

ANALYSIS

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Canada Housing Market Outlook: Slower Medium-Term Prospects

Introduction

The housing market in Canada has reached a turning point, though not into a full-blown national correction, but into an environment of decidedly slower demand growth and house price appreciation over the next few years. The new environment is due to a combination of new national mortgage lending regulations, interest rate tightening by the Bank of Canada, and province-specific regulations such as transfer taxes on foreign purchases. These policy interventions are neither arbitrary nor intended to put the housing market out of reach of purchasers. Their main objective is to prevent further deterioration in affordability and also to prevent a worsening in mortgage debt performance.

The combined effects of these interventions will be that national house price appreciation, which has been strong through 2017 despite regulatory interventions in British Columbia and Ontario, comes almost to a stop in 2018 as the combination of higher mortgage rates and restricted mortgage lending starts to take hold. Some areas will start to experience falling house prices, particularly the Prairie metro areas, which have a historically high sensitivity of house price appreciation to changes in mortgage rates and which also have had lower average house price growth than the greater Toronto and Vancouver regions. Toronto and Vancouver themselves will have substantially slower house price growth, but Montréal will be less affected given that it is not an overvalued market.

Despite the policy shock, there will be only a brief and mild national house price decline in 2018, after which house price growth will resume, albeit at a significantly slower rate. Given that previous house price growth was outpacing income growth and also starting to stretch household debt service ratios, the downward shift in house price appreciation will not be bad news.

Canada Housing Market Outlook: Slower Medium-Term Prospects

BY ANDRES CARBACHO-BURGOS

The housing market in Canada has reached a turning point, though not into a full-blown national correction, but into an environment of decidedly slower demand growth and house price appreciation over the next few years. The new environment is due to a combination of new national mortgage lending regulations, interest rate tightening by the Bank of Canada, and province-specific regulations such as transfer taxes on foreign purchases. These measures are intended to break the upward price momentum in the hottest housing markets, Toronto and Vancouver, while improving mortgage credit quality given that previously low mortgage rates will soon be a thing of the past.

So far, what house prices have shown is how difficult it is to break the national housing market momentum even in the face of consistent pressure by policymakers trying to safeguard affordability. Vancouver is the strongest example. Well more than a year after the British Columbia government imposed a 15% transfer tax on sales to foreign nonresidents, plus several other regulations intended to cool off the housing market, steady house price appreciation has resumed in the metro area, though not yet as strongly as during the feverish 2015-2016 period before the transfer tax was imposed. The later transfer tax and housing regulations imposed by Ontario on the Toronto housing market have so far had the intended effect, with prices declining slightly over the past months, though the case of Vancouver suggests house price appreciation could resume in the near term.

Though provincial government measures have had some impact, it is macroeconomic interventions that will have the larger effect in coming years. Now that the Bank of Canada is moving to increase short-term interest rates, the five-year adjustable mortgage rate has climbed from 3.6% to more than 4% and

will increase further. In addition, starting in January, stress-testing for mortgage lending will be extended to cover mortgage loans where the borrower makes a down payment of 20% or higher. The combination of higher interest rates, more stringent lending conditions, and province regulations on some metro area markets will exert downward pressure on house prices and home sales over the next few years.

Recent Performance

While no longer performing at a feverish pace, Canada's housing markets are so far unimpressed by the various policy measures: Far from panic or pessimism, there has been only a gradual slowdown in the pace of sales and pricing. Canadian Real Estate Association numbers indicate that sales dipped slightly in 2017, but have increased in the past three months and are at 524,000 annualized as of November, not far from the 2016 peak. Sales in Toronto fell slightly over the past several months as the province transfer tax and restrictions on short-term repeat sales took effect, but sales are still increasing in Montréal and Vancouver. Sales are also up slightly year over year in Calgary and Edmonton and are

level in the other Prairie metro areas. The ratio of inventory to sales has started falling again after peaking at a still-tight five months of sales in June.

