Housing Demand is Stronger Than Suggested by Official Figures
by Benjamin Tal

The question is simple: are we building enough houses in Canada to meet demand? Are we building too many? On the surface, it's easy to determine. What's needed is to simply divide the number of housing completions by the number of new households (or household formation). That ratio should be just above one, to accommodate for factors such as demolition, conversion and demand for secondary dwellings.

Conflicting Messages

Let's take a look (Chart 1). Based on information from the census, the verdict is clear. For the period of 2001-2016, the ratio is well over one—suggesting overbuilding. But before you short Canadian housing, take a look at the right bar. Using CMHC's long-term household growth measure (that is widely used by the industry), that ratio for the same period is just under one—suggesting a healthy equilibrium between demand and supply. So, are we overbuilding, or are we building just enough?

If you look at the two components of that ratio, it's clear that the issue is not with housing completions. Counting completions is a straightforward exercise. Instead, the issue is with household formation. Again, it should be relatively simple—but it's not.

Household formation is determined by translating population growth into the number of households by using estimates of headship rates, or the number of households created from a given number of persons. Let's begin with population growth, and then deal with the headship rate.

To calculate the left bar in Chart 1 (suggesting overbuilding) population growth is obtained from the census. However, it is well-documented that this measure underestimates actual population growth, partially due to a gross undercounting of non-permanent residents. In its higher growth estimate, CMHC adjusts for census undercounting by using information obtained from the Demographics Division of Statistics Canada. So, it's no surprise that the CMHC ratio is lower, given that its population growth assumption is larger.

## Undercounting Student Housing Demand

But that's not where the story ends. As explained earlier, population growth is transformed into household formation by multiplying it by a headship rate. CMHC uses headship rates that are derived directly from the census. Those headship rates by age cohort are illustrated in Chart 2. Just to ensure that we understand

Chart 1
Are We Overbuilding or Are We Just Right?

Ratio of Housing Completion to Household Formation (Average of 2001-2016)
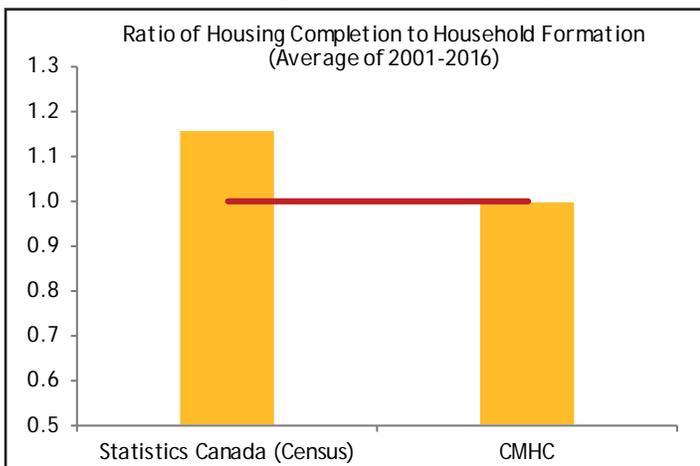
Source: Statistics Canada, CIBC

Chart 2
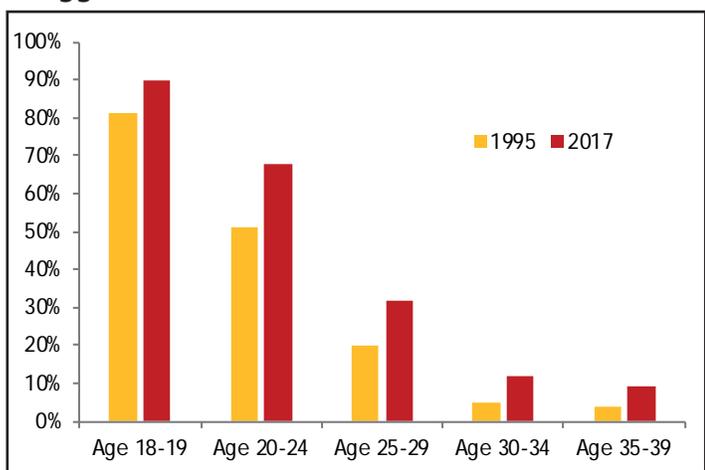**Canadian Headship Rate 2016**
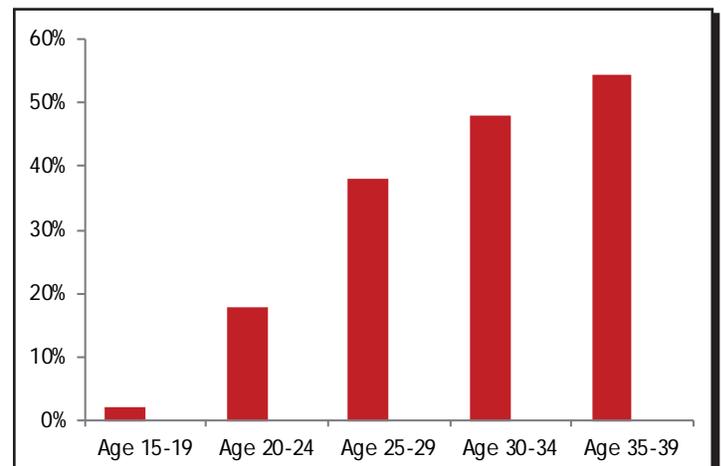
Source: Statistics Canada, CIBC

