In the last two decades in New Zealand, widening income inequalities and a decline in home ownership rates have combined with a shortfall in the volume of new construction to contribute to pressure on the affordable housing market, particularly the rental market, including an unmet demand for social housing.* Affordability is of course a social construct, a recognition that society has legitimate altruistic concerns to ensure that housing costs do not absorb too much of a household’s income, jeopardising other aspects of their ability to function in society. Even where households are not in urgent and immediate need, it is important that households do not pay a large percentage of disposable household income for reasonable quality and reasonably accessible housing.

The adequacy of the affordable housing stock raises a wider set of issues than the adequacy of social housing, and an essentially economic perspective on the question of affordable housing in New Zealand needs to be placed in the broader context of sustainability. Affordability is not the only public policy goal in relation to housing; importantly, factors such as carbon mitigation and the prosperity and quality of life of our urban settlements need to be considered alongside affordability.

The deficiencies in the housing market are driven by a number of factors, but these are amenable to well-judged government interventions.

A conventional economic perspective on affordable housing

In a conventional economic perspective on the housing market, the focus is on supply and demand, incentives and information. Such an analysis provides useful insights, but cannot illuminate the whole picture of how the housing market functions, its various drivers and impacts.

On the supply side of the market, a conventional analysis emphasises costs, the private industry sector, regulatory costs and so on. For instance, builders in

* ‘The [Productivity Commission] inquiry has … identified that the current approach to social housing in New Zealand will not provide sufficient support for many New Zealanders in need.’
New Zealand are characteristically small-scale, building just a few houses per year and therefore they have relatively high costs when compared to industrial scale builder-developers in Australia and the USA. They also tend not to work in both the affordable and higher-priced housing segments, which could in principle allow a steadier flow of work, as the latter fluctuates more.

On the demand side, a conventional economic analysis focuses on ability to pay, changing demographics and other drivers of demand, such as interest rates, which work through consumers’ ability to afford mortgage costs. While the demand for affordable housing provides incentives for suppliers, there are presently some clear impediments in New Zealand.

In Christchurch, supply and demand are not ‘clearing’. Reasons — in addition to the reduction of suitable land — include the difficulty buyers face in resolving insurance payouts and finding replacement properties for which they can get insurance cover. This is slowing activity despite latent demand.

In Auckland, factors include the lack of organisation that is necessary to deliver large housing projects, planning constraints on multi-unit development, and a history of bad experiences (such as leaky homes built in the 1980s–2000s) associated with medium density development. Such developments are likely to cost more initially due to builders’ lack of familiarity with the processes. For example, until it becomes easier to gain consents under the Resource Management Act and district plans for unconventional dwellings, builders are likely to charge more to cover the risks of such developments.

A background cyclical factor has been macroeconomic conditions, particularly housing market uncertainty and slow demand growth as New Zealand incomes have stagnated since 2008. Moreover, the volatility in the housing market clearly raises longer-term costs; New Zealand builders emigrate to Australia or otherwise leave the industry during demand downturns and apprenticeship intakes falter, raising the labour costs of building when demand recovers.

There are important informational barriers in the housing market — for example, difficulty in ascertaining value (including appraising structural quality) and discerning reliable price trends. These issues are markedly more problematic in the housing market than in other markets, such as the car market, where relatively reliable information is more readily available, and the goods in question are usually simpler, of lesser value and more standardised. In the housing market, small numbers (and other factors complicating value, such as location) mean more volatility and uncertainty, so price trends and future value estimations are challenging, especially in smaller sub-markets such as a particular suburb.

A related issue is transaction costs. A good example of these is the often prohibitive cost of assembling complex and fragmented land parcels to enable a large-scale housing or mixed-use development. Perhaps because of some New Zealanders’ naively libertarian views about property rights, it appears to be more difficult to assemble land for developments in New Zealand than in other developed countries. Consent ing uncertainty and process delays also contribute
to transaction costs, and although costs in New Zealand are not exceptional by developed country standards, they may still impede the supply of affordable housing.  