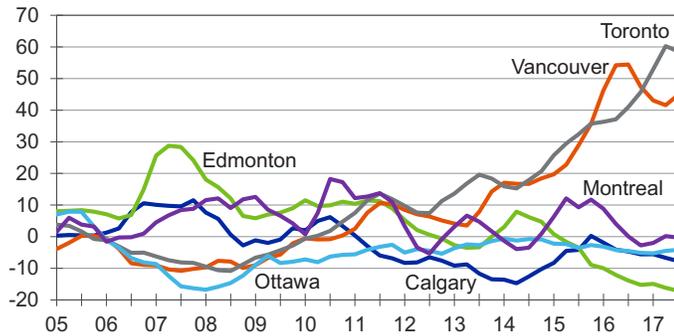
House price trends in the largest metro areas have started to turn, but show few signs of entering correction territory, as shown in Chart 1. The two standouts are Toronto, where house prices have fallen slightly after the imposition of the transfer tax, and Vancouver, where house price growth has resumed. Both metro areas have led the country in house price growth since 2010.

House price dynamics for the 13 metro areas in the RPS composite house price index over the past six months are shown in Charts 2 and 3. Vancouver, which in May was just starting to recover house price momentum after the imposition of the transfer tax and regulations suppressing rapid resale transactions such as shadow flipping, is back to steady if less spectacular appreciation as of November. Toronto entered this cycle much later, so its house prices are still declining.

With the exception of smaller metro areas in the periphery of Toronto and Vancouver, most other regions of Canada are

Chart 5: Vancouver, Toronto Defy Gravity...

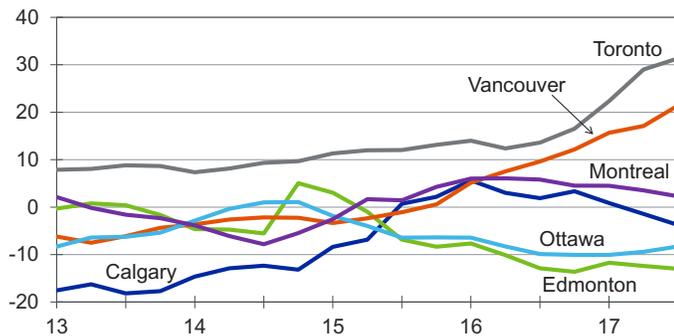
RPS median house price, s-f detached, % deviation from trend



Sources: RPS, Moody's Analytics

Chart 6: ...And Their Condos as Well

RPS median condo apartment price, % deviation from trend



Sources: RPS, Moody's Analytics

far only stopped overvaluation from rising further, but have not started to reverse it.² Prices for single-family homes remain about 44% overvalued in Vancouver one year after the transfer tax and about 59% overvalued in Toronto after several months of the Ontario Fair Housing Plan.³ By contrast, single-family homes seem to be correctly valued in Montreal and are even slightly undervalued in Calgary and Ottawa, with Edmonton having somewhat more undervaluation, which

joint study by Statistics Canada and the Canada Housing and Mortgage Corporation indicates that while foreign nonresident purchases are concentrated in Toronto and Vancouver, they are not an exceptionally large share of purchases compared with those in the United States and Europe.⁴ Also, the data show that foreign nonresident purchases tend to be concentrated disproportionately in condo apartments. It is possible that such purchases displaced domestic demand towards single-family homes, but it is much more plausible that the wealth inflows that have drastically pushed up single-family home prices in Toronto and Vancouver are of

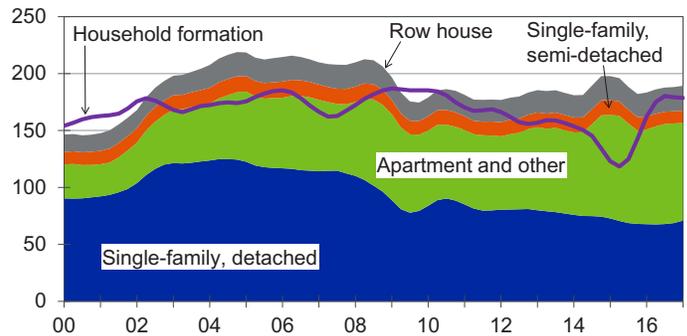
² For Charts 5 and 6 as well as Table 2, it should be added that the trend HPI equations were re-estimated since the September report because of the availability of new and longer population time series for the Canada metro areas, which also resulted in some historical revisions. As a result, the overvaluation and undervaluation percentages in this report are not strictly comparable with those in the September report

³ The usual caveat for measuring overvaluation continues to apply: a high degree of overvaluation is not a surefire guarantee that house prices will start to correct in the near future, especially if wealth inflows affecting local housing markets continue unabated.