the concept: a ratio of 17% for the age group 20-24 means that out of 100 people in this age category, 17 households will be formed. And a 50% ratio for the age group of 35-39 means that 50 of them would form independent households. Here, we claim that those headship rates used by CMHC are too low, and therefore underestimate real housing demand.

The reason behind this claim is the way that we count post-secondary students, or more specifically, the headship rate applied to those students. In the instructions for filling out the census, it indicates that, "students who return to live with their parents during the year should be included at their parents' address, even if they live elsewhere while attending school or working at a summer job".

Now, if you are Statistics Canada, this approach makes sense, since you are interested in the number of permanent households and therefore, excluding students (domestic and foreign) that plan to return home from the headship calculation seems logical. However, if you are CMHC and you use household formation as a proxy for housing demand, then excluding these students is problematic. Yes, they are planning to return to their parents' house, but during the academic year many of them (perhaps the majority) live elsewhere, and therefore represent demand for housing, which is then missing from CMHC figures. Accordingly, from a housing demand perspective, the widely quoted increase in the number of adult kids still living with their parents (Chart 3) may be exaggerated.
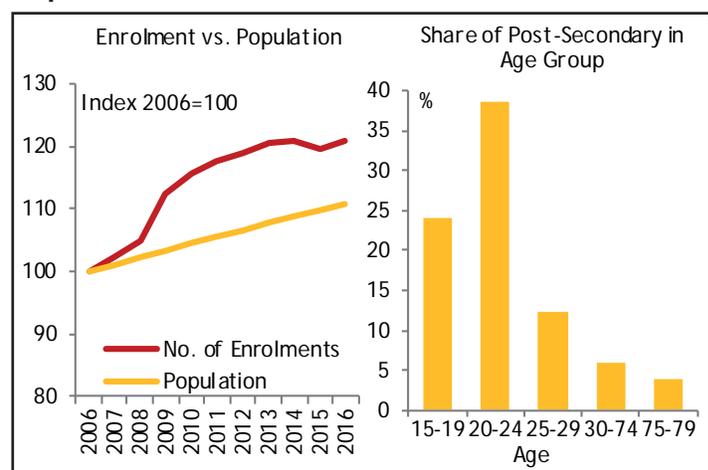
How large is this underestimation of demand? It's difficult to say for two reasons: first, Statistics Canada does not have a headship rate for foreign students, and the hidden assumption here is that that rate is equivalent to the headship rate of domestic students of the same age cohort. That, of course, is an underestimation, since most foreign students do not have a parent's house in Canada as a base. Second, we simply do not know the share of domestic students that live outside of their parents' houses during the academic year.

But, if we assume a headship rate for foreign students equivalent to the headship rate for non-permanent residents and assume that the share of domestic students living independently is equivalent to the share seen south of the border (admittedly an overestimation), that number is roughly 300,000 households. That is, at any point in time, we undercount the total stock of housing demand in Canada by 300,000 units. What's more, given that almost all the undercounting is among young students, and that their number has been rising much faster than the overall population (Chart 4), the relative impact on growth in housing demand is notable—predominantly in cities with major post-secondary schools.

The bottom line: this is a rough estimate, and we will not take it to the bank. But, to get a better sense of the real supply and demand conditions in the Canadian housing market, there is a need to adjust the headship rate used to calculate household formation in a way that correctly counts the number of misclassified post-secondary students.

Chart 3
Proportion of Adults Who Live With a Parent—Exaggerated?

Source: Statistics Canada, CIB

Chart 4
Post-Secondary Enrolment Rose Much Faster Than Population Over the Past Decade

Source: Statistics Canada, CIB