

Canadian Financial Sector

Evaluating the Impact of Low Rates on Household Debt, Real Estate and Credit Conditions

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Table of contents

Executive Summary.....	3
Household Credit	4
Real Estate Markets.....	15
Residential Real Estate Investor Survey.....	31
Credit Conditions	39

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A version of this presentation was made to attendees of the 8th Annual Veritas Great Canadian Real Estate Conference on October 2, 2019 in Toronto.



Executive summary

This presentation examines the impact of low and declining interest rates on household credit conditions, real estate markets and credit risk for Canada's Big Six banks.

We find that a declining yield environment has resulted in:

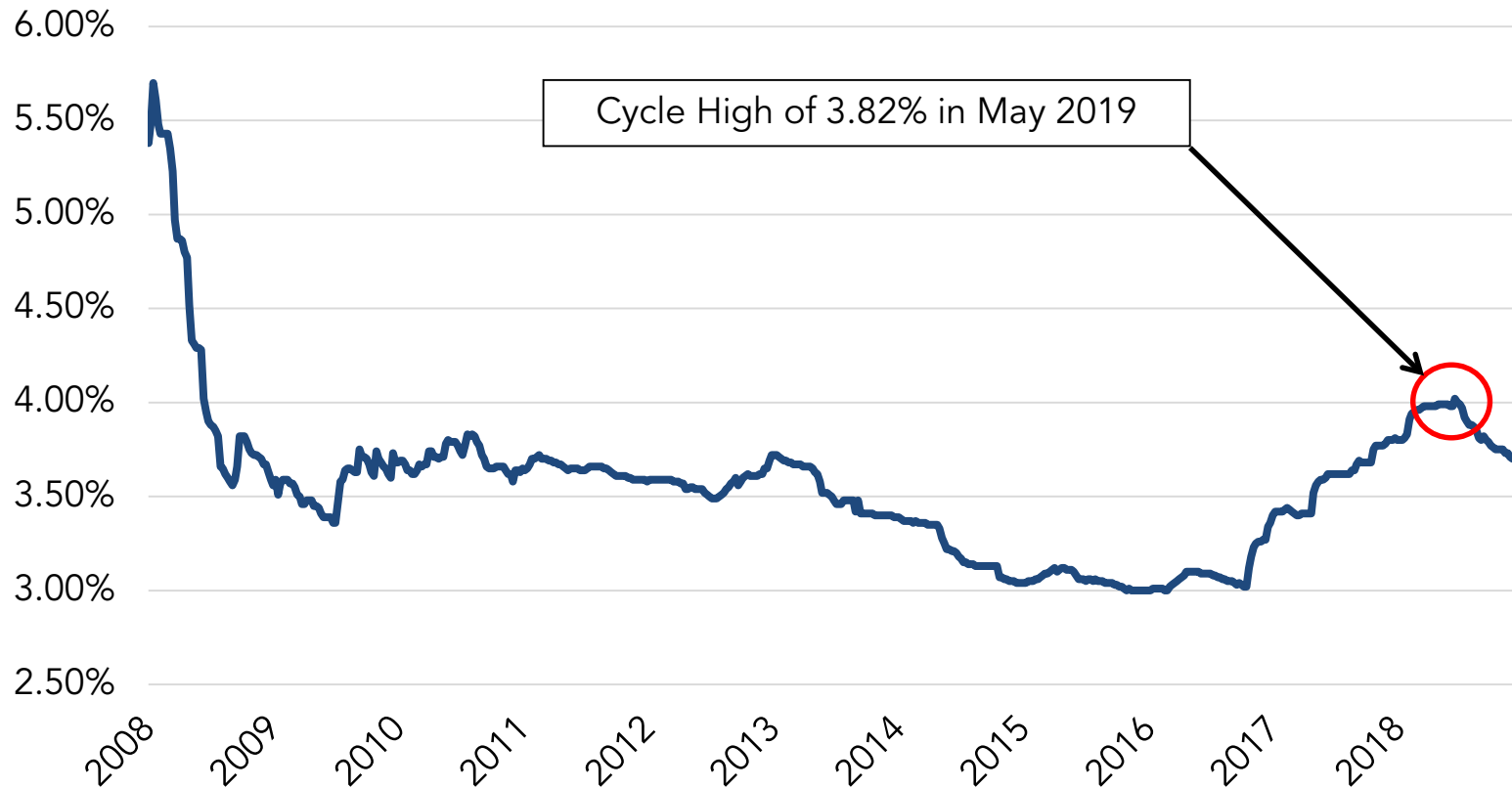
- **A reacceleration of household debt growth driven by mortgage credit:** Canadian household credit has reaccelerated from a nearly 4- year low in March of 2019 largely on higher growth in residential mortgage credit originated by chartered banks. However, we note that mortgage interest growth remains near cycle highs while mortgage principal payments decline at the fastest rate on record.
- **A firming of real estate markets as demand continues to outpace supply:** Using sales and new listings as a proxy for demand and supply respectively, we find that real estate prices continue to be supported by demand outpacing supply. However, with supply at a 15-year low, we remain cautious of a supply shock driven by negative carry real estate investors and speculators.
- **Retail credit risk lagging the cycle for Canada's Big Six banks:** we expect retail credit risk to increase materially over the coming quarters as the debt service ratio for Canadian households surpasses a record high established during the financial crisis.



Household Credit



Weekly Household Effective Interest Rate



Weekly effective household interest rate is a weighted-average of various mortgage and consumer credit interest rates. The weights are derived from residential mortgage and consumer credit data, adjusted for additional information provided by financial institutions

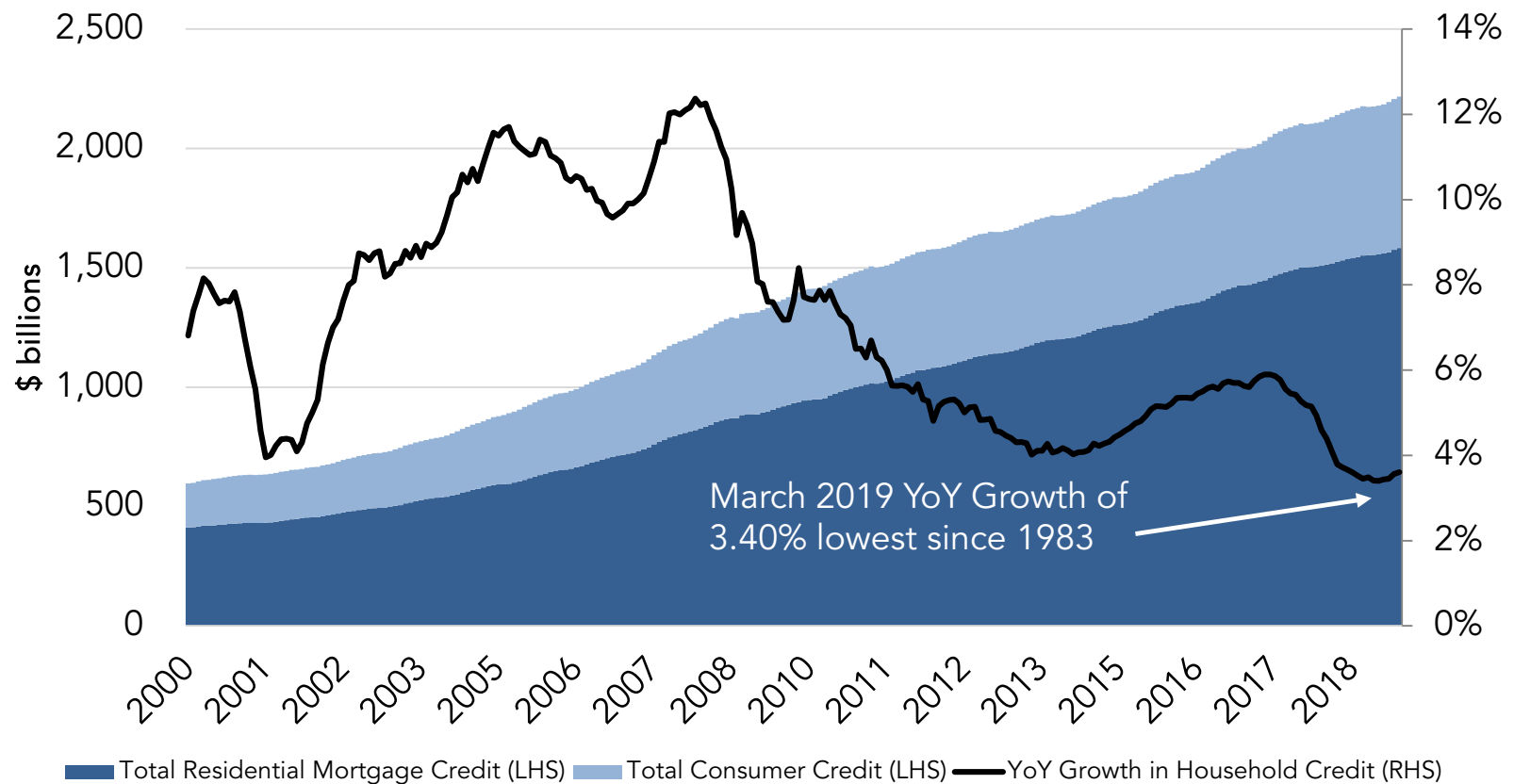
A declining interest rate environment has lowered the weekly household effective interest rate paid by households for mortgage and non-mortgage credit

Source: Bank of Canada, Veritas



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Domestic Household Credit Growth: Mortgage and Consumer Credit



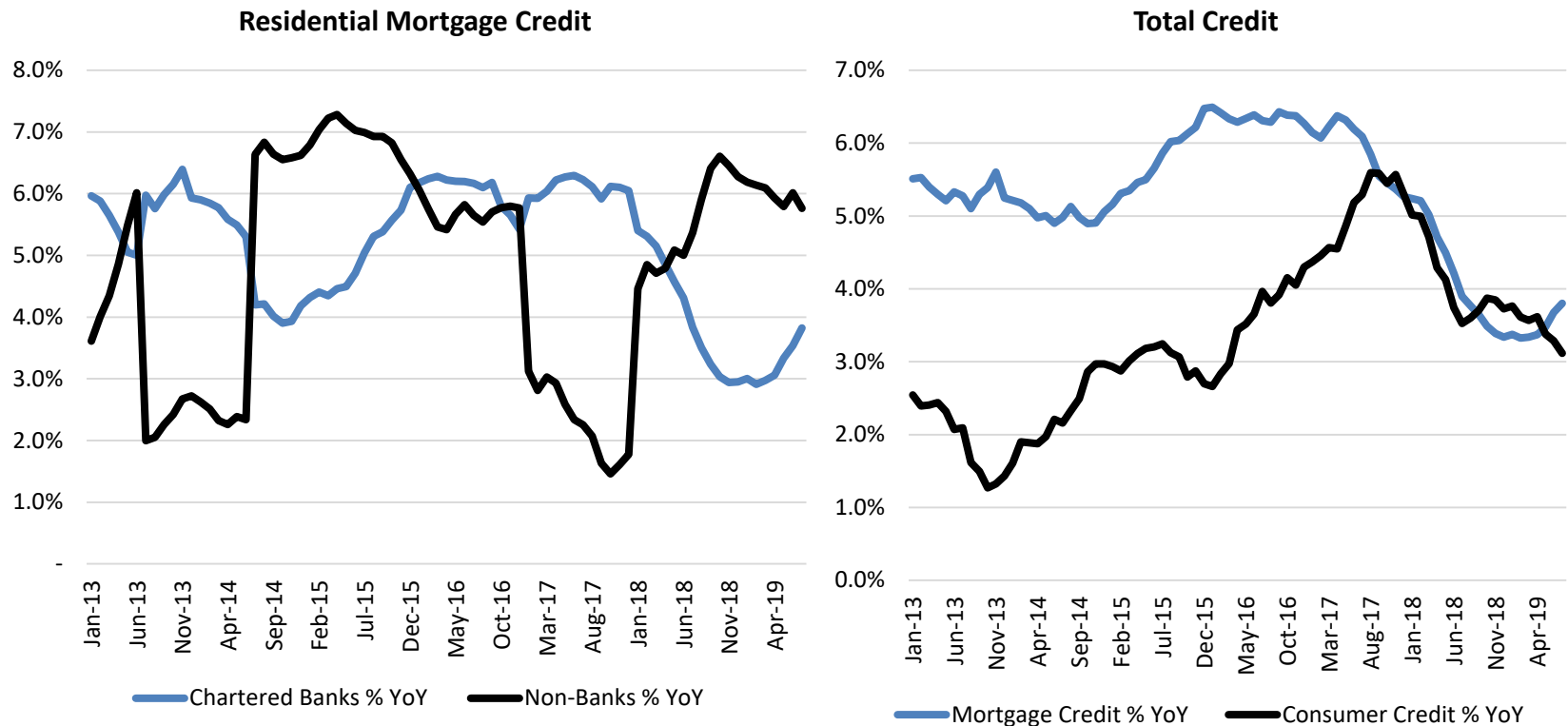
Lower interest rates have resulted in a reacceleration of household credit growth from a 40-year low