⁴ See CHMC/SCHL, *Housing Market Insight: Canada*, December 19, 2017, and Statistics Canada, *Non-resident Ownership of Residential Properties in Toronto and Vancouver: Initial Information from the Canadian Housing Statistics Program*, no. 78. The conclusions of these reports are still tentative given that there are many ways, including shell corporations in Canada, by which foreign purchasers can avoid identifying themselves.

Chart 7: Construction Is Not the Problem

Residential construction, ths annual rate, 4-qtr centered MA



Sources: CMHC, Statistics Canada, Moody's Analytics

will put upward pressure on its housing market in coming quarters.

Indeed, there may be a limit, already reached, on how much transfer taxes and other restrictions on foreign capital inflows to the housing market can pull down on single-family home prices. A recent

domestic origin. As a result, policy interventions other than transfer taxes are needed to choke off the steep runup in single-family home prices in the past three years.

The market for condo apartments is usually overshadowed by the single-family home market, but in recent quarters the Toronto and Vancouver condo markets have also been showing danger signs as indicated in Chart 6. Unlike single-family markets, where the province initiatives have been able to interrupt upward price pressures, restrictions on the condo market such as taxes on unoccupied apartments have not yet started to drag on price appreciation.

Overall, the valuation metrics shown in the Charts 5 and 6 suggest that large metro area housing markets do not immediately start to correct when housing becomes seriously overvalued. As long as wealth can flow into a local housing market from outside sources, it can sustain house prices at rates far above what would be suggested by local income, land and construction costs, and even average national wealth.

Construction effects

Before discussing the details of the macroeconomic forecast, it is worth addressing the argument that the erosion of national affordability is due to insufficient residential construction. This assertion may well be true in the urban cores of Toronto and Vancouver, but it is harder to make the case in national terms. Chart 7 juxtaposes annualized housing completions with household formation. The increasing pace of urbanization can be

Table 1: Canada Housing Market, History and Baseline Forecast

	Most recent	2015	2016	2017	2018	2019	2020	2021	2022
Detached single-family house price index, % change *	11.9	6.7	11.7	10.1	0.1	1.2	1.7	1.7	1.7
Condo apartment price index, % change *	17.8	4.1	9.9	15.4	0.5	0.8	1.2	1.2	1.2
Composite house price index, % change *	11.5	5.9	11.3	9.6	-0.2	0.9	1.4	1.4	1.3
Real per capita income, % change	1.3	2.6	0.0	1.3	1.1	0.8	0.8	0.9	1.1
Unemployment rate, %	6.2	6.9	7.0	6.4	6.3	6.6	6.6	6.6	6.7
Avg mortgage rate, 5-yr, %	3.8	3.8	3.7	3.8	4.8	5.8	6.2	6.0	6.0
Housing starts, ths	222.7	194.6	199.0	214.8	205.1	189.6	176.6	179.3	183.4
% change	11.3	3.1	2.2	7.9	-4.5	-7.6	-6.9	1.6	2.3
Ratio, median dwelling price/median family income	7.8	6.4	7.1	7.7	7.7	7.5	7.4	7.4	7.3
Ratio, outstanding mortgage debt/disp. income	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8

*Fourth qtr, yr over yr

Sources: RPS, Statistics Canada, CMHC, Moody's Analytics

seen in the rising share of apartments out of total construction, which also speaks to the contrasting demographics of the three largest metro areas compared with the rest of Canada. In the past decade, only briefly in 2009 did estimated household formation exceed housing completions. More recently, stronger than expected housing starts in the last few quarters may well exert downward drag on new-home prices through the coming year.

