Dr. Chukwudi Osuji, Ph. D., Senior Corporate Economist | Patrick Walters, City Economist

February 9, 2017

Housing Review 2016

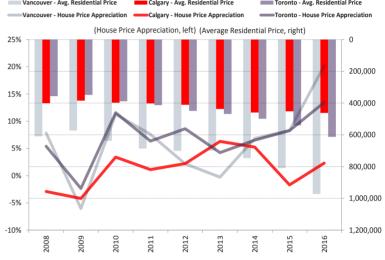
The general theme in the 2016 real estate market was about the "inertia in residential house prices" across Canada. To the west of Calgary is the "red hot" real estate market of Vancouver and to the East of Calgary, is the equally "hot" real estate market in Toronto. The real estate market in Calgary was lukewarm relative to the two major cities mentioned before. On average house prices in the Calgary Census Metropolitan Area remained relatively stable (Q4 2016 compared to Q3 2016), though on a year-over-year basis (Q4 2016 compared to Q4 2015) Calgary experienced a 4 per cent increase.

The persistent increase in Calgary's unemployment is symptomatic of a weak labor market, relative to the rest of Canada. The relatively high unemployment rate in Calgary depressed net migration levels and weakened residential housing demand. In addition, the imposition of new mortgage rules further weighed on housing demand. The new rules now require a higher down payment for house purchases.

Given the above dynamics we should expect downward pressures in apartment vacancy rates going forward into 2017 as more settle for renting due to the inability to purchase. The new mortgage rules are geared towards calming the residential real estate markets in Vancouver and Toronto which have experienced strong house price appreciation. Unfortunately, the housing market is regionalized, thus, the peculiarities which exist in any region are characteristics which influence housing attributes and priced into residential real estate and so housing polices would be suboptimal when applied from the a national perspective.

As Calgary continues to remain a major headquarter location for the oil and gas industry, an upward trend in oil prices bodes well for consumer and business confidence in the local economy. As we move into 2017, investment sentiments should grow stronger on the back of potential upward pressure on oil prices rising from the OPEC and non OPEC member nation's agreement to reduce oil production. We expect consumer and business spending to strengthen in Calgary and correspondingly push job creation and provide some degree of relief on reduced residential housing demand.

Average Residential Price and House Price Appreciation



Sources: CREA, Statistics Canada, Corporate Economics

Calgary CMA: Residential Units Listed and Sold



Sources: CREA, Statistics Canada, Corporate Economics

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What we know:

Unemployment in Calgary Economic Region increased from 8.5 per cent in the third guarter of 2016 to 9.3 per cent last guarter. The aggregate average weekly wage fell from \$1,139 in the fourth guarter to \$1,129 in the last guarter, a decrease of 1 per cent, however, year over year we experienced about 0.32 per cent increase in aggregate average weekly wages.

The sales to new listing ratio of 0.38 suggested a buyer's market in the first quarter, however, for the next two quarters the ratio fluctuated around 0.6 leaning towards a more balanced market, and jumped to 0.73 in the last quarter of 2016, signaling an increasingly seller's market.

Resale Market

The average house price in Calgary year over year appreciated by 4.4 per cent in the fourth quarter of 2016, up marginally from \$465,268 dollars in the third quarter.

The total units sold in the third quarter was 4,749 down from 6,132 units sold in the third guarter of 2016, and up year over year from 4,536 units sold in the fourth quarter of 2015, an increase of 4.7 per cent units more sold from last quarter of 2015.

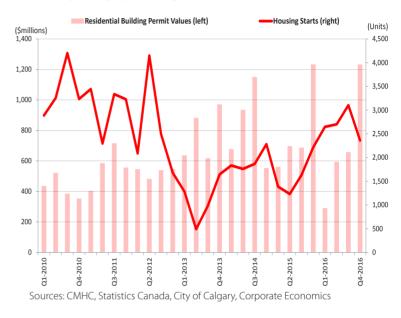
The total units listed in the last guarter of 2016 was 6,896 units, down from 10,669 units in the third quarter 2015 and also down from 12,290 units for the same period 2015, a fall of 15 per cent.

The relative unresponsiveness of units sold to listed units implies that we will continue to see upward-pressures in the rental housing market for apartments and continued reduction in vacancy rates.

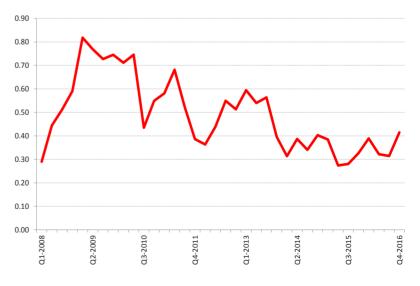
Housing Starts and Permit Values for the City of Calgary

The total housing starts provides us with the potential number of additions to existing housing stock, and understanding the flow of this additional stock helps to inform the discussion on the availability of housing stock in a region. The estimated construction values which we define here as permit values provide a rough estimate of the likely additions to the existing capital stock. The residential housing starts are composed of single family and multifamily residences, and correspondingly estimated construction values.