Source: Bank of Canada, Veritas



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Consumer and Mortgage Credit for Bank and Non-Bank Lenders



Credit growth has been driven mainly by residential mortgage credit originations by chartered banks offset by a decline in mortgage credit growth for non-banks

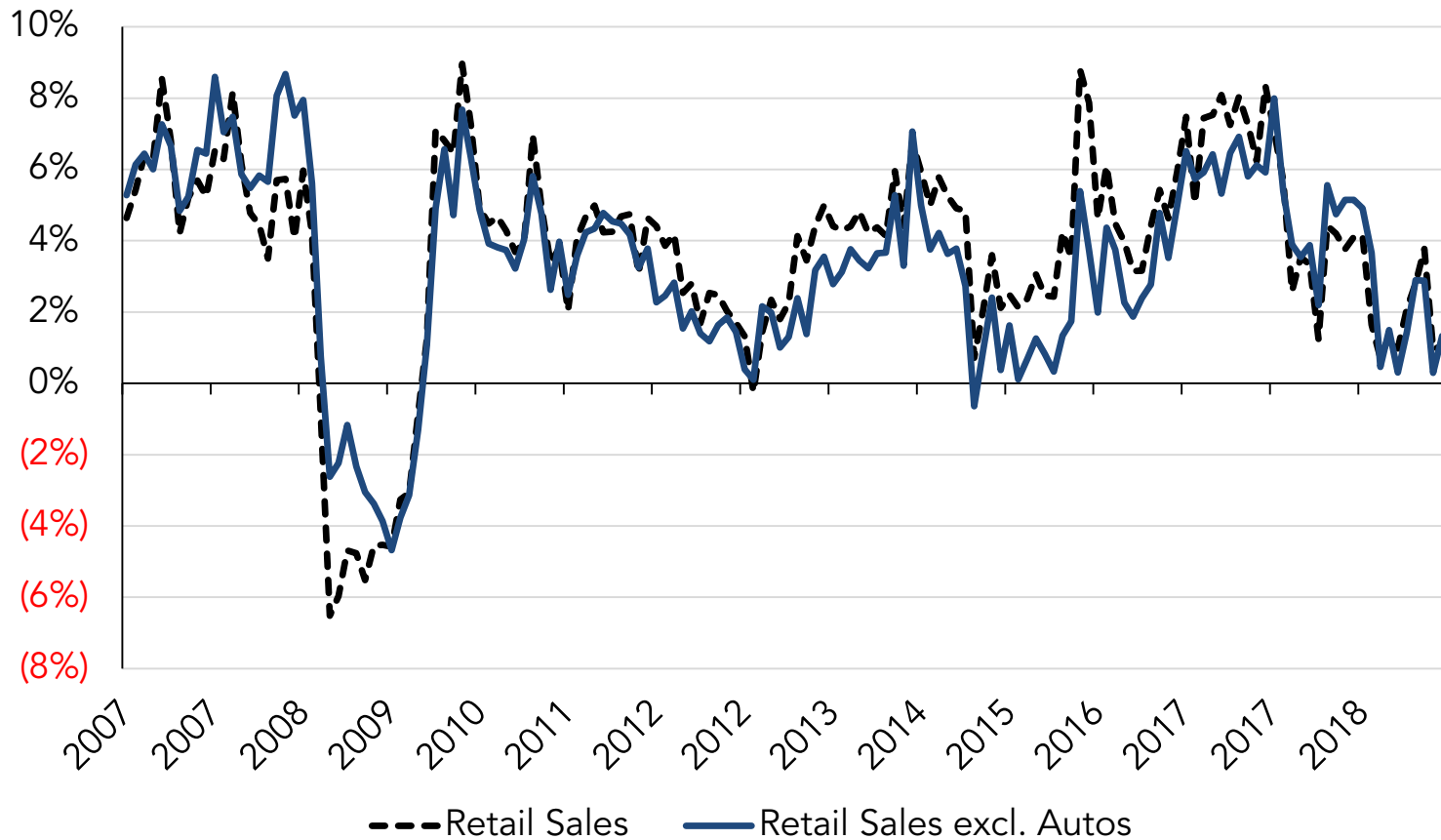
Total consumer credit growth continues to slow despite uptick in mortgage growth

Source: Bank of Canada, Veritas



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Seasonally Adjusted Retail Sales for Canada



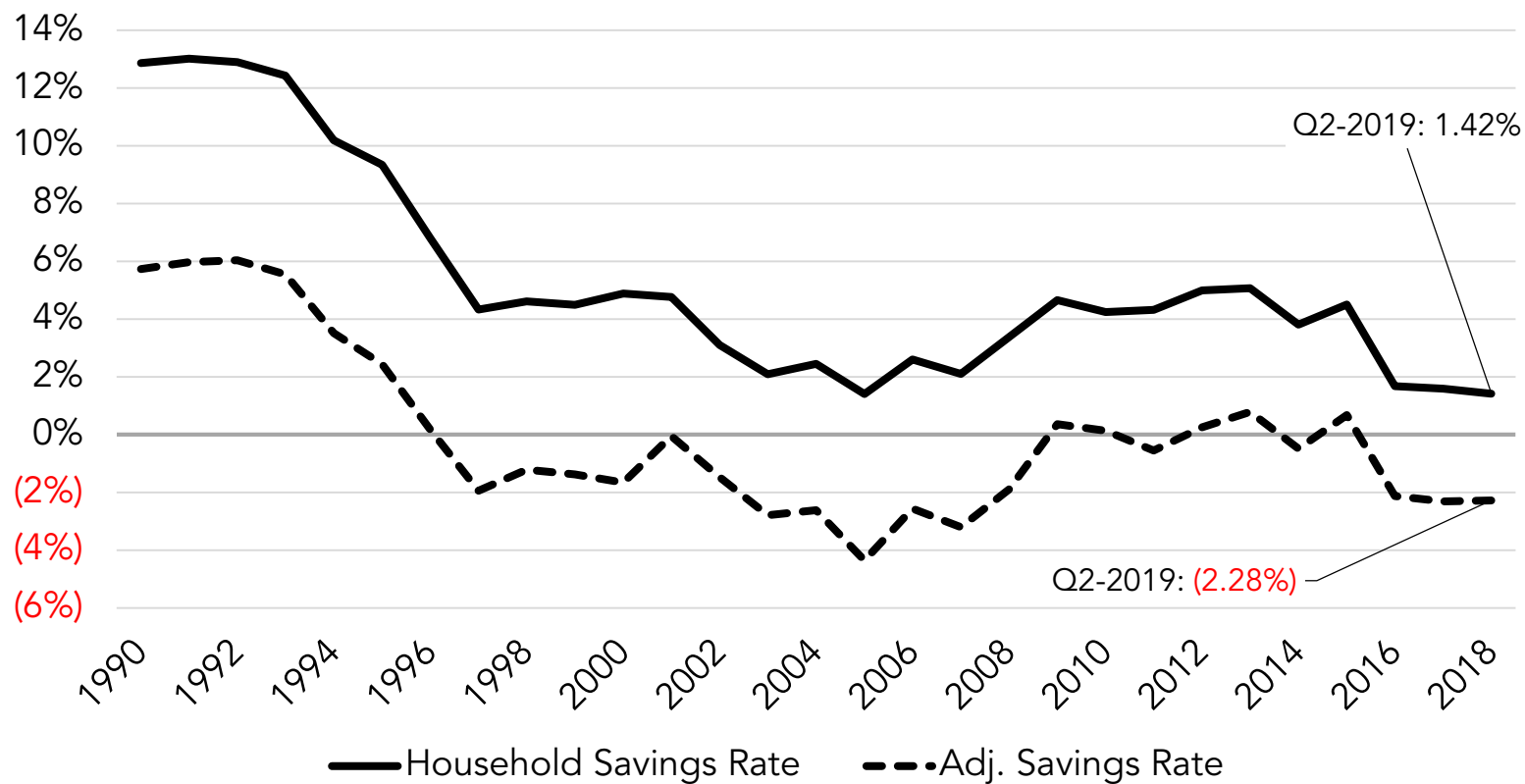
***Rate of growth in retail spending has decelerated as rates have risen.
However, retail spending continues grow YoY despite economic headwinds***

Source: Statistics Canada, Veritas



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Household Savings Rate and Adjustment for Pension Entitlements



