IT HAS BECOME taken for granted that the cost of housing is driven by land prices. Certainly, the land price is generally the biggest ticket item in the cost structure of a new build.

Policy not hitting the mark
In response to the demand for affordable housing at a time when land costs are high, a threefold policy approach has been used:

● Central government has encouraged the release of land through reducing land use planning restrictions in special housing areas. The idea behind this is that an increased supply of land will bring land prices down or at least hold them steady.

● There has been pressure on councils to reduce the costs of consenting and other processes.

● There have been arguments that the building industry should use lower-cost materials or different construction methods.

In spite of these interventions, production of dwellings in the lower quartiles of value remains low. Considerable evidence suggests new-build production in special housing areas is not making significant inroads into housing undersupply or generating affordable stock for low-income and middle-income households.

Even local authorities with the most flexible land-use planning regimes find that little affordable housing is being produced.

Developers actively set land prices
National Science Challenge 11 Building Better Homes, Towns and Cities is taking on this and other conundrums. In the Improving architecture of decision-making strategic research area, it is asking “Will reducing building and consenting costs bring new-build house prices down?” To answer, it is looking into how developers and builders are involved in setting land prices.

Developers and their financiers assess the merits of a possible development proposition in a very different way from that generally assumed. It is commonly assumed that
developers are involved in a cost-plus industry and that they passively take land prices as part of their costs. The reality, however, is that developers, financiers and valuers actively make land markets. Of particular importance is their use of residual valuation.

**Residual valuation sets land bids**

Residual valuation determines what developers and builders are prepared to pay for land. This does not reflect some predetermined land price but a calculation of what price they are likely to be able to get for their end product.

It is based on prevailing prices in the market - for residential developers, these are the prices for similar houses - and an estimate of how much these prices are likely to rise or fall. This is acknowledged by many in the industry including retirement village operators such as Glen Sowry, CEO of Metlife Care Retirement Village. He said, 'We have a metric ... somewhere around 70 to 75% of the median house price is where we typically pitch the price of one of our units.'

Developers use residual valuation to decide whether to purchase land, and financiers use it to assess whether to support a particular development. Subsequently, the land values become embedded in the system by standard valuation practices.

**Similar finding overseas**

This is evident not only in New Zealand but overseas. A recent Australian study found ‘... developers were clear that stripping out costs from the production of new housing was not going to lower the price of established housing. Indeed, the price of new housing is related to the price of established housing, not simply what it costs to produce. This is due to the nature of the residual based land pricing model where the cost paid for the land is a function of the revenue which can be generated from the development. This revenue is estimated based on the prevailing price of existing, comparable product in the local area. (See Housing supply responsiveness in Australia, AHURI Report 281.)

How existing house prices drive the price of new builds and land is largely ignored in policy settings where the industry is typically treated as cost plus.

**Significant implications**

The use of residual valuation has several significant implications.

**Can drive up land prices**

First, lower costs associated with a particular gross development value (GDV) may lead to higher land bids rather than any house price reduction. This is particularly the case where there is competitive bidding combined with a widespread belief in house price increases. This is consistent with:

- international studies showing the elasticity of housing supply is linked to house price change, not simply the level of house prices
- high bidding for land in New Zealand recently over the period of extremely high house price increase.

**Bankruptcy and land banking**

Secondly, residual land valuation practices can generate undesirable outcomes beyond the potential to drive up land prices. Feedback loops (particularly through established valuation practices and legislative requirements) mean prevailing bidding becomes part of the land market even when those bids are potentially overestimated. Essentially, those who are daring and optimistic about house prices may well find that their estimates are right and all the development elements, including finance, fall into place. On the other hand, they may go bankrupt or have to liquidate if they are over-leveraged and their estimates are wrong. This perhaps explains why the building industry is one of the few in which bankruptcy is associated with boom times.

Similarly, if estimates around future house prices are overcooked and have prompted a bidder to pay too much, the land may be banked because of a lack of working capital. This assumes the buyer is not already over-leveraged and can choose to retain the land.

**Discourages lower-value development**

Essentially, residual land valuation calculations may mean that the less bullish developers and those most prudent in their estimates of GDV may simply step away from producing housing for a period. This may be because they lose in land bidding or because they are less attractive to lenders if the value of the completed development looks ‘lowish’.

For those providing housing for people unable to find housing without support from community housing providers or those building in the lower quartile of value, the financial value of a completed development is always low. This is because the house price is calibrated with boom times.

These dynamics, and whether they are a critical driver in New Zealand, will be explored further through the National Science Challenge.