

Global Economics Comment: The Global Housing Shortage (Bhushan)

- Housing markets in the US, Canada, the UK, and New Zealand are on fire, and surging home prices have caused some concern among central banks.
- While low interest rates and the shift to working from home are fueling housing demand, one underappreciated reason for the house price boom is that housing supply is very tight. Vacancy rates were trending down even before the pandemic, and pandemic-triggered material and labor shortages are weighing on construction activity, further exacerbating the housing shortage.
- While the easing of temporary bottlenecks, such as material shortages, should support an eventual recovery in supply, historically tight housing supply and more persistent constraints, such as land use regulations, should continue to push home prices up in coming quarters, especially in the US, Canada, and UK.

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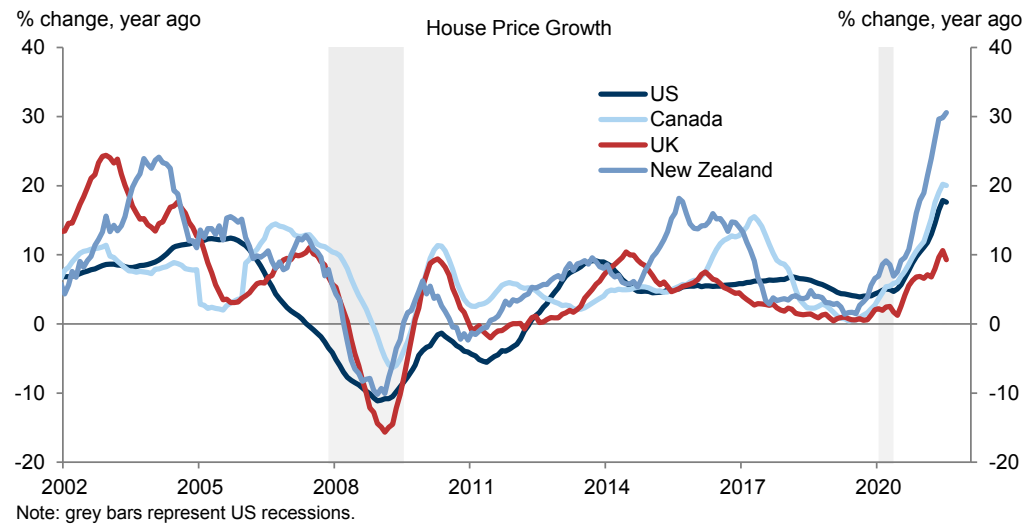
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The Global Housing Shortage

Housing markets in the US, Canada, UK, and especially New Zealand are on fire. Averaging the key house price indices, home prices have risen 30% in the past year in New Zealand, 20% in the US and Canada, and 10% in the UK (Exhibit 1). This surge in home prices has caused some concern among central banks, and the RBNZ recently described the current level of home prices as unsustainable.

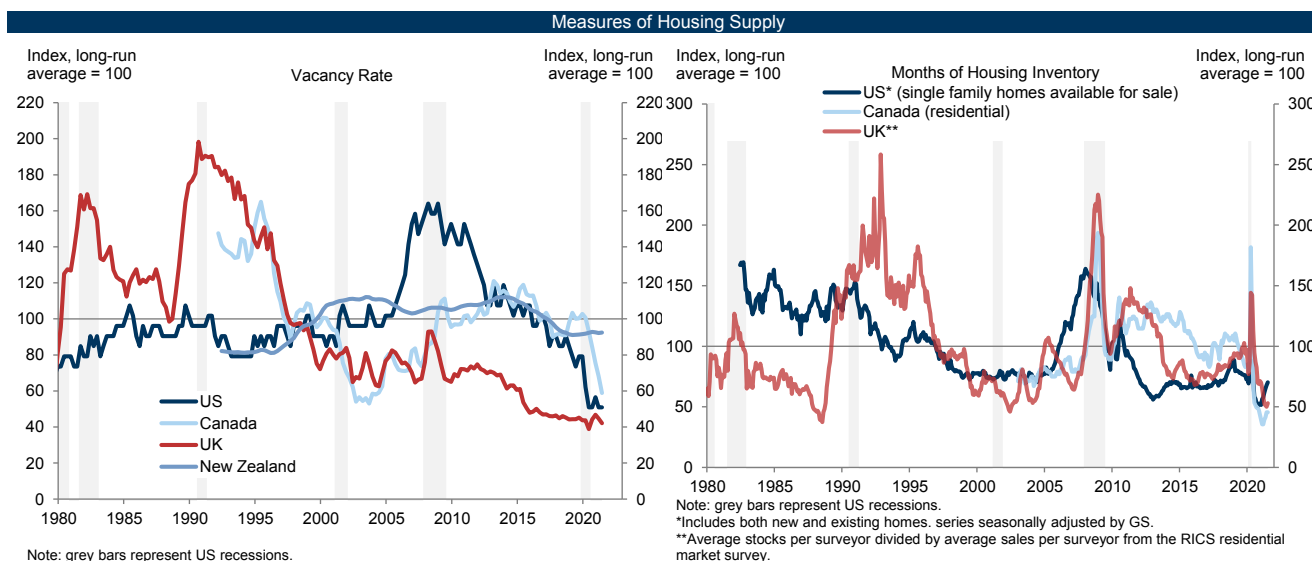
Exhibit 1: House Prices Have Risen by 30% Year-Over-Year in New Zealand, 20% In the US and Canada, and 10% In the UK