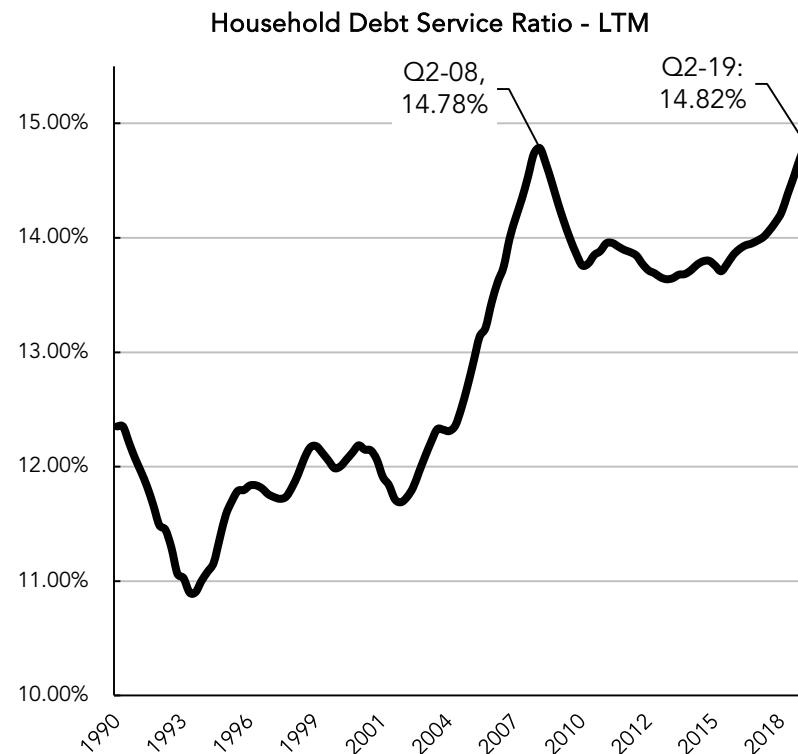
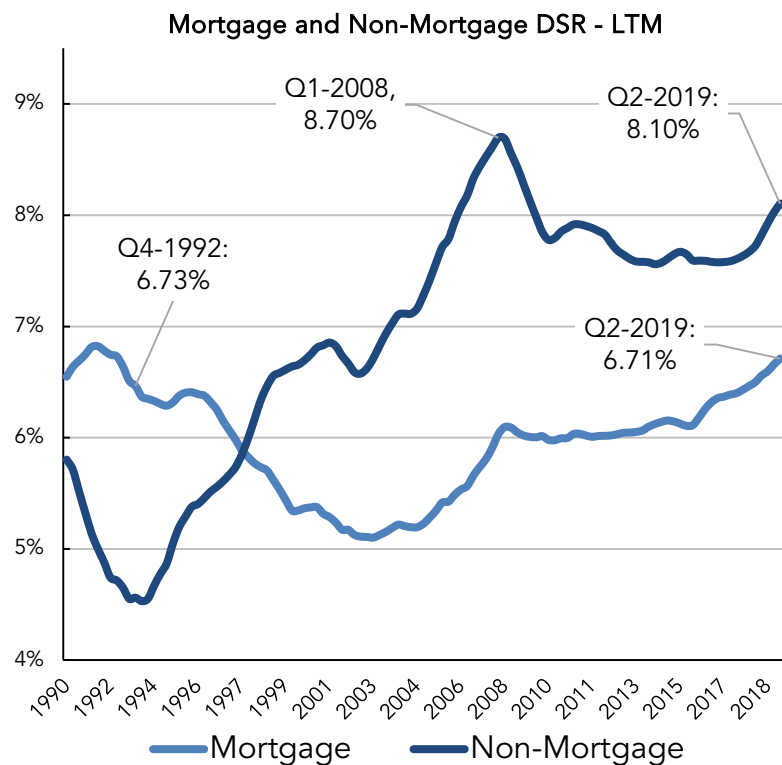
Household savings have reached cyclical lows. When adjusting for pension contributions, the savings rate for Canadian households is negative.

Source: Statistics Canada, Veritas



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Debt Servicing Costs Rising Rapidly for Canadian Households



Despite a declining rate environment, debt servicing costs continue to rise for both mortgage and non-mortgage debt service ratios.

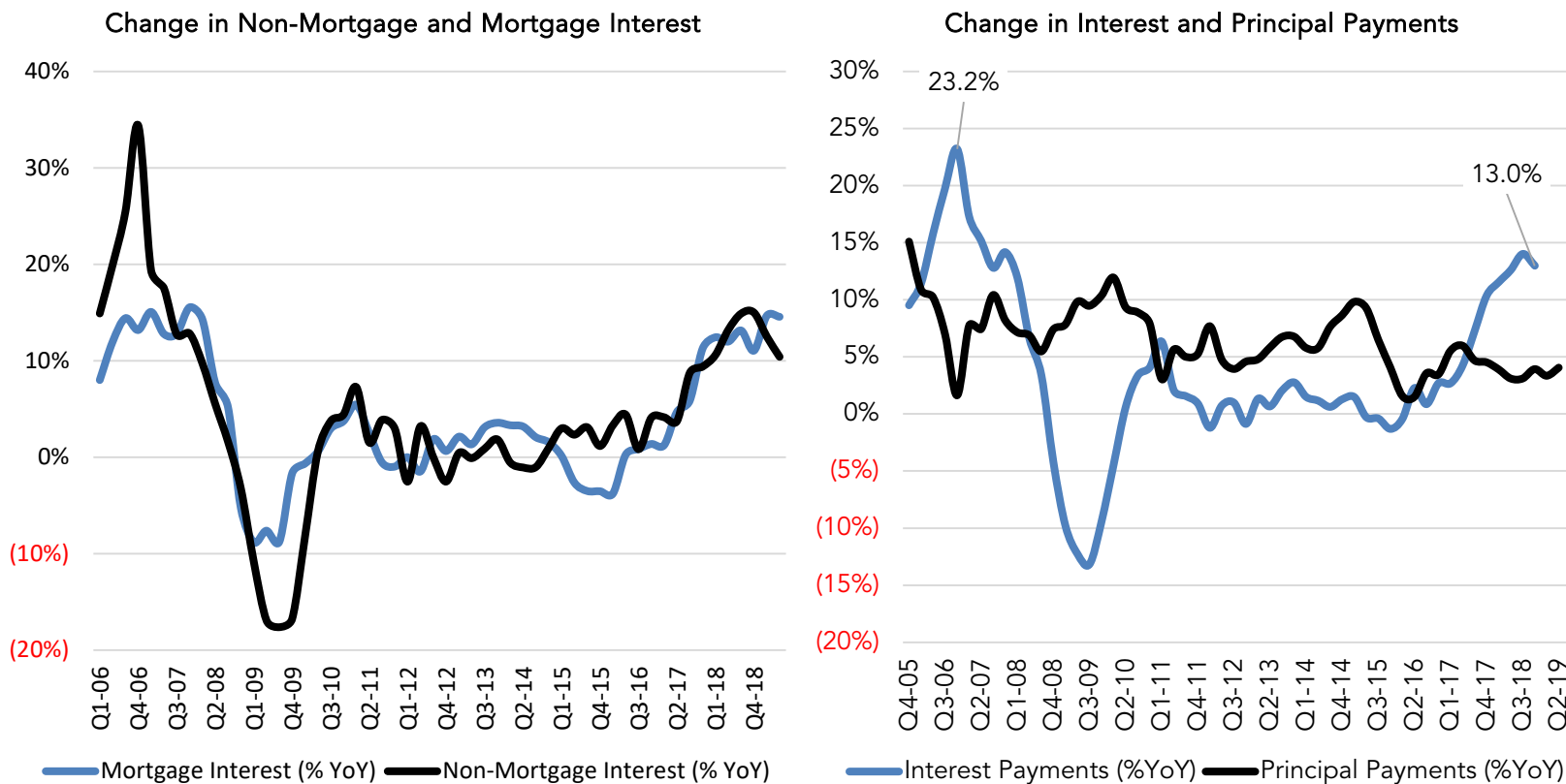
Household debt service ratios recently past the record high last achieved in 2008.

Source: Statistics Canada, Veritas



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Tracking Payments by Mortgage, Non-Mortgage, Interest and Principal



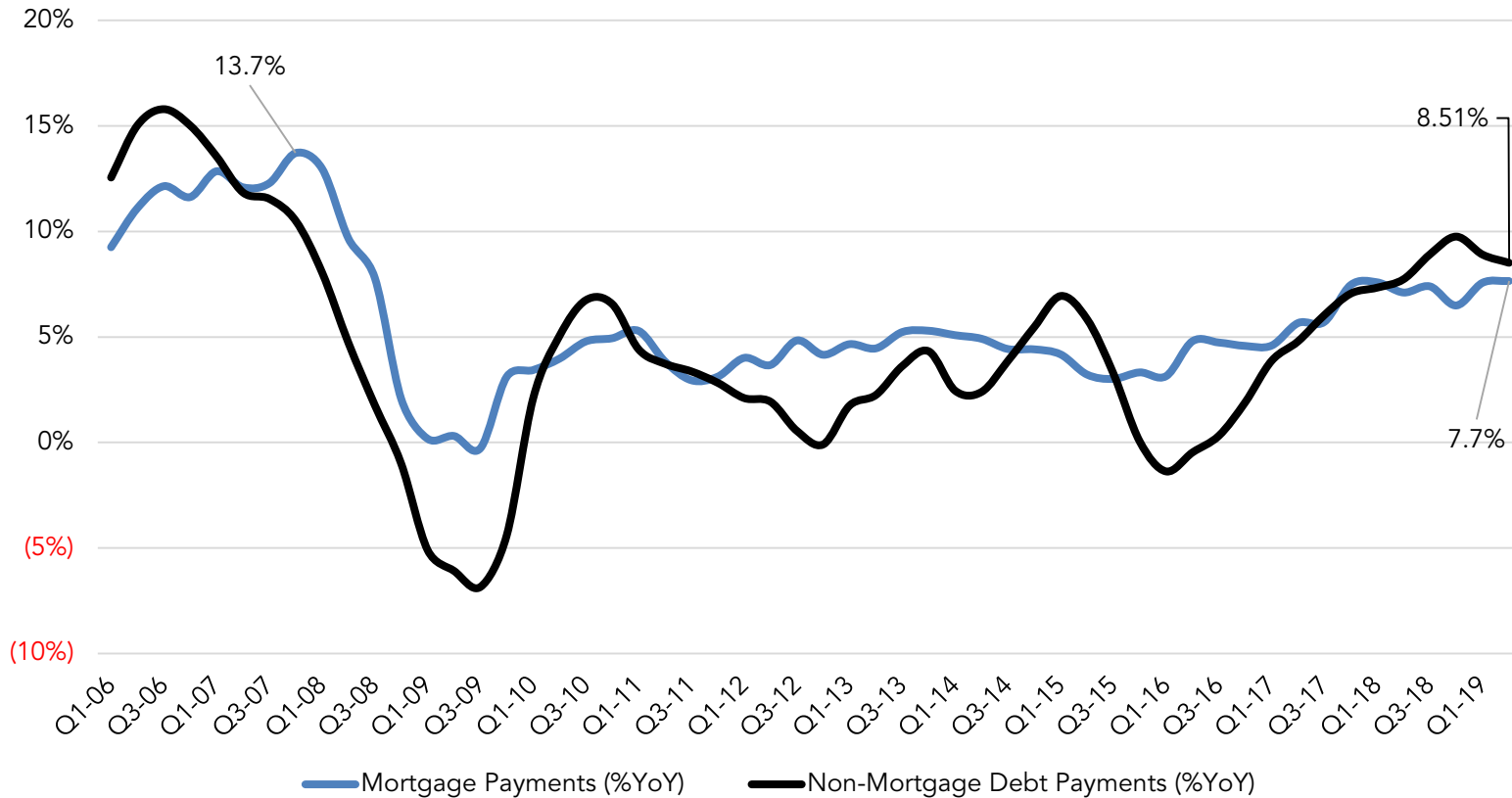
Interest costs still rising at a rapid rate for mortgage and non-mortgage interest. Non-mortgage interest growth has slowed, however, likely due to a higher mix of floating-rate debt.