Since arguments that residential construction has been geographically misallocated do not seem plausible, what may be true is that despite a seemingly healthy rate of construction, an increasing share of the nation's housing stock may be both vacant and held off market for only seasonal or occasional use. However, data from CMHC indicate that the national vacancy rates for apartments and row houses have been roughly constant over the past eight years,

so if there is an increasing share of the housing stock that is vacant and being held off market, it is likely for detached single-family homes. Insufficient construction may, however, become an upside risk for house prices in coming years as policy moves in a more demand-restrictive direction.

The macroeconomic forecast

The move by the Office of the Superintendent of Financial Institution, or OSFI, to restrict mortgage lending by imposing stress tests for most borrowers is plausible given the predicted increase in interest rates. Moody's Analytics forecasts that the overnight target rate, which was at only 0.5% in mid-2017 and has already started going up, will peak at 3.5% in early 2020. The five-year adjustable mortgage rate will increase in parallel, peaking at 6.2% in mid-2020 after having already risen from 3.6% in June to more than 4% in November. The

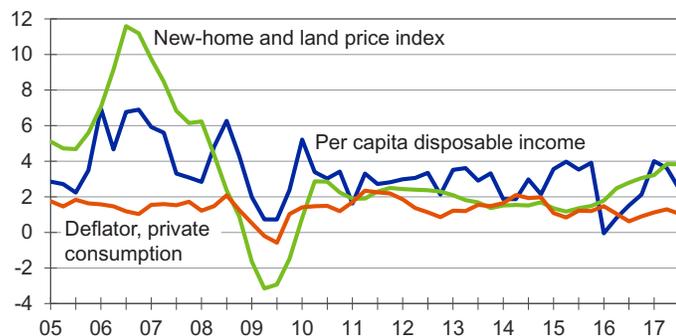
percentage of residential mortgages in arrears is now at a cyclical low point thanks in part to low mortgage rates, but it is quite likely to increase over the next three years if mortgage lending is not made more prudent.

national RPS house prices, as of December. What is notable about the forecast is that national house price appreciation, which has been strong through 2017 despite regulatory interventions in British Columbia and Ontario, comes almost to a stop in 2018 as the combination of higher mortgage rates and restricted mortgage lending starts to take hold. A perceptible share of mortgage applicants, including those with 20% down payments, may fail the stress tests, which require that mortgage rates 2 percentage points higher than current rates, or the Bank of Canada's benchmark five-year mortgage rate, whichever is larger, be used when obtaining the resulting share of mortgage debt service to income. Even borrowers who pass this stress test may be sufficiently deterred by the steady increase in the mortgage rate to the point where they look for lower-priced housing or possibly even put off purchasing a home for the foreseeable future.

The other elements of the macroeconomic forecast are straightforward. A decline in residential construction is to be expected in an environment of monetary and fiscal tightening; by 2020, residential construction's role in demand will be much weaker before it subsequently starts to recover. Reduced construction will also act to constrain the appreciation of new homes, which has been starting to edge up over the past two years (see Chart 8). The good news is that the restrictive policies will start to have the desired effect, improving affordability by pushing down on the ratio of the median dwelling price to median family income.

Chart 8: New-Home Prices Start Edging Up

Canada macroeconomic indicators, % change yr ago



Sources: Statistics Canada, Moody's Analytics

Slower growth in house prices will also help sustain mortgage debt performance, keeping the debt service to disposable income ratio almost constant for the next five years.

The regional outlook

As always, there is wide variability between Canadian regions and metro areas, resulting in diverging house price outlooks over the next few years. The clearest examples are the large attraction of wealth inflows to Toronto and Vancouver, which tends to mute or even eliminate any historical reversion-to-trend effects. But there are also other effects in play, including the stronger sensitivity of house prices in Prairie metro areas to changes in mortgage rates and the slower demographics of metro areas in the Atlantic provinces. Thanks to these varying effects, house price appreciation will be disproportionately concentrated in Ontario, whereas other provinces such as Alberta may undergo medium-term house price corrections.