We take an average of key house price indices in each country. In the US, we use FHFA, Freddie Mac, Case Shiller, and Zillow. For Canada, we use MLS and Teranet Composite 11. In the UK, we use Halifax, Nationwide Building Society, and England/Wales e-Survey. For New Zealand, we show REINZ house prices.

Source: Haver Analytics, Goldman Sachs Global Investment Research

While low mortgage rates and the shift to working from home are also fueling housing demand, one underappreciated reason for the price boom is that housing supply is very tight. Vacancy rates—the share of houses available for sale on the market at a given time—were already trending down before the pandemic, and have recently fallen sharply further in the US, and especially Canada. (Exhibit 2, left panel).¹ Similarly, months of housing inventory remaining are near historically low levels in the US, Canada, and the UK (right panel). Why is housing supply so tight and will the housing shortage continue to fuel home price growth?

¹ Furthermore, aggregate vacancies understate the tightness in supply because of the pandemic related spatial mismatch.

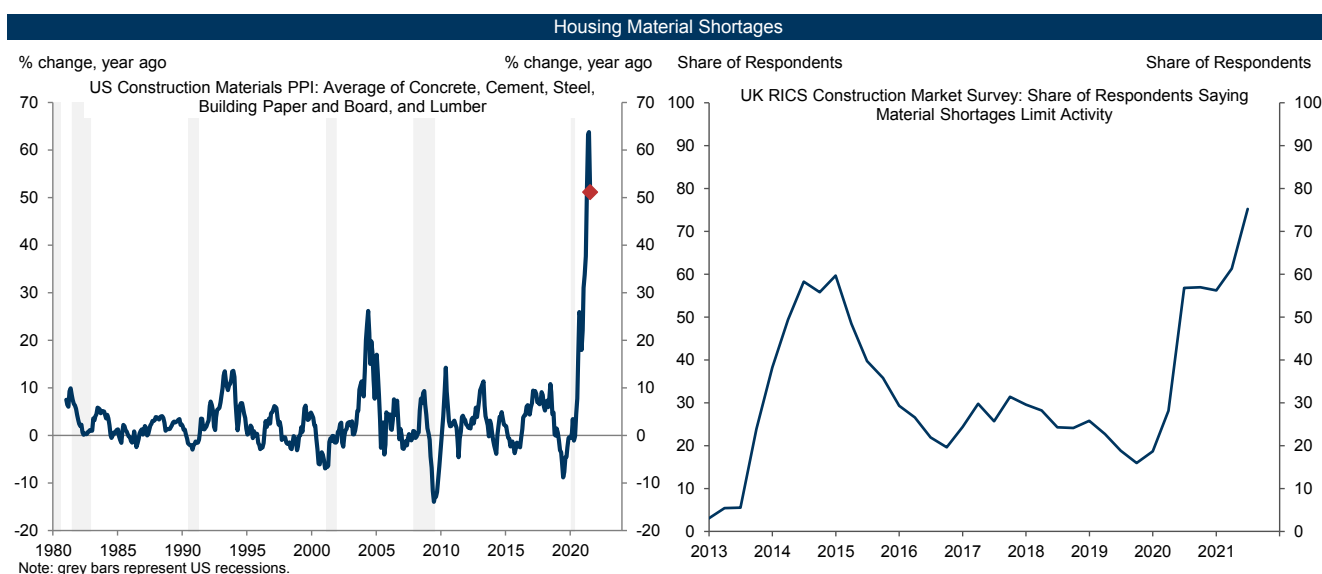
Exhibit 2: Vacancy Rates and Months of Housing Inventory Are at or Near Record Low Levels in the US, Canada and UK

For the US we show homeowner vacancy rate. For the UK, we show the average stock of unsold property per surveyor. For Canada, we show the number of completed and unabsorbed dwellings divided by the total population. For New Zealand, we show the difference between the number of private dwellings and the number of households, divided by the number of private dwellings.