A further issue is regulatory costs, where higher standards (such as requiring ceiling, floor and wall insulation and double glazing in buildings) are imposed for good health or environmental reasons. These add to up-front costs and can create an affordability challenge. Over time, this cost increment will fall as builders fully internalise these additional components, but until then this affordability challenge needs to be met, and not by cutting corners.

Another regulatory issue that needs attention is restrictions on infill housing that hinder or prevent more accessible, central areas of cities from intensifying. This may protect the character of particular neighbourhoods, but it can also impose high transportation and environmental costs and cause loss of economic opportunity in the community.

A broader view of the ‘economics’ of affordable housing

Aside from strictly economic aspects, there are important sustainable development features of housing, such as social, cultural and environmental aspects. How the housing market interacts with wider systems, such as the transportation and land use, matters for housing affordability.

Affordable housing fulfils important social and cultural functions. It is critical for families to have access to a stable place to live of reasonable quality and that isn’t overcrowded, for health and social reasons including the stability of schooling for children. Affordable housing thus contributes to social cohesion and stability.

Many of the health benefits of quality housing have a public-good nature, such as reduced hospitalisation from housing-related illness (although such interventions as retrofitted insulation also give occupants more comfort, which is a private good). Hence there is a strong case for minimum quality standards (analogous to minimum quality standards for safety and energy efficiency of appliances or vehicles) or subsidies to bring standards of housing up to an adequate level. The doctrinaire resistance to building regulation in New Zealand has had major consequences over time, including a poor international reputation for New Zealand housing and the damaging effects of the leaky homes scandal.

Other social externality effects of housing also need to be considered. The quality of one property influences the value of properties nearby. For example, certain areas (and certain types of housing, such as some multi-unit housing) develop reputations — perhaps undeserved — for poor quality. A developer attempting to build new, better quality housing in such areas (or use certain building types) may be deterred by the risk of low sale prices. These spill-over effects can continue to constrain certain areas or suburbs in an ongoing way.

Another social and environmental externality arises from the interaction of housing and transportation. Typically, low-density housing in the inner to
middle parts of a large city is there due to historic reasons, but it imposes a significant external cost on commuters from the newer, outer parts of the city by increasing travel times: it acts like traffic congestion, a widely noted externality. In essence, the market ‘overprovides’ (relative to a social optimum) low-density housing in these locations, not taking into account the costs it imposes on other residents, and underprovides high-density housing. Moreover, overprovision of low-density housing increases carbon emissions.

It also needs to be remembered that the housing market does not operate in a vacuum, but is connected in multiple ways to the land use planning and transportation systems. It goes almost without saying that these systems are planned, and not ‘free’ markets, and for this reason alone it cannot be said that the housing market is an unconstrained market. For example, if a motorway near a city is planned, land values increase along the planned route, and land banked along that route may earn speculative rents for landholders, depending in part on the associated planning decisions of local councils. Strategic decisions as to land development can influence land prices and thus housing prices.

Housing generally has big consequences for the environment; carbon emissions from production, location and inbuilt energy use features vary greatly, and location and density strongly influence transport emissions. Land transport is responsible for about 19% of New Zealand’s total greenhouse gas emissions and about 40% of its carbon emissions. For a reasonable chance of climate stability, New Zealand’s emissions need to be reduced by around 80–95% by 2050, and there is no reason why the housing sector could not contribute its share to that reduction. Various policy instruments can induce this, and a carbon tax on fossil fuels may be the best. However, if an adequate carbon price is not available a possible alternative is the taxation of forms of housing that create excessive emissions, such as large footprint or high-value housing, or the subsidisation of forms of housing (e.g. compact housing) that reduce emissions.

