waiting lists but it is not obvious if this is a good argument for building more subsidised rental housing. Politicians from both sides of the political divide generally agree that a high rate of home ownership is the desired outcome because it produces better educational outcomes for children and a more stable population who move less frequently than renters and are likely to become involved in their local community. Unfortunately, the reality is ownership rates in New Zealand have been falling since 1986. One reason for this could be that because there is no time limit for people occupying state houses there is no incentive to move and thus a real danger of long term welfare dependency.

Certainly, HNZ has made modest attempts at infilling and redevelopment but so far there is nothing on a scale to impact on rents and house prices. What is different in 2007 is the desired outcome includes the objectives of financial neutrality in terms of cost to the taxpayer, maintaining at least the same number of rental houses and minimising further urban sprawl.

**Summary and Conclusions**

Housing policy is a complex issue. Society generally accepts that government intervention is required in areas where the private sector is reluctant to invest. Intervention is typically at the lower end of the rental market to support households in genuine need. Aspiration to home ownership is an important part of the New Zealand culture but increasing numbers of young New Zealanders are finding that the high price of housing means they are being shut out of home ownership.

The plan put forward in this paper aims to moderate rents and house prices by increasing the supply of affordable housing at no cost to the taxpayer. The way that this can be done is by selling 10 percent of the HNZ rental housing stock each year and replacing it with the same number of new units. This can be accomplished by using well planned medium density housing to redevelop land already owned by the Crown. Increasing the density of new HNZ
rental housing will help to minimise further urban sprawl. Consequential flow on cost savings in rental subsidies are also likely as the HNZ rental housing portfolio is rationalised to provide a better fit between tenant needs and housing types. Similarly, moderating house price increases is likely to save the taxpayer money on existing demand based subsidies aimed at encouraging home ownership. Practical considerations mean that it would take some time for the production of new units to occur so the sale of old units would need to be adjusted to balance cash flows.

Of course there are design and construction risks associated with the plan. Well designed and constructed housing is crucial for obtaining good medium density housing outcomes. An international design contest is thought to be the best way of ensuring quality design. HNZ and its predecessors enjoy a good reputation on the construction side and the proof of this is just how well the majority of older state houses have stood up to 50 years of wear and tear. The implementation of this plan could also act as a catalyst to encourage the private sector to become more involved with the provision of affordable medium density housing, possibly through a private public partnership.
References Cited