Source: Haver Analytics, Canada Mortgage and Housing Corporation, Royal Institute of Chartered Surveyors, Statistics of New Zealand, Census Bureau, Goldman Sachs Global Investment Research

Normally, red hot home prices trigger a boom in the construction of new houses. Construction activity, however, has been constrained by shortages of materials, labor and land regulations.

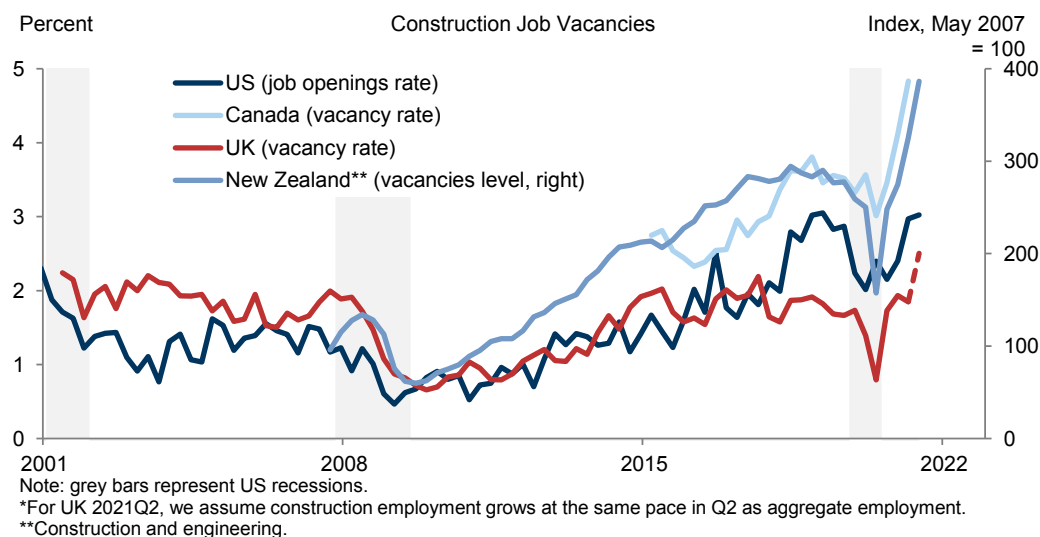
Construction material prices surged during the pandemic as material producers initially cut production and unloaded inventory, and were subsequently surprised by the demand rebound (Exhibit 3, left). Although material prices have started to moderate, nearly 80% of respondents to the UK RICS construction market survey say that material shortages are limiting activity (right panel).

Exhibit 3: Material Shortages Are Limiting Activity but Are Likely Peaking

Source: US Bureau of Labor Statistics, Royal Institute of Chartered Surveyors

The recent spike in construction job vacancies, a measure of unfilled labor demand, points to labor shortages across the four economies, with particularly sharp rises in New Zealand and Canada. The pandemic, however, does not fully explain the labor shortages, with vacancies already approaching or reaching historical highs in all four countries even before the pandemic.

