The implications of KiwiBuild for monetary policy

Introduction

This note explains the Reserve Bank of New Zealand’s assumptions regarding the impact of KiwiBuild on the residential construction industry. These assumptions are based on information known as of January 2019, including the November Monetary Policy Statement outlook for the construction industry. Estimates presented in this document are subject to change as more information about KiwiBuild becomes available.

Key points:

• The KiwiBuild programme aims to build 100,000 affordable homes over the next ten years, with a range of supporting programmes targeting capacity constraints in the construction sector. Most of this building activity is expected to happen beyond the Bank’s forecast horizon of three years.

• The construction sector is currently facing capacity constraints, which means that KiwiBuild developments may crowd out other private developments, particularly in the near term. The Bank has assumed that half to three quarters of what KiwiBuild contributes to residential investment will be offset by crowding out of other private investment over the forecast horizon.

• The Bank has included $2.5 billion of additional (net) nominal construction spending generated by KiwiBuild in our projection. This is consistent with between 7,000 and 14,000 extra houses being built, assuming each costs between a half and the full value of an average new build.

• Estimates of the impact of KiwiBuild can vary widely, depending on whether the net or gross contribution is being calculated, and the assumptions made about timing, capacity constraints, and crowding out.

• Estimates presented in this document are subject to change as more information about KiwiBuild becomes available. At this stage, and acknowledging recent developments, our overall assessment about the net contribution of KiwiBuild to residential construction activity remains similar to the November Statement.
Why is the Reserve Bank interested in KiwiBuild?

The Reserve Bank of New Zealand (the Bank) is directed by the Policy Targets Agreement to ‘maintain a stable general level of prices, and contribute to supporting maximum sustainable employment.’ To meet its targets, it is important that the Bank considers how various developments such as government policy impact the economy both now and in the future.

The KiwiBuild housing programme is intended to add 100,000 affordable homes over the next 10 years. This could have a significant impact on employment and inflation over that time period. It is important that the Bank makes judgements about how the KiwiBuild programme will affect the economy so that the Bank can meet its policy targets.

Details of the KiwiBuild programme

The KiwiBuild programme is designed to increase home ownership amongst New Zealanders. The programme wants to achieve this by building 100,000 affordable homes for first home buyers over the next ten years. While it is currently uncertain how much of this construction will take place in each year of the programme, in general we expect it will ramp up to around 12,000 houses per year by 2022.

KiwiBuild homes have price caps. This price cap (including land) is $500,000 for a house under the KiwiBuild programme, with exceptions for Auckland and Queenstown-Lakes areas, where prices can be up to $650,000.

The construction sector is currently capacity constrained, meaning that the sector is struggling to expand due to factors like labour shortages. In order to meet the 100,000 home target, the KiwiBuild programme contains several other programmes designed to expand the capacity of the construction sector. These include:

**Buying off the Plans**

This is aimed at helping developers obtain funding for projects.

The Government will either underwrite or purchase homes off the plans from private sector or other developers.

This programme should speed up developments by providing funding faster than would otherwise be the case.

**Land for Housing**

This programme is targeted at increasing land supply for developments.

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The programme will find and obtain land that is vacant or not fully utilised, and sell this land to developers who can then build houses on it.

Developments within this programme must have 40 percent of dwellings at or within the price limits for KiwiBuild housing.5

**Offsite manufacturing**

Use of prefabricated housing is intended to make building KiwiBuild housing cheaper and quicker.

The Government sent an Invitation To Participate (ITP) to offsite manufacturers in the December quarter of 2018.6

**Changes to immigration policy**

The Government has consulted on several adjustments to immigration policy that are aimed to reduce the estimated 30,000 worker shortfall in the construction sector.

A KiwiBuild Skills Shortage List will enable firms to hire overseas construction workers more rapidly, similar to the more narrowly focussed Canterbury Skills Shortage List.

Employer accreditation or pre-approval could allow a ‘good employer’ to gain pre-approval for visa applications.

Other adjustments would be made to reduce potential exploitation of overseas workers. Further details can be found on the MBIE website.7

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**What are we assuming about KiwiBuild?**

Over the next ten years, 100,000 affordable houses are expected to be built through the KiwiBuild programme. We assume that the programme gradually ramps up over our projection period, up to 2022. The rate at which KiwiBuild adds to residential construction depends on the capacity of the construction sector.

**Constraints in the construction sector**

The construction sector is currently capacity constrained. It will likely be difficult to expand residential investment without significant crowding out. This assessment is supported by discussions with those in the industry, along with the already elevated level of construction activity, and survey measures of constraints in the sector.

In late 2018 the Bank carried out a series of business visits. One of the key themes in these visits was capacity constraints, particularly in the construction sector. Construction firms noted that they were facing strong demand for their products, but a range of capacity-related issues meant that they could not expand production enough to keep up with demand. Shortages of skilled and unskilled labour were the main issues holding back firms' production, in addition to the cost of land for developments, and obtaining financing for projects.