Source: Statistics Canada, Veritas



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Year-over-Year Change in Mortgage and Non-Mortgage Payments



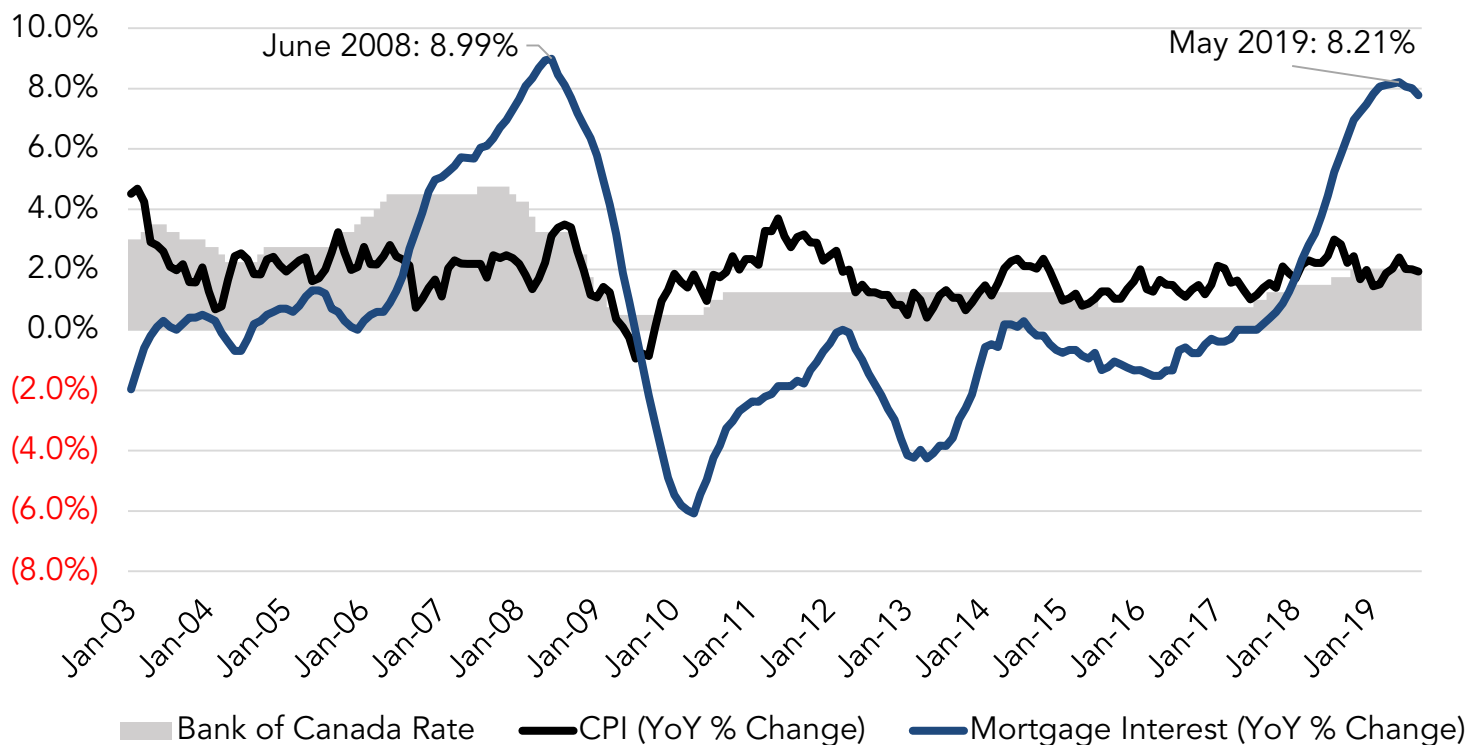
Total payments for mortgage and non-mortgage payments continue to rise despite lower rates as households continue to take on more debt.

Source: Statistics Canada, Veritas



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Mortgage Interest Inflation Relative to Consumer Price Index (CPI)

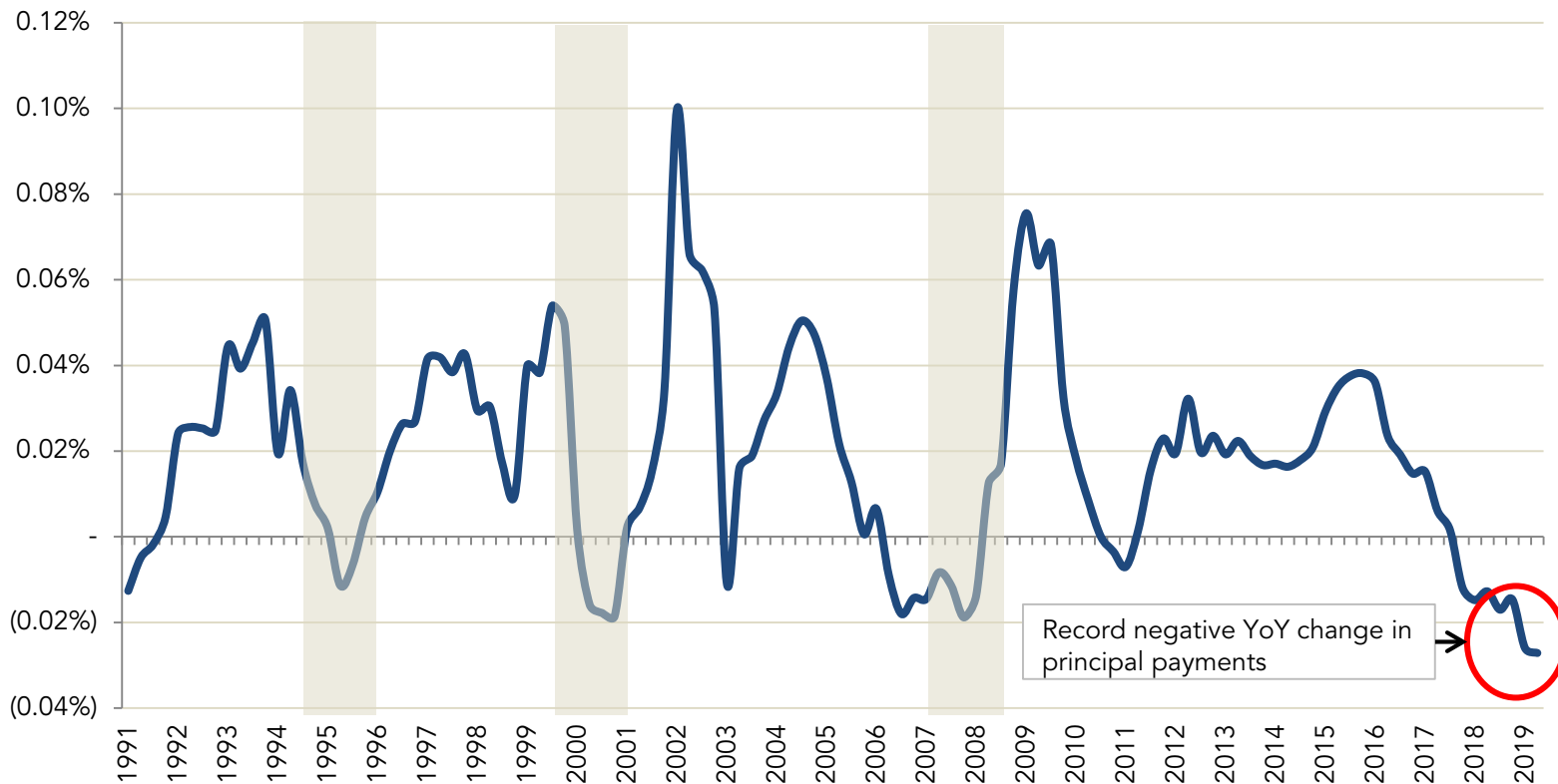


Mortgage interest growth YoY nearly matched the previous peak in June 2008. However, the BOC policy rate required for an 8% YoY increase was much lower; a policy rate below 2% had a similar impact as a policy rate near 5%. Vintages of 2015 and 2016 mortgages are likely to reaccelerate interest growth at renewal.

Source: Statistics Canada, Veritas



Mortgage Principal Payment Rates Decline Substantially in 2019



A material YoY decline in mortgage principal typically only occurs in recessionary environments. Canada recently experienced a record decline in mortgage principals likely due to amortization periods being extended.