Exhibit 4: Construction Job Vacancies Are Elevated

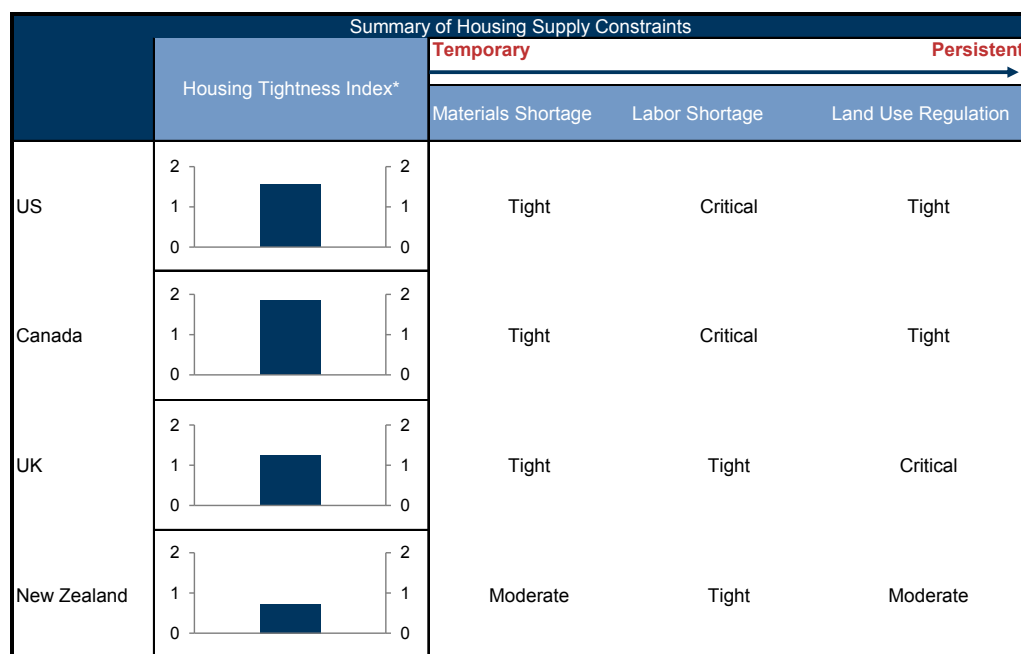


Source: US Bureau of Labor Statistics, Statistics Canada, Office for National Statistics, Ministry of Business, Innovation & Employment, Goldman Sachs Global Investment Research

The availability of land for construction, to a large extent driven by land use regulation, is the most persistent constraint on homebuilding. The economics literature estimates particularly large price effects of land use regulation in the UK and New Zealand (Appendix). In New Zealand, however, recent policies have significantly eased these regulations, encouraging construction, and the [RBNZ](#) forecasts that total available houses will be growing at its fastest pace on record by the middle of next year.² Land use regulation is also very tight in major US cities, especially New York and San Francisco, and the [large share of undevelopable land](#) in Canadian cities further contributes to persistent land scarcity there.

Exhibit 5 summarizes the findings. First, housing supply—summarized with an average of z-scores for the vacancy rate and months of housing inventory—is the tightest relative to its own history in the US and Canada, followed by the UK, and New Zealand. Second, we find that shortages in the US and Canada are primarily driven by temporary bottlenecks, such as labor shortages (consistent with the rapid pandemic decline in housing supply), and their tightness should be alleviated at least somewhat in the near future. However, land scarcity from strict land use regulation is likely to continue to weigh on housing supply across most countries, especially the UK. That being said, New Zealand demonstrates that the government can ease this regulatory bottleneck and help housing supply to recover.

² For example, the National Policy Statement on Urban Development.

Exhibit 5: Temporary Bottlenecks Are Constraining Supply, Especially in the US and Canada, but Land Use Scarcity Is a Long-Term Constraint Globally


*Average current z-score index for homeowner vacancy rate and months of housing inventory (except in New Zealand where we only have homeowner vacancy rate). We use all data available since 1980. A positive score means a tighter housing market.

Source: Goldman Sachs Global Investment Research

While the easing of temporary bottlenecks, such as material constraints and pandemic labor supply effects, should support an eventual recovery in supply, historically tight supply and more persistent constraints, such as land use regulations, should continue to push up house prices in coming quarters, especially in the US, Canada, and UK. Price growth is likely to moderate more in New Zealand, where supply is historically less tight and is forecasted to pick up on the back of easing land use regulations, and tightening macroprudential policies should weigh on demand.

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Appendix

Land Use Regulations Are a Significant Long-Term Supply Constraint

Empirical Studies on The Impact of Land Use Regulation on House Prices			
Study	Country	Method	Finding
Hilber and Vermeulen (2016)	UK	Model-based estimations of local supply constraints using historic panel data.	House price growth from 1974 to 2008 would be 100% less if all regulations were removed.
Lees (2017)	New Zealand	Test for impacts of land use regulation using unit record data on house sales.	Land use regulation could be responsible for up to 56% of the cost of an average dwelling.
Green et al. (2016)	Canada	Construct land-use regulation index using municipal-level data.	Strong association between regulation and dwelling stock growth but uncertainty in approval times and fees have more explanatory power than zoning restrictions.
Gyourko and Krimmel (2020)	US	Estimate an implicit zoning tax in different land markets.	Effect of land use restrictions on available housing is very negative on the West Coast and NYC but mild in central areas.

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

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