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7 [https://www.mbie.govt.nz/assets/823ebf4d8c/kiwibuild-factsheet.pdf](https://www.mbie.govt.nz/assets/823ebf4d8c/kiwibuild-factsheet.pdf)
This constraints story is mirrored in other data, in particular the Quarterly Survey of Business Opinion (QSBO). Figure 1 shows the proportion of construction firms identifying orders (demand), labour, or physical capital as the factor that most limits their production. The proportion of firms citing demand as their most limiting factor is the lowest since the previous construction boom in the 2000s, while the proportion citing labour or capital is at its highest since the previous boom. Figure 2 shows that the net share of construction firms finding it more difficult to source labour is also very high.

Both the survey data and discussions with business tell us that the construction sector is facing robust demand, but capacity constraints are restricting firms’ ability to meet that demand. The ability of the construction sector to build additional houses therefore depends on whether these constraints can be eased.
Capacity pressures have grown because residential construction is elevated. Residential investment is around 6.5 percent of real GDP and around 7.5 percent of nominal GDP, both above their historic average shares (figure 3). While this elevated level of residential investment activity is only part of the picture, when combined with constraints in the construction sector, it suggests that further increases in residential investment may be limited.

**Net addition to residential investment**

The net contribution of KiwiBuild to residential investment is what matters for monetary policy. As such, the Bank must make assumptions about how the capacity constraints discussed above will impact the effectiveness of KiwiBuild, and therefore what the programme’s impact on monetary policy will be. While KiwiBuild is assumed to contribute 100,000 affordable houses over 10 years, it is unlikely that this will be achieved without crowding out a significant amount of other residential construction activity, given the current and projected state of the construction sector.

Taking capacity constraints and crowding out into account, the Bank’s point estimate is that KiwiBuild generates a net $2.5 billion of additional nominal residential investment activity by the end of fiscal year 2022. Over the next three years, the Bank assumes that half to three quarters of the houses built under the KiwiBuild programme will be offset by crowding out of private sector developments. The Bank’s forecast for KiwiBuild is equivalent to between 7,100 and 14,200 additional houses being built over 2019-2022, depending what you assume about the average consent value of these houses (table 1). The Bank expects that the majority of KiwiBuild houses will be constructed outside its forecast horizon because of the constraints in the construction sector: it will take time to ease these constraints.

The Bank’s forecast for KiwiBuild’s contribution to residential investment is consistent with Treasury’s most recently published forecast. Any assessment of the net contribution of KiwiBuild is dependent on an assessment of how the construction sector will evolve. The Bank is expecting that the construction sector will continue to face robust demand and constrained supply. This means that the net contribution of KiwiBuild to residential investment is expected to be smaller than if there was spare capacity in the construction sector. However, if the housing market were to soften and residential construction slow or decline, then

<table>
<thead>
<tr>
<th>Average construction cost per home</th>
<th>2019-2022 total new builds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average consent value ($360k per home)</td>
<td>7,100</td>
</tr>
<tr>
<td>85% of average consent value ($306k)</td>
<td>8,200</td>
</tr>
<tr>
<td>70% of average consent value ($252k)</td>
<td>9,400</td>
</tr>
<tr>
<td>50% of average consent value ($180k)</td>
<td>14,200</td>
</tr>
</tbody>
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Note: This table uses the Bank’s forecast for additional nominal residential investment activity generated by KiwiBuild from the November 2018 Statement, and divides this by different construction cost values to calculate a range for the number of extra houses built by KiwiBuild.

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8 It may be reasonable to assume that the average construction cost for KiwiBuild projects is lower, given that KiwiBuild is intended to provide affordable housing.

9 See the 2018 Budget Economic and Fiscal Update.
KiwiBuild may help to prop up demand in the sector, resulting in a larger net contribution.

In the 2019 fiscal year, the Bank assumes that the net contribution of KiwiBuild to residential investment is almost zero, as the KiwiBuild programme is in its infancy and the construction sector is capacity constrained. Over the next few years, the net contribution of KiwiBuild is expected to increase as programmes within KiwiBuild, such as Land for Housing, start to ease capacity constraints. Figure 4 shows the contribution of KiwiBuild to the residential investment forecast in the forecasts from the November 2018 Statement.

Uncertainty

The impacts of the KiwiBuild programme, as with any forecast, are inherently uncertain. There is a wide range of uncertainty about the gross investment activity that will take place under the KiwiBuild programme. There is even more uncertainty about the additional net investment activity as a result of KiwiBuild (i.e. taking into account crowding out and capacity constraints). In order to forecast the additional (as opposed to gross) residential investment generated by KiwiBuild any forecaster must make a range of assumptions about the programme. These include:

- the degree of crowding out of private investment activity and how this changes over time,
- how effective KiwiBuild policies are at alleviating capacity constraints in the construction sector,
- when the extra residential investment activity takes place, including whether it is new investment or ‘pulled forward’ from future activity, and
- whether KiwiBuild construction can enable additional private investment by underpinning mixed developments that might not otherwise have been viable.

The uncertainty around each of these aspects means that there is a wide range of possible estimates for how KiwiBuild will contribute to residential investment activity. The Reserve Bank will continue to monitor developments in the construction industry to deepen our understanding about how the KiwiBuild programme is affecting activity.