In the Moody's Analytics house price forecast model, the strongest short-term effects are due to either inertia, as proxied by the last historical quarter of house price growth, and reversion-to-trend effects, as proxied by the degree of overvaluation (undervaluation if negative). Table 2 presents these immediate dynamics and the resulting forecast for single-family home price appreciation or depreciation over the next two years. The first column presents overvaluation rates for metro areas in the third quarter of 2017, the last with full history.⁵ Serious overvaluation is not limited to Toronto and Vancouver proper, but also includes their smaller surrounding metro areas, Abbotsford, Hamilton and Oshawa in particular. Of the larger metro areas, only Edmonton suffers from serious undervaluation and would thus face upward push in coming quarters.

The second column looks at third quarter house price growth, which would partially carry over into the succeeding quarters in the Moody's Analytics forecast model. At the moment, the British Columbia metro areas

plus the metro areas outside Toronto have the strongest house price momentum. Toronto itself is going through declining house prices as its market reacts to the Ontario Fair Housing Plan, so its third quarter house price appreciation is significantly lower than that in the second quarter. Currently, only the New Brunswick metro areas—Moncton and St. John—plus Regina have significant downward momentum.

The third column looks at the house price outlook in the coming year, when the effect of interest rate tightening and stricter mortgage lending would start to make themselves felt but in which house price inertia is still a significant determinant of appreciation. As implied by the national house price forecast on the top row, the average of the regional house price forecasts will be substantially slower than in recent quarters, including the third quarter of 2017. In fact, some of the metro areas and provinces will go into correction, especially Alberta, Calgary and Edmonton, which have a historically high sensitivity of house price appreciation to changes in mortgage rates, and which also have had lower average house price growth than the greater Toronto and Vancouver regions.

Newfoundland will have a house price correction as well because of strong mortgage rate sensitivity and also because of a weak short-term demographic and income outlook. By contrast, Ontario and the smaller metro areas around Toronto will do relatively well in part because of inertial effects, as will Montreal and Vancouver.

The fourth column lists predicted house price growth for the subsequent four quarters from the fourth quarter of 2018 to the third quarter of 2019. Here, the inertial effects from historical house price growth are no longer as strong and forecasts are driven mainly by reversion to trend and by sensitivity to changes in mortgage rates. The correction for Alberta will continue; house prices there will not recover before 2020. Lesser downturns will also take place in British Columbia, Manitoba and Saskatchewan as the combination of interest rate tightening and mortgage stress-testing takes effect. By contrast, Ontario will do somewhat better, as it will continue to have a disproportion-

ate share of Canada's wealth inflows and has also had less historical house price sensitivity to mortgage rates.

Lastly, Table 3 ranks the metro area forecasts for the 2017-2022 five-year period and also compares them with the August forecast, which was used in the September report. The five-year outlook for several metro areas has changed in part because of different assumptions on the sensitivity of different regions to more stringent mortgage lending, and as a by-product there is less dispersion around the Canada average. But the much slower projected house price growth for Canada as a whole (compared with the last three years) informs the forecast. Most of Quebec will do somewhat better than previously forecast, while Toronto will have slower house price growth now that all of the measures in the Ontario Fair Housing Plan have kicked in.

With the exception of Toronto, Montreal and a few of the smaller Quebec metro areas, the overall rankings for five-year house price outlook has not changed; the Prairie metro areas are still down at the bottom because of a combination of sensitivity to higher mortgage rates, slower demographics, and slower projected median family income growth. The only exception is Saskatoon, whose house prices will do somewhat better because of its recovery from a deeper current recession trough; its current unemployment rate is almost 2 percentage points higher than the Saskatchewan and Canada rates.

On average, the Canada metro areas will experience significantly slower house price growth over the next five years, though the decelerations will be sharper for Toronto and Vancouver than for other metro areas, while the Prairie metro areas will undergo price decreases. The more pessimistic house price forecast is consistent with intended policy effects: The combined efforts of the province and federal governments and of the Bank of Canada to improve affordability and reduce mortgage risks will have at least partial success in the medium term.

Risks

The alternative scenarios for Canadian house prices incorporate the effects of in-

⁵ Overvaluation and undervaluation rates are calculated only for the metro area forecasts. Province house price forecasts are mostly aggregates of metro area forecasts, so they do not use the actual vs. trend house price forecast method.

