

GLOBAL ECONOMICS | HOUSING NOTE

May 13, 2020

Canadian Housing Markets to Recover Quickly Post COVID-19

- Concerns of a significant adjustment in housing markets appear overblown. To assess housing market prospects in the COVID-19 era, we have estimated housing sales, starts and price equations. Our analysis concludes that the pre-COVID shortage of supply will re-assert itself as we head into the second half of the year.
- We view the housing market to be on a COVID-related pause. Following a
 dramatic slowing in Canadian housing markets in 2020Q2, we anticipate a
 quick rebound in home sales and housing starts through 2021 if
 population growth remains strong, and the economy improves in the
 second half of the year. Home prices will adjust modestly down—about 4%
 by end-2020 relative to last year—but rising by about 11% y/y by 2021Q4.

A number of observers and analysts have long worried about the sustainability of the Canadian housing market in light of affordability challenges in many major cities. Concerns about developments in the housing market and their impact on household indebtedness prompted a number of policy actions at all levels of government. While warranted, in some instances these actions reinforced the notion held by some that housing markets in Canada were ripe for a correction. Given these concerns, economic trauma caused by COVID-19 could well be the trigger to a prolonged adjustment in housing markets, owing to its impact on employment, incomes, confidence, and potentially population growth. In our view, these fears are misplaced. There is no doubt that housing market activity is slowing dramatically at the moment, but the empirical analysis presented below suggests this decline in activity will be temporary, and that only a very modest decline in prices might result from this.

Pre-COVID-19, we long had viewed the Canadian housing market as being generally undersupplied. Population in Canada has exploded since the Federal Government increased the number of immigrants allowed into the country in 2016. Housing completions have not, resulting in a sharp record low home completions relative to population (chart 1) since population has grown at twice the rate of completions since early 2016. In light of these persistent and growing supplydemand imbalances, an increasing number of regional housing markets had seen upward pressure on prices owing to low levels of housing inventories (chart 2), though there are obvious regional disparities.

Heading into the crisis, the insufficiency of supply remained apparent as about a third of 31 markets were considered to be sellers' markets—where conditions favor sellers over buyers—and most of the remainder were balanced. Even in March, as the full effect of the virus was felt in the second half of the month, a third of regional markets remained sellers' markets, with none favouring buyers.

The impact of recent developments on housing markets prospects is not so straightforward. The economic disruption is affecting factors that influence supply and demand. From a pricing perspective, demand relative to supply is key. In this context, the dramatic rise in the number of unemployed Canadians is sure to have a downward impact on demand, but the factors leading to a decline in employment are also leading to significant reductions in supply. Housing starts are down over 20% from February levels. Listings have fallen nearly 13%. Sales have fallen by about 14%. Against these developments, population growth has started

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Chart 1

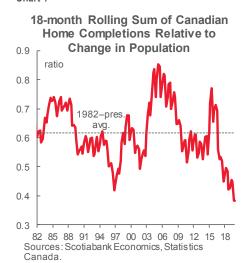


Chart 2

80

70

50

30

Sellers' Market 10 Buyers' Market 5 Buyers' Market 5 Buyers' Market 5 Buyers' Market 5 -5

Canadian House Prices

-10



to slow as immigration is affected by border closures and other COVID-related disruptions. That being said, population growth remains near 30-year highs.

To assess the impact of developments on housing market prospects, we have estimated equations for housing sales, starts and prices using a range of factors that affect supply, demand and prices (see Appendix for details) and run those through Scotiabank's Global Macroeconomic Model to ensure full consistency between the outlook for housing variables and our economic outlook. As a reminder, our macro-economic forecast assumes a deep contraction in 2020H1, followed by modest rebound in the third and fourth quarters as restrictions on economic and social activities are gradually lifted. It is important to note, however, that it will take until early 2022 to return to levels of economic activity observed in 2019Q4. Underlying these forecasts in an assumption that population grows by 1.5% annually, which is slightly slower than the most recent observations.

In the current COVID-19 context, the large increase in the unemployment rate and the almost equally large decline in the participation rate are expected to be the principal drivers of a roughly 40% decline in housing sales in 2020Q2 (chart 3). Other factors that cannot be captured by our model are of course at play, such as restrictions on physical movement and a

Canadian Housing Forecasts change relative to 20Q1 House prices 0.1 0.0 -0.1 -0.2 -0.3 -0 4 Housing sales -0.5 21 22 Sources: Scotiabank Economics

Chart 3

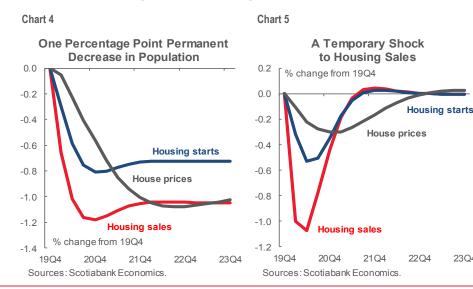
dramatic reduction in listings. Restrictions on non-essential business activities are leading to an almost equivalent reduction in housing starts in Q2 as employment in the construction sector fell sharply in March and April. Moving into the second half of the year, the gradual resumption of economic activity, a return to work by large numbers of workers, and continued strength in population growth are expected to drive home sales and starts given that the housing market is still expected to be generally undersupplied. Our modelling suggests housing starts and sales will rebound by 12% q/q in 2020Q3 followed by an even larger increase of 31% for starts and 17% for sales in the final quarter of the year. Note that these estimates are at the national level. Regional markets won't necessarily reflect this dynamic,

