## What Happens Next to Home Prices?

$\square$ Snce 1981, prices have posted monthly year-over-year increases of 20\% or more 46 times.
$\square$ An acceleration in prices is generally followed by a reversion of growth back to its long-run average within 12 months.
$\square$ In a number of periods, price growth has turned negative within 24 months, though generally following a significant external shock.

Home prices in the Real Estate Board of Greater Vancouver (RBGV) area accelerated over the past year, even exceeding 20 per cent year-over-year growth in each of the first three months of 2016. Given already high prices, in particular for single-detached homes, that rapid acceleration in prices prompts the obvious question of what happens next? In this issue of Market Intelligence, we look to past periods of accelerating prices in the RBGV area for answers. This analysis is not a forecast, but rather an examination of what trajectory home prices have typically followed after previous periods of rapid acceleration.

## Analysis:



Source: BCREA Economics

Periods of rapid price acceleration, defined as 20 per cent or higher year-over-year growth for the purposes of this report, are far from unusual in Vancouver. In fact, since 1981, there have been 46 months in which prices rose by more than 20 per cent on a year-over-year basis and 38 of those months occurred prior to 2010. To provide a benchmark for the aftermath of a period of rapid price acceleration, we estimated a statistical model ${ }^{1}$ that does a good job explaining this data. In particular, it demonstrates that price growth is mean-reverting. That is, after an acceleration of home prices, the percentage change in growth tends to trend back to its long-run average growth rate. These model findings are further corroborated by a simple historical average of price growth following historical periods of 20 per cent year-over-year price increases.

While these summary measures provide us with a general idea of how prices typically evolve following a period of acceleration, it is also informative to examine each period of price acceleration individually. Excluding the highly anomalous 1981 market, there were seven periods of price acceleration in the RBGV area over the past 35 years:

1988 and 1989: Growth in home prices breached 20 per cent or more on a year-over-year basis six times in 1988 and re-accelerated into 1989, peaking at 45 per cent year-over-year in February 1989. From 1989 to early 1990, price growth averaged 30 per cent before eventually turning negative in October 1990, following a sharp increase in interest rates and the onset of a severe Canadian recession.

1993: Home price growth tipped over 20 per cent for just one month in 1993 before trending to single digit growth within 12 months.

[^0]1995: After a steady rise throughout 1994, home prices rose 23 per cent in February of 1995 but sharply corrected within six months, turning negative through the late 1990s as the lingering effects of the leaky condo crisis and significant net losses of interprovincial migrants dampened housing demand.

2006: After a long period of relative calm in the Metro Vanoouver housing market, prices accelerated through the early 2000s, eventually reaching growth of 20 per cent or higher in seven of 12 months of 2006. Strong price growth continued until the onset of the Global Fnancial Orisis in 2008 and ensuing recession which sent prices lower for several months in 2008 and early 2009.

2009: The recovery from the financial crisis and subsequent recession saw prices rise as interest rates fell to historical lows and home sales surged

2011: Strong growth in home prices was restricted to detached homes as a result of their relative scarcity. The federal government, through the Canada Mortgage and Housing Corporation, tightened mortgage insurance regulations. These tightening measures included requiring all insured borrowers to qualify at the five-year fixed rate and also a reduction of amortization periods on insured mortgages to 30 years in 2011, and eventually to 25 years in 2012. These changes had a strong impact on demand, and price growth turned negative in late 2011.

2016: The year started with home prices posting 30 per cent year-over-year increases, which moderated to 16.5 per cent by May.

Most periods of priœ acceleration were followed by a gradual moderation of price growth within 12 months. In two of the historical periods, price growth turned negative in the 12 months following a rapid acceleration. However, these periods coincided with an idiosyncratic or external shock, such as the leaky condo crisis of the mid to late 1990s, recessions or a tightening of monetary or macroprudential policy.

Using history as a guide to what comes next for the Vancouver housing market, one would expect that without a major economic shock or significant change in housing policy, that $\infty$ nventional market dynamics of supply and demand will take hold and growth in home prices will likely trend lower over the next 12 months.

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[^0]:    ${ }^{1}$ In particular, a first order auto-regressive model.