Source: Statistics Canada, Veritas

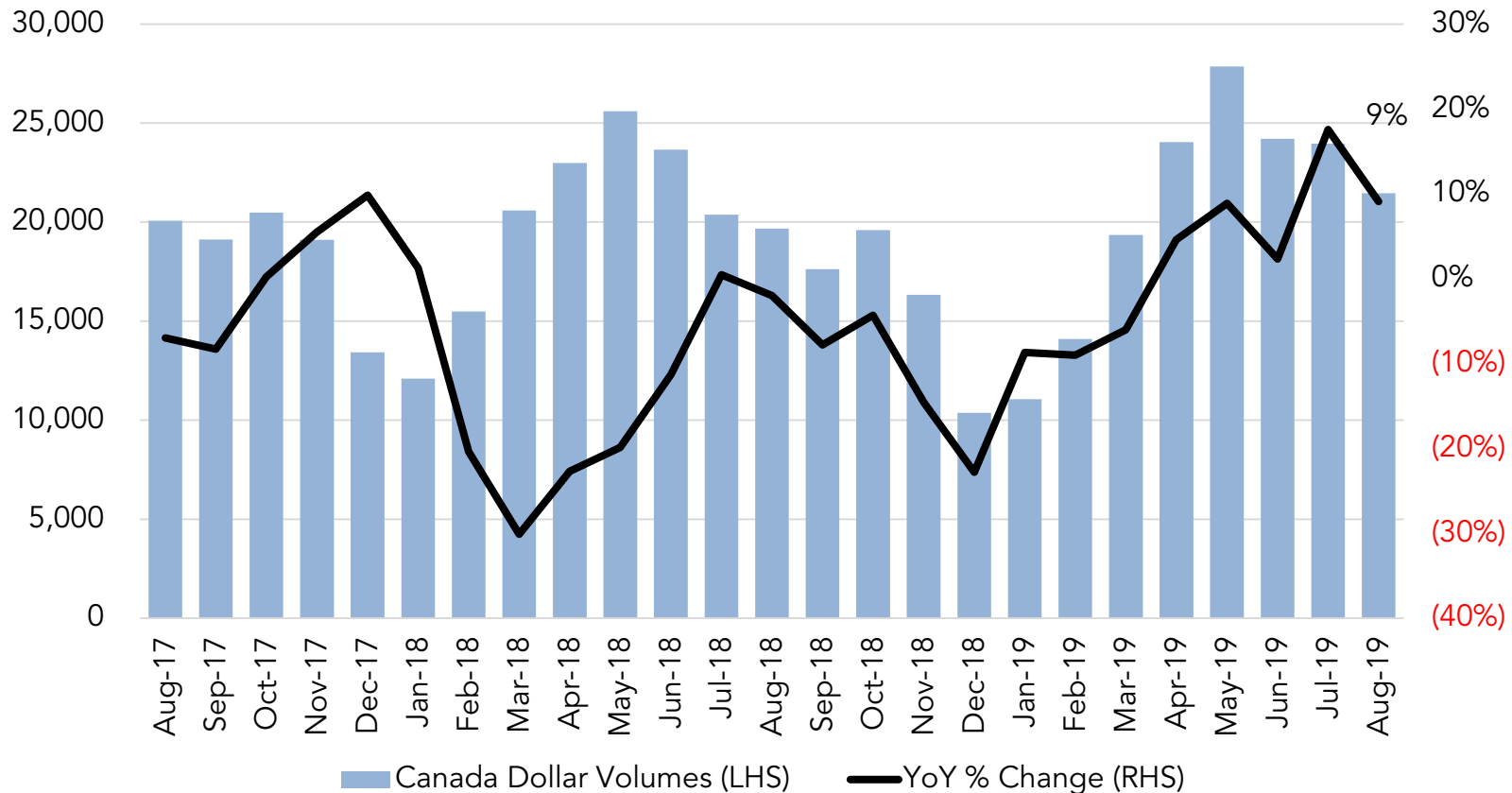


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Real Estate Markets



Canada-wide Residential Real Estate Dollar Volumes



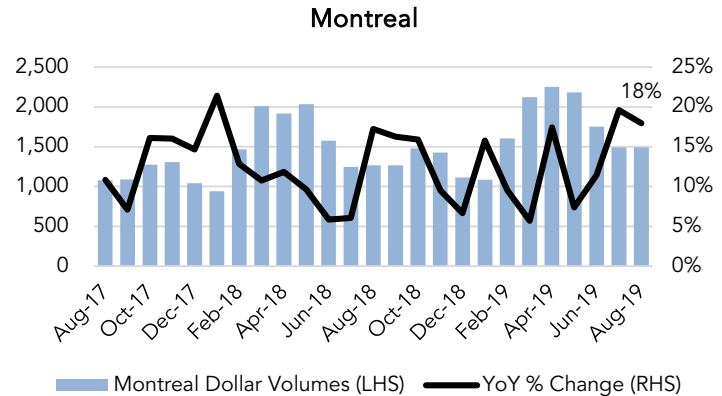
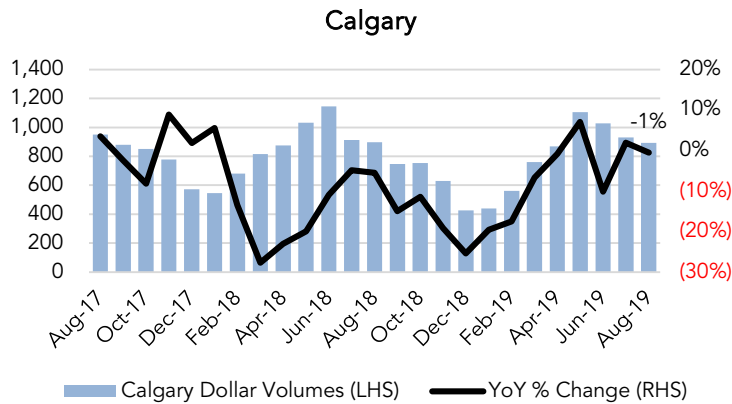
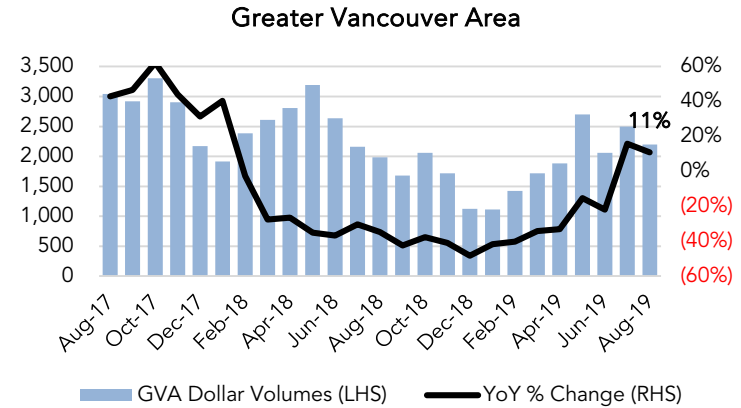
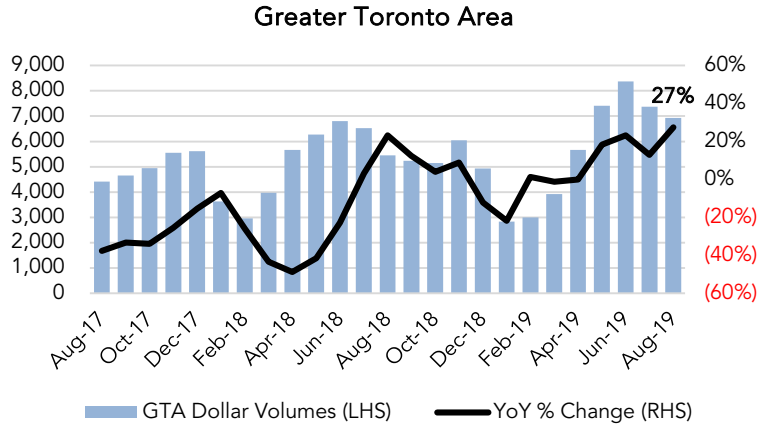
Based on dollar volumes, average price multiplied by unit sales, the Canadian real estate market looks relatively strong with activity increasing by nearly 10% YoY

Source: CREA, Veritas



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Residential Real Estate Dollar Volumes for Major Markets



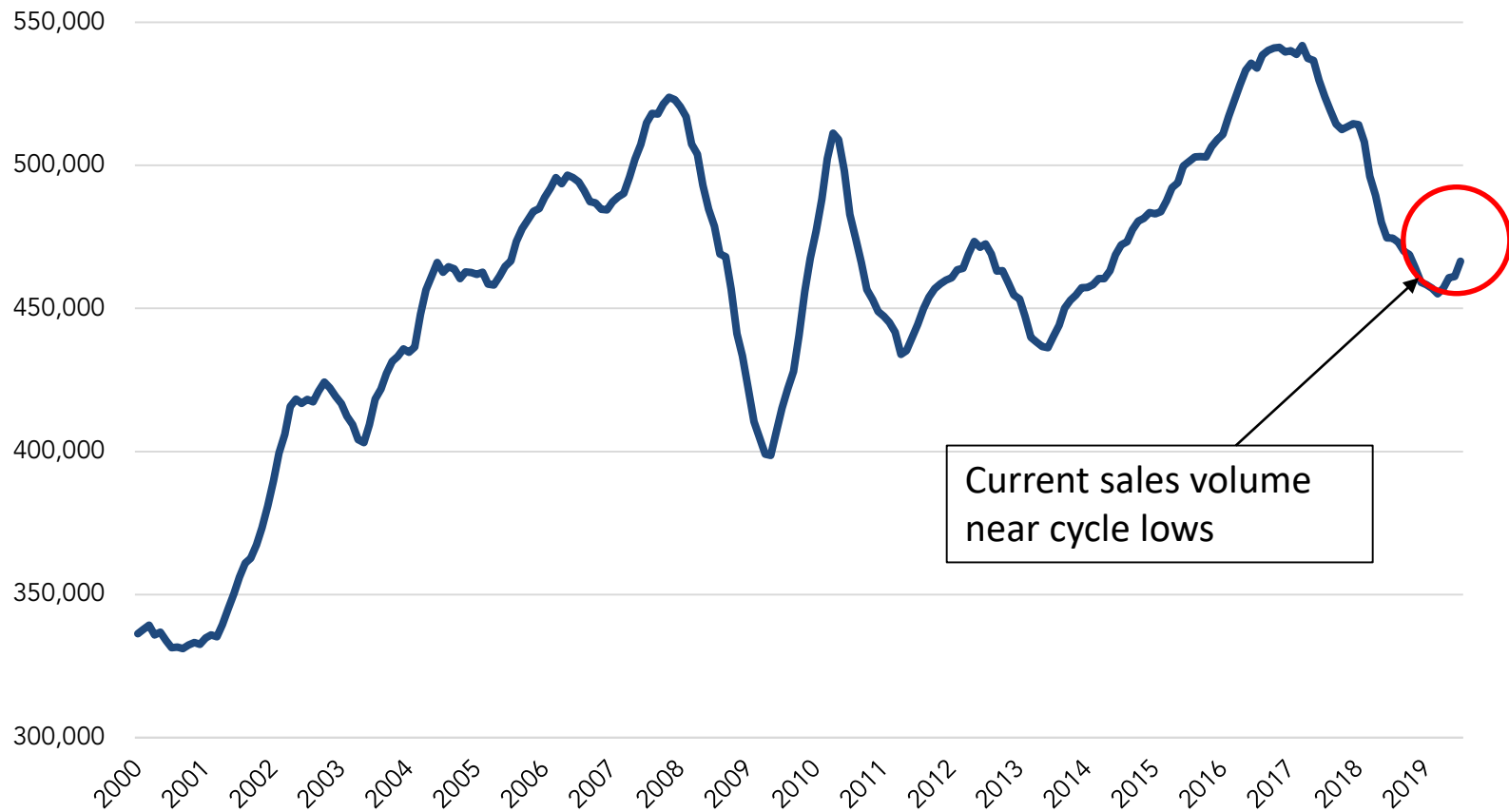
For regional markets, outside of Calgary, real estate activity appears robust for major real estate markets on a YoY basis.

Source: CREA, TREB, Veritas



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Canada Real Estate Sales: Trailing Twelve Months



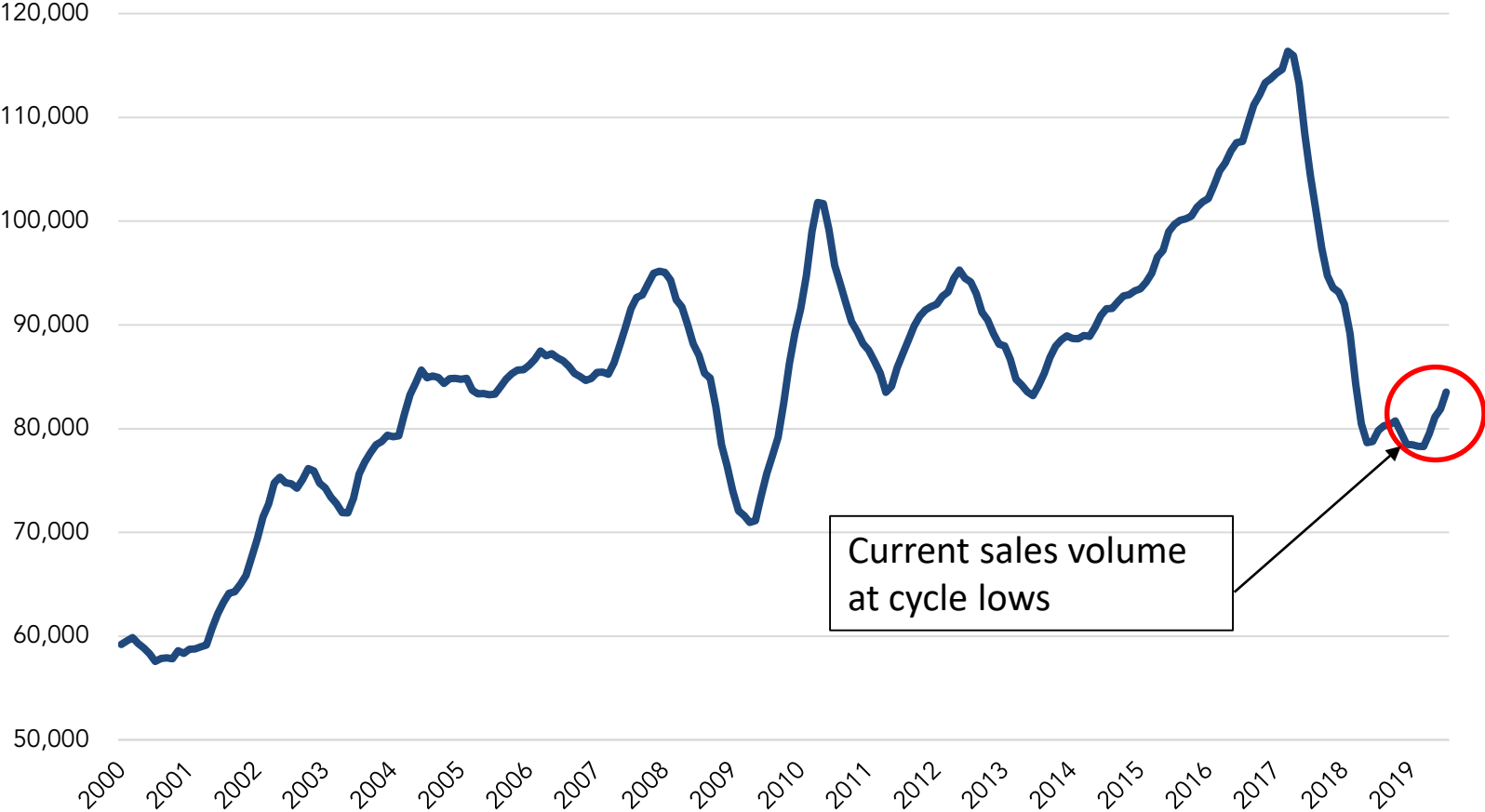
In the context of longer-term cycles, current real estate sales volumes are near cycle lows