Well-designed and compact housing provides a range of ‘co-benefits’ or public-good features including social, health and environmental benefits, so from a public policy point of view there is a strong case for supporting and promoting such co-benefits through policy. The critical point that is often missed is that the market will tend to underprovide affordable housing with significant co-benefits and public good features, as will any market where there are such features. This is because markets, left to themselves, do not handle public goods adequately. Wider society has a stake in the provision of good quality affordable housing, and there is a clear role for government in regulating minimum quality standards and supporting good quality affordable housing financially, in line with its public good features.

The need for good quality housing arises partly because society as a whole takes a longer term view (has a lower ‘discount rate’) than individuals. Thus, for society, it is rational to require housing insulation or to subsidise it, but for individuals it can be a short-term affordability challenge. In many European
countries, planning policies — such as requiring developers to provide a certain proportion of a new development as affordable units — are used. Such inclusionary policies can be effective:\textsuperscript{12}

\ldots while using the land-use planning system to support the provision of affordable housing may be one valuable tool in a government's armoury, the land-use planning system alone is very unlikely to be a primary source of additional affordable housing. \ldots However, even in England, large-scale government financial support is also necessary if affordable housing provision targets are to be achieved.

There are uncertainties around how planning-based policies might be implemented in New Zealand and whether they would be politically palatable, given the brief, unhappy history of the Affordable Housing (Enabling Territorial Authorities) Act. The aim of the Act was to facilitate the provision of affordable housing and resist covenants that would exclude affordable or social housing;\textsuperscript{*} it came into effect in September 2008 but was repealed in 2010 after the National-led government was elected.

**How can policy failures and gaps be addressed?**

In principle, larger scale redevelopment has the capacity to reduce regulatory costs. The now-disbanded Sustainable Urban Development Unit (\textit{SUDU}) noted in 2008 that there are opportunities to develop 'model district plan provisions capable of being adapted for specific local circumstances (to encourage public transport-oriented, higher-density areas).\textsuperscript{13} This seems highly desirable given the importance of affordable housing in such locations, and given the evidence from the international literature pointing to the significance of urban design that encourages more compact housing well-served by public transport.\textsuperscript{14} However, there seems to be little local research on this point, and in the current climate local authorities struggle to proceed with such developments.\textsuperscript{15}

As suggested earlier, there also seems to be a \textit{capability gap} in terms of organisations that can put together a package to deliver and maintain, over time, good quality affordable housing at scale in the main (new) housing markets of Auckland and Christchurch. This role is played by various organisations in other countries, like Housing Associations in the UK and various public-private partnerships in Australia. The package elements include:

\textsuperscript{*} The purposes of the Act were to —

\begin{itemize}
  \item[(a)] enable a territorial authority, in consultation with its community, to require persons doing developments to facilitate the provision of affordable housing—
    \begin{itemize}
      \item[(i)] for the purpose of meeting a need for it that the authority has identified by doing a housing needs assessment:
      \item[(ii)] in a manner that takes account of the desirability of the community having a variety of housing sizes, tenures, and costs:
    \end{itemize}
  \item[(b)] void covenants that have, as one of their purposes, stopping the provision of affordable housing or social housing.
\end{itemize}
- land aggregation (difficult in already developed areas) and development capability
- regulatory issues management and relationship management with government and the public
- ensuring public authorities invest in provision of public infrastructure and amenities
- tenancy and sales management.

Managing this package effectively requires a high level of skill and expertise. In the past, a lack of stable support for housing providers from the central government may have contributed to the scarcity of such capability. It does not help potential providers to see divergent views being articulated over time about the extent of the public good benefits of affordable housing. Moreover, where a social partner organisation (e.g. a housing trust) is involved that is making a commitment of skill development and expertise, it is incumbent on the government to make a reciprocal commitment so that trust in delivery and support can be developed.

It is important for the government to be able to rely on a delivery organisation’s good management and transparent accountability so that taxpayer-funded government support is not seen to be placed at risk. However, trust takes time to build, so the relationship has to be a long-term one, with reputations guarded zealously. This may present a problem for a private-sector organisation as to whether it can meet the test of warranting ongoing public support, given its profit objective.