COVID-19 is not expected to have a large or lasting impact on house prices. Our estimates suggest that prices will fall modestly by at most 4% in 2020 relative to 2019 as the decline in home sales is expected to largely track the decline in starts, so supply-demand dynamics will remain roughly unchanged relative to the pre-COVID state of insufficient supply. Moreover, the impact of the rise in unemployment rate will be muted by the exceptional fiscal support measures relative to what has been observed historically. In the absence of exceptional fiscal support measures, for instance, the fall in house prices would be roughly double our current forecast. By early 2021, population growth should lead to a much stronger rise in sales than starts, leading to house prices exceeding pre-COVID levels by mid-2021.

and activity in some cities, such as Calgary and Edmonton is likely to take much longer to rebound given local economic conditions.

Without any doubt, the housing outlook outlined above is subject to a number of uncertainties. Setting aside COVID-related uncertainties about the outlook, the largest risk to the housing outlook is a change in the prospects for population growth. While the Trudeau government remains rightfully committed to its immigration objectives, a modification of those, or a challenge in attracting and landing immigrants, could represent a serious headwind to housing markets. One thing to be watchful for on this front is the

move by Canadian universities to proceed with online learning in the fall. This could potentially lead to a drop in foreign university students living in Canada. Chart 4 demonstrates how an admittedly large 1% reduction (or rise) in population levels (in a partial-equilibrium framework) would lead to a similar decline (increase) in sales, a reduction (rise) of about 0.75% in starts. leading to a fall (increase) of about 1% in prices. Likewise, an exogenous decline in sales—linked to heightened uncertainty for instance—would lead to home prices falling by about a third of the decline in sales (chart 5). A number of other drivers are considered in the appendix.



2304





Appendix 1: Adding a Canadian Housing Block to the Scotiabank Global Macroeconomic Model (SGMM)

To better identify Canadian housing market prospects in this period of intense uncertainty, we updated our Canada/US macroeconomic forecasting model by estimating equations for housing sales in units, average house prices and housing starts. We use the same modelling approach as for the rest of the SGMM. The model is a fully estimated general equilibrium model similar to semi-structural models used at the Bank of Canada, such as MUSE (Gosselin and Lalonde 2005), IMPACT (Blagrave et all, 2020) and LENS (Gervais and Gosselin, 2014). The housing block features forward-looking behaviour, with agents attempting to optimally set the level of their decision variables, such as housing sales and housing starts, in the face of adjustment costs conditional on the expected evolution of many economic drivers.

The drivers of the units housing sales are (sign of the effect in parenthesis) Unemployment rate (-) Labour market participation rate (+) Population (+) VIX (-) Real mortgage rate (-) Real policy rate (-) The drivers of the housing starts are Employment of the residential construction sector (+) Unit labour cost of the residential construction sector (-) Housing sales (+) Real long run rates (-) Real exchange rate (-) + is a depreciation The drivers of the average housing price are Housing sales (+) Housing starts (-) Real disposable income in deviation from potential GDP (+) Relative price of lumber (+) Relative price of metals (+)

Unemployment rate (-)

Consequently the model includes variables that affect the demand for housing (unemployment rate, participation rate, uncertainty measured by the VIX, mortgage rate, disposable income and population) and variables that affect the supply for housing (housing starts, unit labour cost and employment of the housing sector, relative prices of housing inputs and potential GDP). Together, these demand and supply measures jointly determine house prices, along with some housing-specific cost variables.

The attached charts demonstrate the estimated response of the housing sector to changes in a number of variables.



Chart A1

Scenario 1: One Percentage Point Persistent Increase in Unemployment Rate % change from 19Q4 0 Housing starts -2 lousing sale -3 House prices 19Q4 20Q4 21Q4 22Q4 23Q4 Sources: Scotiabank Economics.

Chart A4

Scenario 4: One Percentage Point Permanent Decrease of Employment of Residential Construction Sector

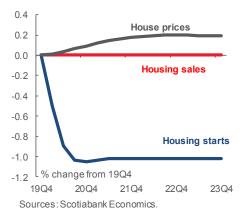


Chart A7



Chart A2



Chart A5

Scenario 5: One Percentage Point Persistent Decrease in Policy and Mortgage Rates



Chart A8

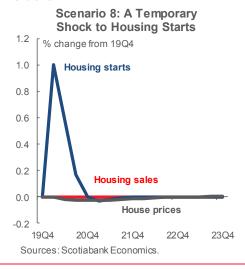


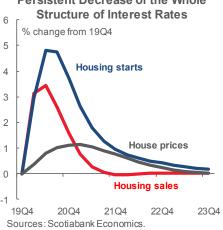
Chart A3

Scenario 3: One Percentage Point **Permanent Decrease in Population** 0.0 -0.2 -0 4 -0.6 **Housing starts** -0.8 House prices -1.0 -1.2Housing sales % change from 19Q4 -1.4 19Q4 20Q4 21Q4 22Q4 23Q4

Chart A6

Scenario 6: One Percentage Point Persistent Decrease of the Whole

Sources: Scotiabank Economics.





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