City of Calgary: Housing Starts and Residential Investment



City of Calgary: Shares of Single-Family Starts



Sources: CMHC, Statistics Canada, Corporate Economics

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The City of Calgary saw total housing starts decrease from 2,471 units in the third quarter 2016 to 2,188 units in fourth guarter 2016, and down 28.3 per cent from a year ago. The single family housing starts rose from 739 units in the third guarter 2016 to 882 units in the last guarter of 2016, but down 6.7 per cent from the last guarter in 2015. The share of single family housing starts remained on average above 50 per cent of the total housing starts between 2005 and 2013, and has been on average below 40 per cent of total housing starts ever since. This demonstrates a notable change in demographic shift which also relates to change in tastes and preferences as housing choice patterns evolve.

The residential permit values (estimated construction values) rose from third quarter 2016 to \$1.2 billion dollars in the last quarter of 2016, an increase of 87 per cent in construction value from the third quarter 2016, and no change year over year. T he residential permit values are composed of single family and multifamily permit values. Single family permits decreased from \$282 million dollars in the third guarter 2016 to \$267 million dollars in the last quarter of 2016, a decrease of 5 per cent and a year of year increase of 13.6 per cent from the last guarter of 2015. On the other hand multifamily permits increased by 157 per cent from \$375 million dollars in the third guarter of 2016 to \$965 million dollars in the last guarter. This significant upswing in the last guarter was driven by the rush by builders to submit their permit request, in an attempt to avoid the new change in rules for multifamily units which took effect in January of 2017. However, multifamily permit values fell 3.3 per cent from last quarter of 2015 to last quarter of 2016. The permit values are used to estimate the construction investment in the City of Calgary.

Affordability Index

The regional affordability index for Calgary did not improve over its 2015 level¹. This was a result of a weak wage growth relatively to house price appreciation. Clearly, the recession impacted the labor market in Calgary to greater extent than the

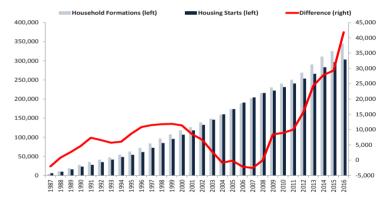
House Price and Weekly Wage Rate Growth vs. Affordability Index



Sources: CREA, Statistics Canada, Corporate Economics

Calgary: Household Formations vs. Housing Starts

(Rolling Sum, 1987 - 2016; units)



Sources: Statistics Canada, Corporate Economics

Vancouver: Household Formations vs. Housing Starts

(Rolling Sum, 1987 - 2016; units) 30,000 00,000 20,000 00,000 00 000 -10.000 20,000 00.000 30.000

Sources: Statistics Canada, Corporate Economics

 $^{^{1}}$ The affordability index attempts to measure the pulse of the regional ability of workers to purchase residential housing. So, this measure also sheds some insight on the basket of livability for Calgary. Livability requires a broader set of socio and economic attributes; however, a major pillar in this basket is the affordability index. We construct an affordability index for Calgary using a ratio of associated cost of housing and wages

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housing market, and this has led to a decrease in affordability.

Looking Forward

Calgary residential real estate market certainly, does not exhibit the characteristics of any overheating, or unbuckled regional drivers of residential house pricing. Evidence from household formation and housing starts show that house price changes could be explained by local economic and demographic factors. The same argument cannot be made for Vancouver. However, for Toronto, the same evidence for Calgary substantiates economic fundamentals and provides preliminary evidence against a housing bubble. Further insight on understanding potential housing bubble can be gleaned by comparing residential house pricing with residential housing rent, while controlling for housing attributes.

The build up and completion of residential housing from 2016 will see residential housing stock build up in 2017 crawling, as residential housing investment is expected to be at relatively lower numbers than 2016, and thus corresponding to loss in jobs for the residential Construction industry in 2017. However, as business confidence "builds up" no pun intended, and investments increase, this should drive job creation, and as unemployment rate relative to the national begins to decrease, this will also provide upward pressures on housing demand. As the unabsorbed residential housing stock begins to decrease this should drive further residential housing construction.

Toronto: Household Formations vs. Housing Starts (Rolling Sum, 1987 - 2016; units)



Sources: Statistiics Canada, Corporate Economics

Who We Are

Corporate Economics provides services in four areas: forecasting, information provision, policy analysis and consulting. We also monitor the current economic trends which allows us to develop unique insights on how external events are impacting the local economy and the Municipal government. We are experienced at researching different economic topics and have developed reliable methods of forecasting and analysis.

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Sources: Statistics Canada, CMHC, CREA, City of Calgary, Corporate Economics