Source: CREA, Veritas



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Greater Toronto Area Real Estate Sales: Trailing Twelve Months



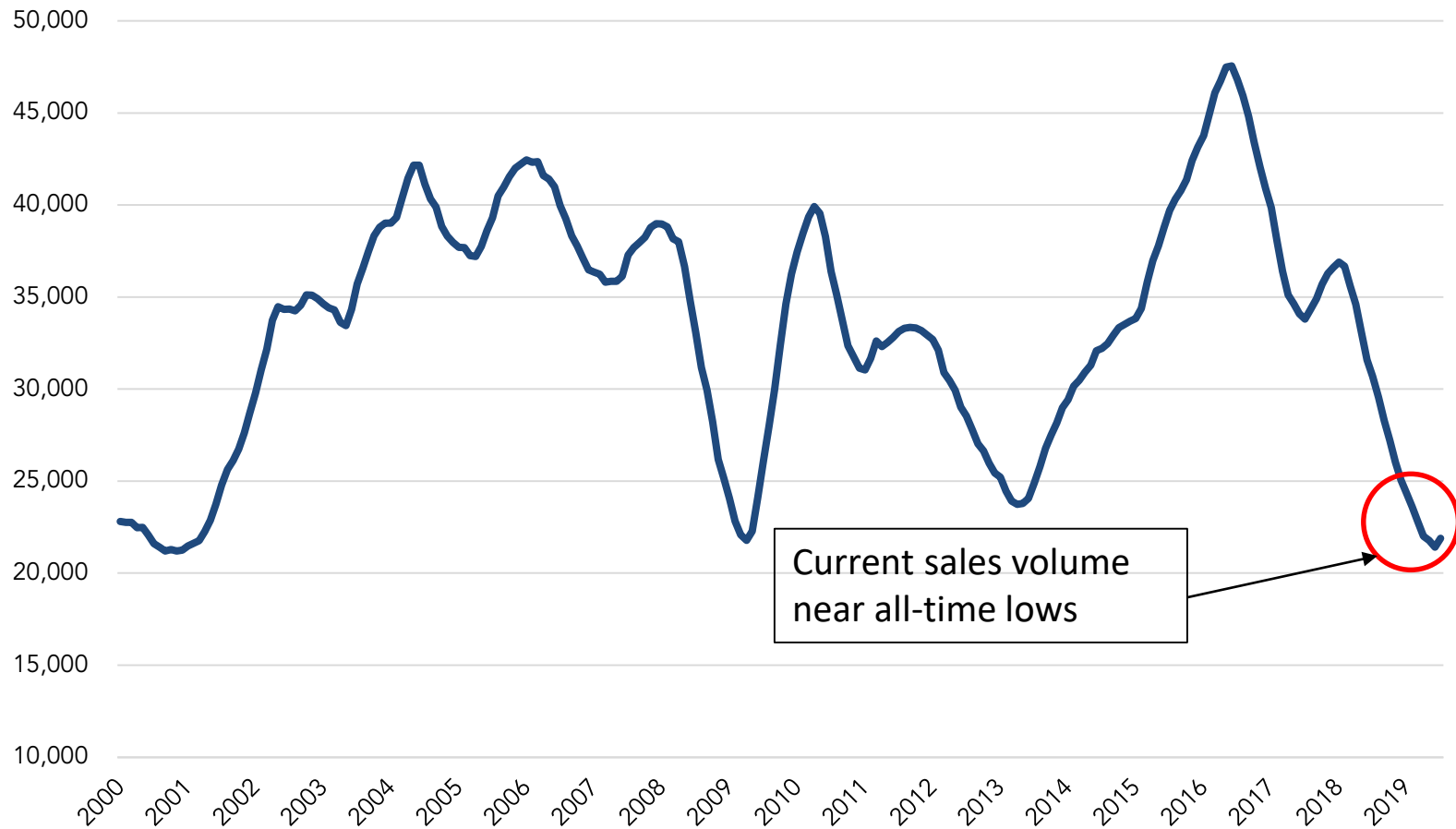
GTA sales volumes have declined significantly since the recent peak in spring 2017

Source: CREA, Veritas



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Greater Vancouver Area Real Estate Sales: Trailing Twelve Months



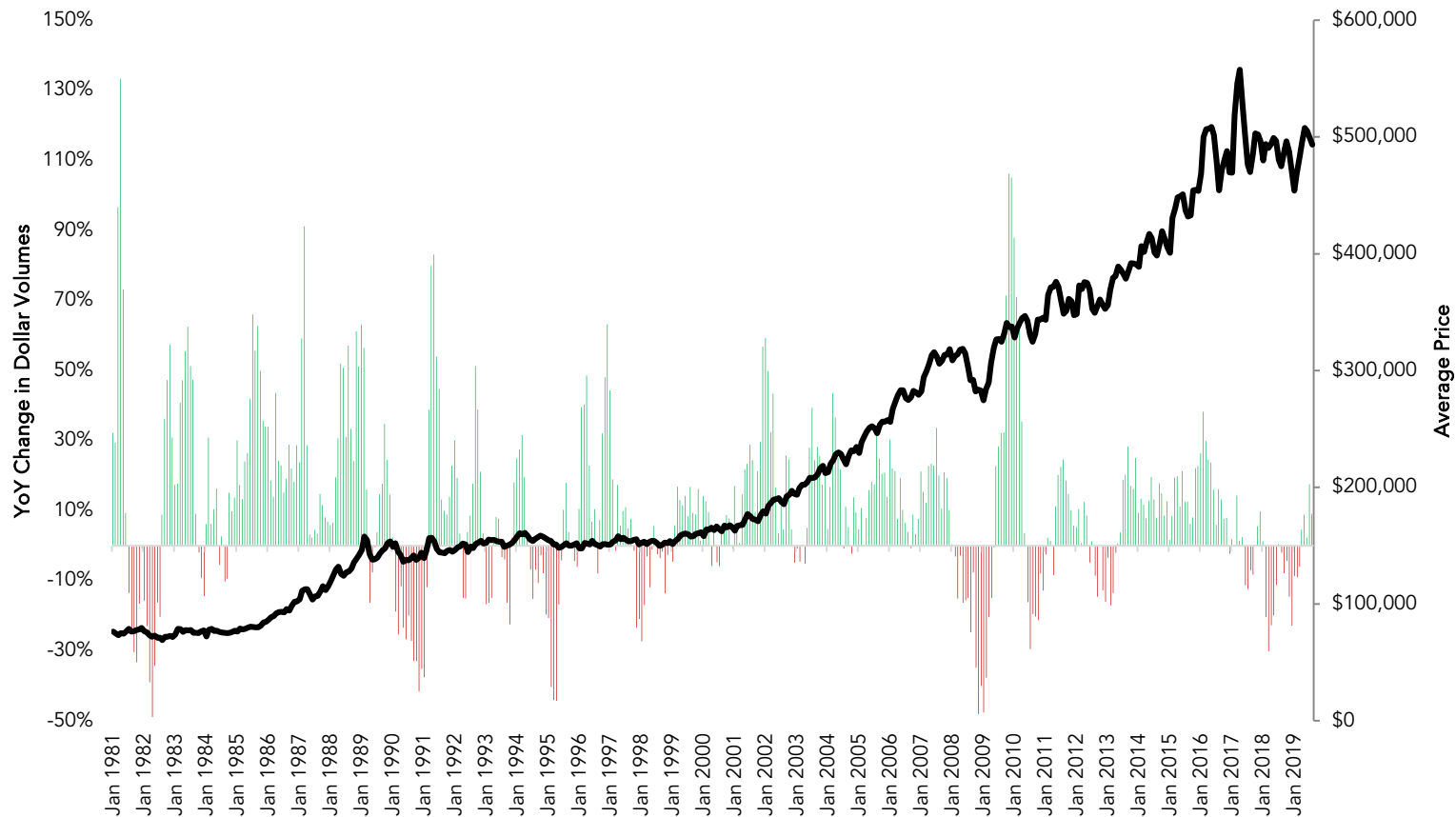
GVA unit sales are below levels last seen during the financial crisis

Source: CREA, Veritas



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Historical Canada-wide Residential Real Estate Dollar Volumes