Table 2: Canada Subnational Forecast, Median Detached House Price

	% deviation from trend price, 2017Q3*	% change annualized, 2017Q3	Avg annualized house price growth, %, 2017Q4-2018Q3	Avg annualized house price growth, %, 2018Q4-2019Q3
Canada		8.0	0.8	0.9
Alberta		0.7	-4.6	-5.4
<i>Calgary, census metropolitan area</i>	-7.7	1.8	-6.3	-7.1
<i>Edmonton, census metropolitan area</i>	-17.1	0.2	-4.3	-5.6
British Columbia		17.7	3.3	-2.4
Abbotsford, census metropolitan area	22.9	24.9	3.4	-3.5
Kelowna, census metropolitan area	9.0	15.9	-1.8	-2.9
<i>Vancouver, census metropolitan area</i>	44.8	20.0	4.8	-2.4
<i>Victoria, census metropolitan area</i>	10.8	14.6	-0.7	-3.5
Manitoba		3.9	-1.5	-1.3
<i>Winnipeg, census metropolitan area</i>	5.3	5.4	-1.8	-1.4
New Brunswick		3.0	0.2	2.3
Moncton, census metropolitan area	-9.6	-5.2	0.0	2.0
Saint John, census metropolitan area	-9.2	-9.6	1.3	1.7
Newfoundland and Labrador		-2.3	-6.7	-2.2
St. John's, census metropolitan area	-0.4	-2.1	-8.5	-3.7
Nova Scotia		2.3	0.0	3.1
<i>Halifax, census metropolitan area</i>	-4.5	3.3	0.3	2.2
Ontario		6.3	2.6	2.2
Barrie, census metropolitan area	45.7	11.9	2.9	3.7
Brantford, census metropolitan area	32.2	16.7	6.2	2.8
Greater Sudbury, census metropolitan area	9.4	5.9	-1.3	0.1
Guelph, census metropolitan area	31.0	20.6	8.9	4.5
<i>Hamilton, census metropolitan area</i>	46.5	11.3	1.6	0.5
Kingston, census metropolitan area	-11.1	2.3	-1.1	0.5
Kitchener, census metropolitan area	36.4	21.7	6.9	2.2
London, census metropolitan area	10.7	18.9	5.6	1.9
<i>Ottawa-Gatineau, census metropolitan area</i>	-4.2	7.4	1.9	1.9
Oshawa, census metropolitan area	64.1	4.1	1.3	3.6
Peterborough, census metropolitan area	21.5	16.8	6.0	1.1
St. Catharines-Niagara, census metropolitan area	30.5	17.0	4.5	1.3
Thunder Bay, census metropolitan area	21.4	8.1	-0.5	-0.5
<i>Toronto, census metropolitan area</i>	58.6	2.4	0.4	2.8
Windsor, census metropolitan area	-6.1	19.5	8.3	4.1
Prince Edward Island		4.2	-1.4	0.4
Quebec		5.2	2.2	5.6
<i>Montreal, census metropolitan area</i>	-0.3	7.2	3.5	6.9
<i>Quebec, census metropolitan area</i>	31.4	0.5	-0.4	3.9
Saguenay, census metropolitan area	22.8	4.5	1.1	4.0
Sherbrooke, census metropolitan area	5.6	5.3	2.7	6.0
Trois-Rivieres, census metropolitan area	7.7	-2.2	-1.8	3.2
Saskatchewan		-2.5	-4.6	-3.3
<i>Regina, census metropolitan area</i>	14.2	-5.2	-10.2	-8.1
<i>Saskatoon, census metropolitan area</i>	-5.2	0.6	-1.0	-0.3

Italicized metro areas are part of the RPS 13-metro area composite index.

*Census metropolitan areas only

Sources: RPS, Moody's Analytics

terest rate tightening and more restricted mortgage lending; the alternative scenarios themselves add different degrees of policy or financial risk, as well as effects of stronger international inflation or higher and lower oil prices. The international macroeconomic environment affects the Canada housing market indirectly through effects on interest rates and income growth paths. But there are other sources of risk that could lead to reduced housing affordability or to a disorderly correction after continued overvaluation.