The SUDU has suggested that a private-sector organisation might participate in ‘Development Area Agreements’ which set out clear roles for a lead development agency, local government, central government, network utility operators, etc.\textsuperscript{16} However, there is a risk that a public-private partnership might involve complex contracting to guarantee the profitability of the private partner, creating legal or administrative costs and risks to government that may outweigh the gains from a private capital injection. This has been the pattern in the United Kingdom and arguably elsewhere, such as in Australia.

**Funding — state support**

While there is no perfect policy answer, explicit and carefully managed state funding may have attractions of simplicity and low risk relative to the risks of public-private partnerships. The state would need to draw on a source of funding that is politically low-cost and this may limit direct subsidy support. It is likely that state funding support will not be accepted by all as a policy approach.

One means of generating funds for state support is through a value uplift levy. There is a strong case for recycling value uplift in this way as an implicit housing subsidy. Value uplift arises when value is added above land acquisition cost, through the development process generating externality and agglomeration benefits, especially in high density developments that can take advantage of accessibility (for example, at transport nodes or along transport corridors).
Traditionally, this uplift has accrued to private-sector developers despite their limited contributions. Much of the value uplift accrues because of provision of public amenities such as roads or rail links, schools, police services and health facilities.

It is especially true that the whole is more than the sum of the parts when there is significant investment in transport or other infrastructure, typically by the public sector. In these cases, there can be a large value uplift. Typically, the developer is not obliged to pay through development contributions for the sort of investment at issue here. If a public agency (e.g. a local authority) assembles a block of land at market prices and facilitates or provides extra infrastructure (such as community facilities) which benefit that land, the value uplift can and ought to accrue to the government agency in question.

If a development is of sufficient scale, then much of the externality effects (and some agglomeration gains) can be internalised in value uplift. If the developer is the local authority, this value uplift (capital gain) can then be used (e.g. borrowed against) to finance further development or can be realised (returned to the trust) if some units are sold. This can give the local authority a big advantage.

If the developer is a private-sector organisation undertaking a privately-owned land redevelopment, a value uplift levy capturing a proportion of the value uplift can be used to finance assistance for affordable housing, in the development in question or elsewhere. If the levy revenue is passed to a housing trust or other public agency for subsidising affordable housing, it is vital that the organisation involved does not fritter away these gains through hidden value release in below-market sale prices or rent subsidies to non-social tenants.

Ensuring that such arrangements work over time, in the public interest, requires careful setting up (trust goals and powers are critical), capability building, monitoring and review. It is also important that any subsidy flowing to increased housing supply is used to increase provision of innovative and sustainable medium to high density housing rather than promoting low density sprawl. This is for strong environmental reasons that should also form an important part of a coordinated housing and urban development strategy.

Conclusion
A conventional economic perspective is useful in considering some of the basic drivers affecting affordable housing supply and demand in New Zealand, but a broader analysis that takes into account transaction costs and sustainability factors, such as the carbon emission benefits of more compact housing developments, is important in providing a richer view of affordable housing. In this broader perspective, affordability cannot be the only goal. Ultimately, factors such as carbon mitigation and the quality of life of our urban settlements matter more than cost alone.

Clearly, there are presently supply issues regarding affordable housing in some New Zealand cities. An important problem is a capability gap in terms
of organisations which can put together innovative and successful packages for housing developments. Creative state support for overcoming this problem will have to go beyond the conventional nostrum of regulatory barriers and address the difficult political issue of subsidies: how much support should the state offer and in what form. A valuable approach could be finding new ways to capture and use an element of value uplift to subsidise new affordable housing developments. Cases in Auckland and parts of the Christchurch rebuild may give useful opportunities to address these issues and pilot new options to deliver affordable housing.

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Chapter Five: Affordable housing in New Zealand cities: an economic and policy analysis