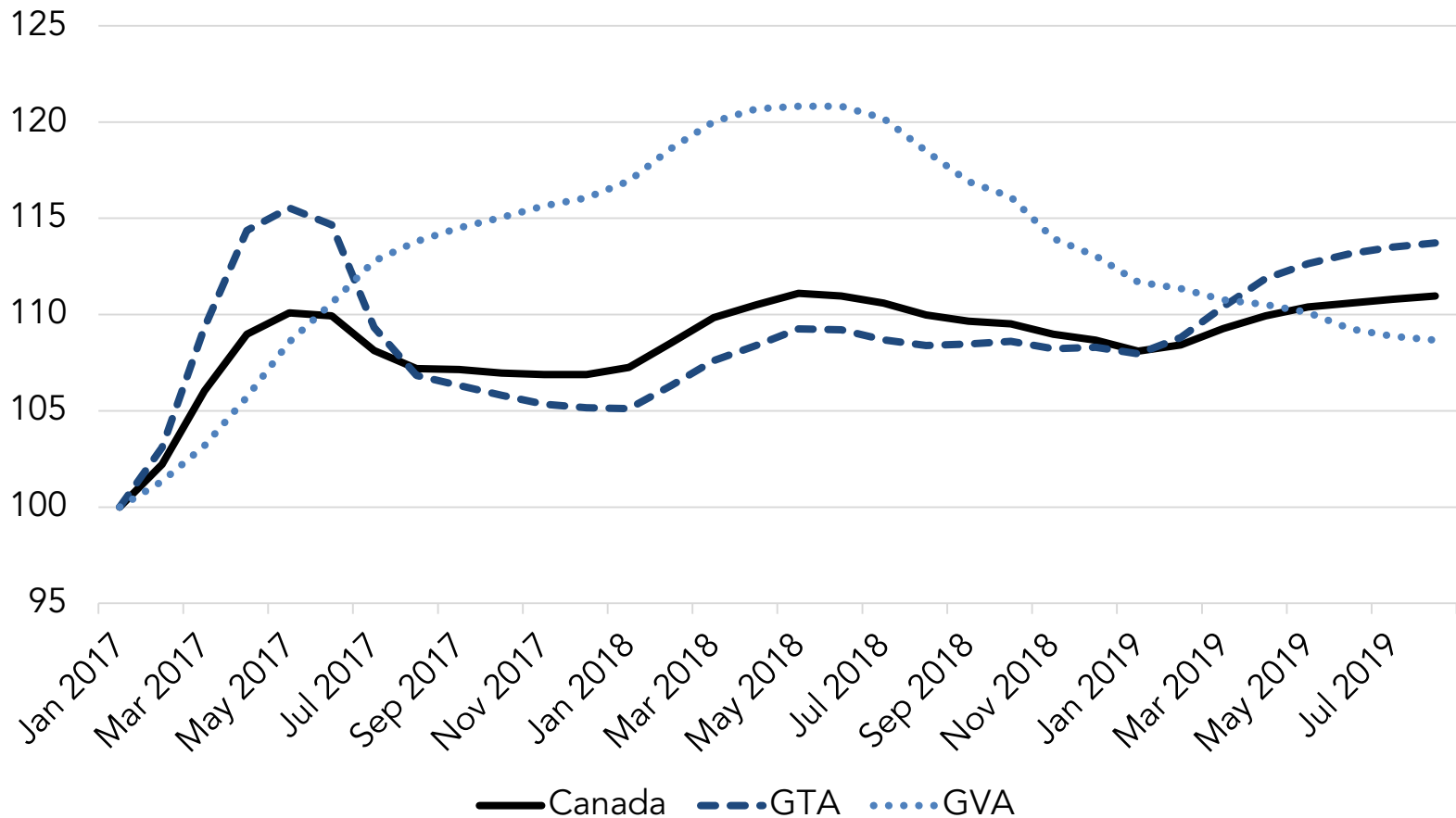
Over the last 40 years, Canada has experienced two material real estate price corrections in 2008 and 1990.

Source: CREA, Veritas



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Home Price Index: Canada, GTA and GVA Markets



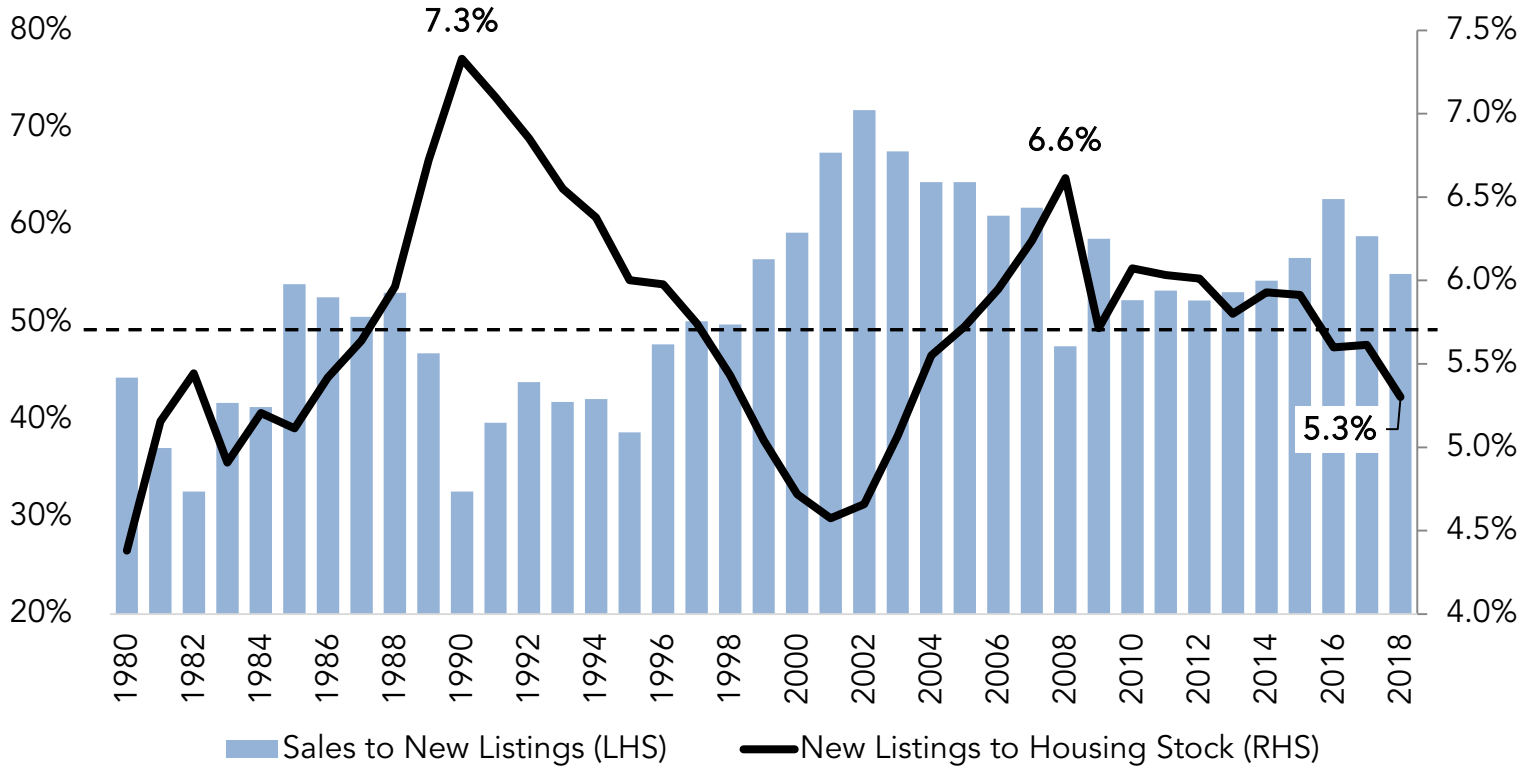
National real estate prices are up marginally, GTA prices have increased more materially while GVA real estate prices are in a continual decline.

Source: CREA, Veritas



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Annual New Listings to Total Housing Stock Units

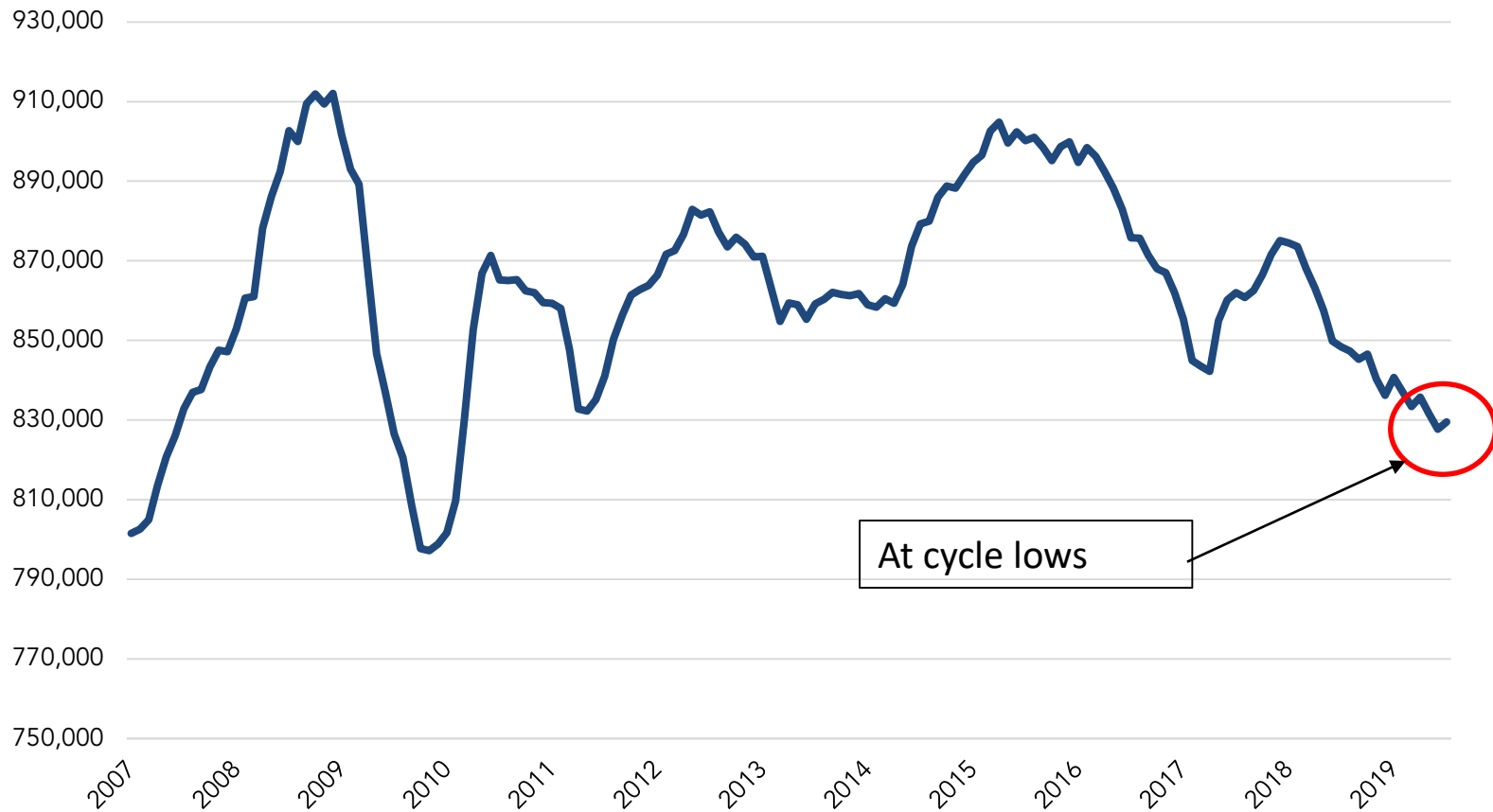


Supply side is a key variable for directionality of real estate prices. New listings to Housing Stock, on a historical basis, corresponds with real estate price corrections. Periods with price corrections in 1990 and 2008 experienced a substantial increase in the New Listings to Housing Stock ratio. Current ratio near a 15-year low.