The new regulations on mortgage lending put forward by the OSFI could be a source of downside risk or possibly of risks that future policy will be less effective. Many analysts think that the stress test for conventional borrowers with 20% down payments is too strong and will reduce actual purchase demand by creating too much financial stringency. The resulting downward pressure on purchases will pull down not just on home values, but also on the financial balance sheets of real estate developers and on residential construction; by trying to tamp down a housing bubble, the OSFI could actually add perceptibly to the drag on Canada's GDP growth.

Conversely, the new stress test could result in a serious reshuffling of mortgage lending as potential buyers shift from banks towards credit unions and other nonbank mortgage lenders who are not federally

regulated. This possibility would result in the stress test being less effective than planned in reducing house prices and purchases, but also less effective in its primary goal of preserving mortgage credit quality as interest rates climb, setting the stage for a worsening of mortgage debt performance several years down the line.

Lastly, there is the risk that even with the stress tests preserving mortgage credit quality as planned, the projected tightening of interest rates will prove to be an overreaction in macroeconomic terms. If median income growth is slower than projected, the Bank of Canada's tightening could lead to perceptibly slower GDP growth in addition to reducing access to credit, in which case not only house prices and purchases, but also residential construction and overall spending, would suffer a substantial correction.

Table 3: Medium-Term House Price Outlook, Census Metropolitan Areas

Avg annualized projected single-family house price growth, %, 2017Q3-2022Q3

	Aug forecast	Dec forecast
Canada	1.2	1.4
Guelph	5.8	5.3
Barrie	4.4	4.6
<i>Montréal</i>	-0.4	3.8
Sherbrooke	-0.2	3.2
<i>Saskatoon</i>	-1.7	2.5
Oshawa	6.7	2.3
<i>Québec</i>	-2.2	2.1
Brantford	3.5	1.9
Kitchener	3.4	1.8
<i>Toronto</i>	7.3	1.8
Saguenay	-1.0	1.6
London	-0.6	1.5
Windsor	0.9	1.5
<i>Ottawa-Gatineau</i>	3.6	1.4
Peterborough	1.7	1.3
Trois-Rivières	-1.8	1.2
<i>Halifax</i>	0.6	0.9
St. John's	-4.9	0.9
St. Catharines-Niagara	-2.4	0.9
<i>Vancouver</i>	-0.5	0.6
Saint John	0.7	0.3
Moncton	1.1	0.2
<i>Hamilton</i>	5.3	0.1
Kingston	-2.1	0.1
<i>Edmonton</i>	-2.7	0.0
Abbotsford	-0.3	-0.1
Greater Sudbury	-4.3	-0.3
Kelowna	0.5	-0.5
<i>Regina</i>	-3.6	-0.6
Thunder Bay	-5.1	-0.7
<i>Calgary</i>	-1.1	-0.8
Winnipeg	-1.4	-1.4
<i>Victoria</i>	-1.5	-1.5

Italicized metro areas are part of the RPS 13-metro area composite index.

Sources: RPS, Moody's Analytics

About the Author

Andres Carbacho-Burgos is an economist at the West Chester office of Moody's Analytics. He covers the U.S. housing market, residential construction, and U.S. regional economies. Before joining Moody's Analytics, he taught economics at Texas State University, where he also researched open-economy macroeconomics and income inequality. Born in Chile, he obtained his PhD and master's in economics from the University of Massachusetts at Amherst and his BA in economics from Carleton College.

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The RPS – Moody's Analytics House Price Forecasts are based on fully specified regional econometric models that account for both housing supply-demand dynamics and long-term influences on house prices such as unemployment and changes in mortgage rates. Updated monthly and providing a 10-year forward-time horizon, the forecasts are available for the nation overall, its 10 provinces and for 33 metropolitan areas, and cover three property style categories, comprising single-family detached, condominium apartments and aggregate, in a number of scenarios: a baseline house price scenario, reflecting the most likely outcome, and six alternative scenarios.

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