Source: Statistics Canada, National Energy Use Database, CREA, Veritas



Canada Real Estate New Listings: Trailing Twelve Months



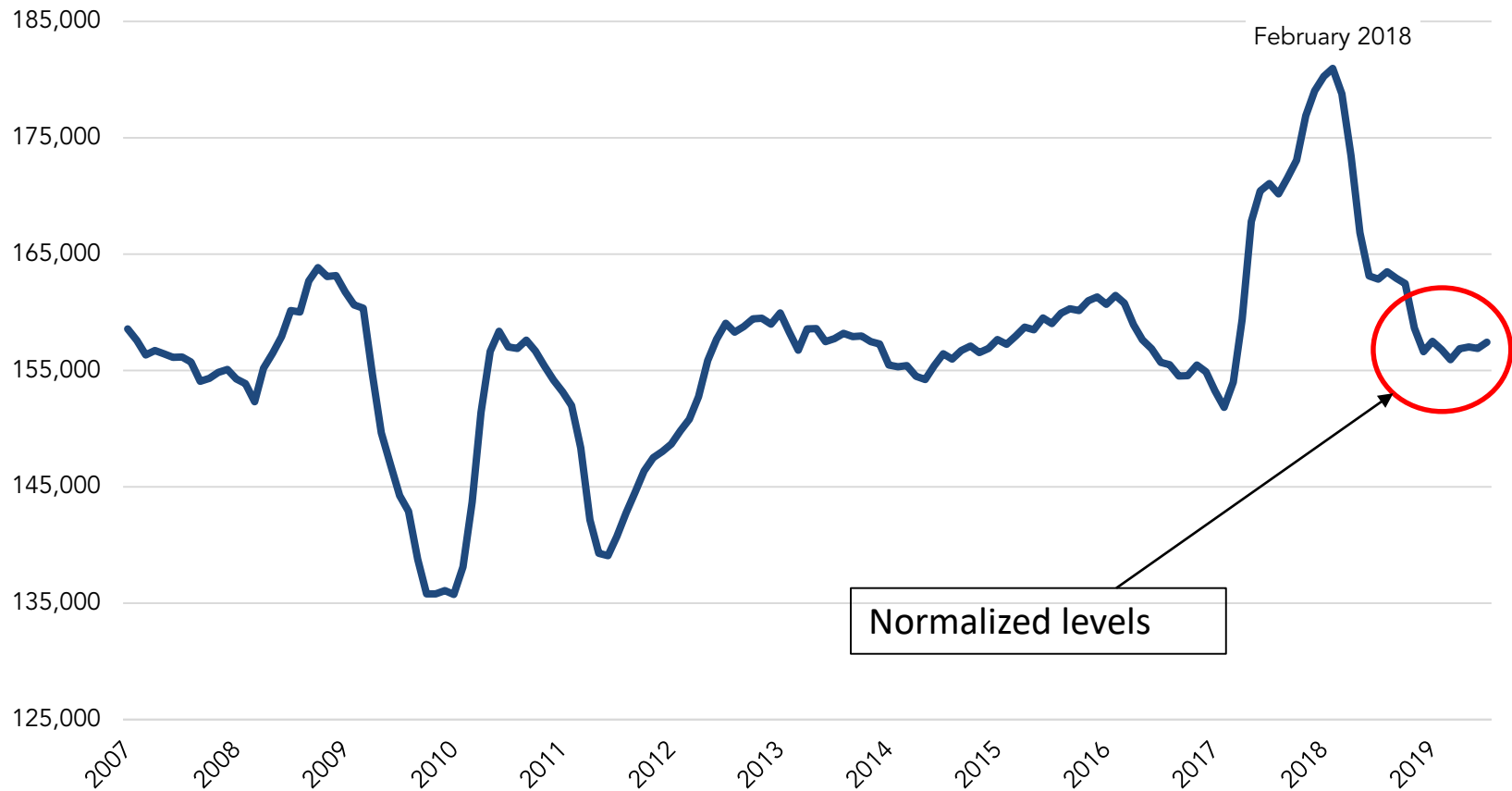
New listings for Canada are at cycle lows which restricts supply of real estate for sale.

Source: CREA, Veritas



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Greater Toronto Area Real Estate New Listings: Trailing Twelve Months



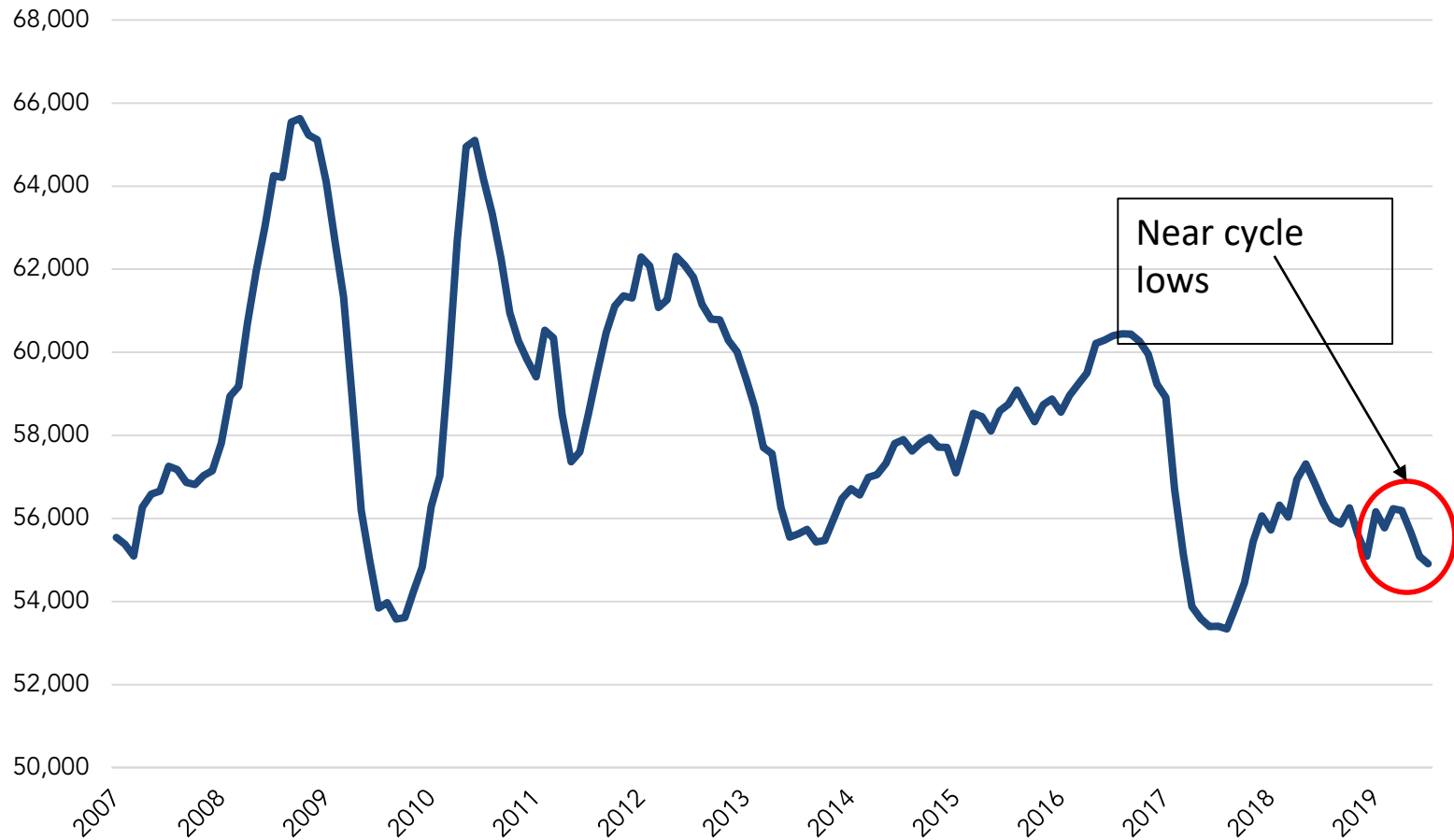
GTA New Listings have declined substantially since the implementation of B-20 in 2018.

Source: CREA, Veritas



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Greater Vancouver Area Real Estate New Listings: Trailing Twelve Months



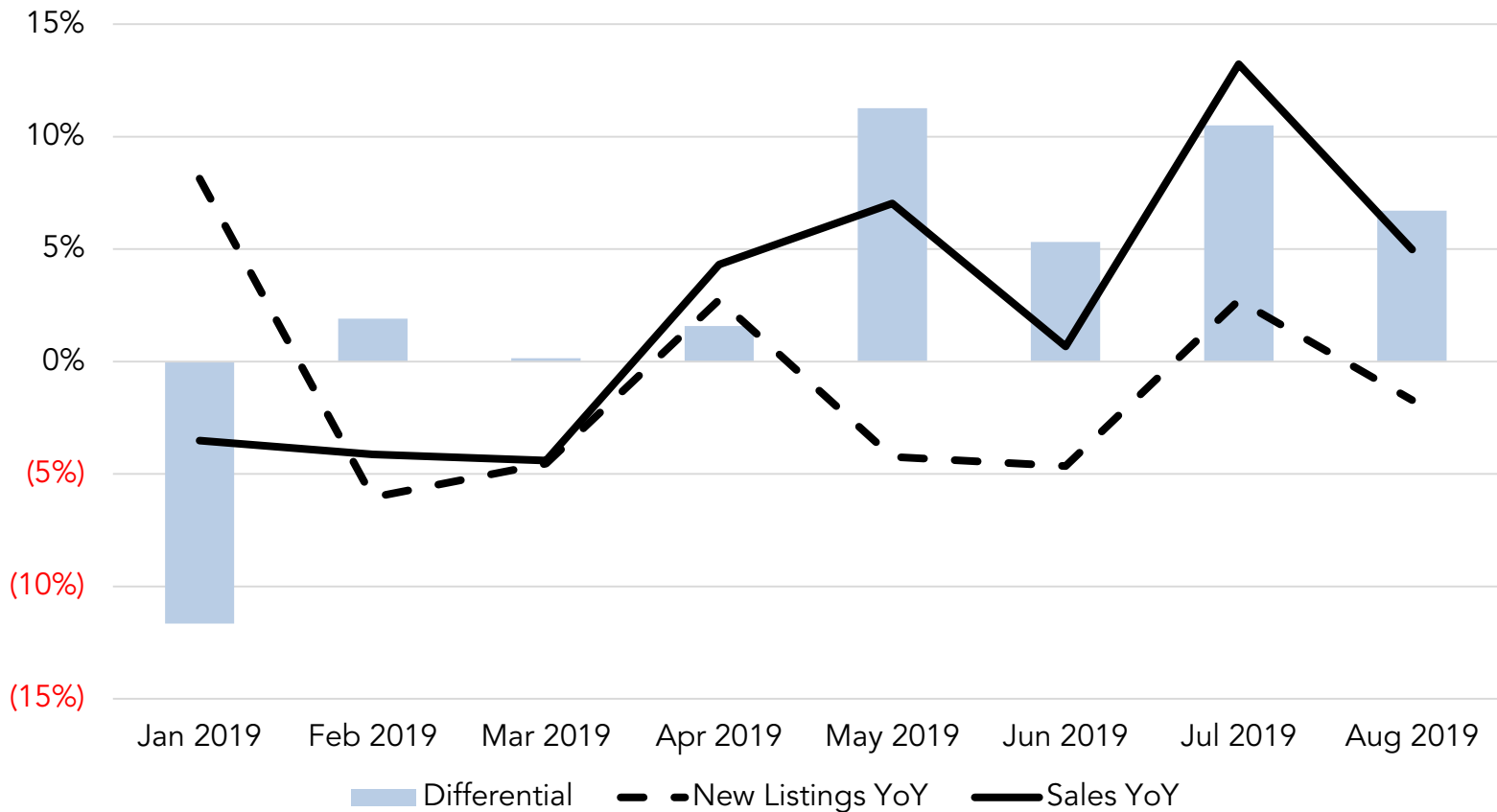
GVA New Listings are also near cycle lows indicating restricted supply.

Source: CREA, Veritas



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Canada: YoY Change in New Listings and Unit Sales



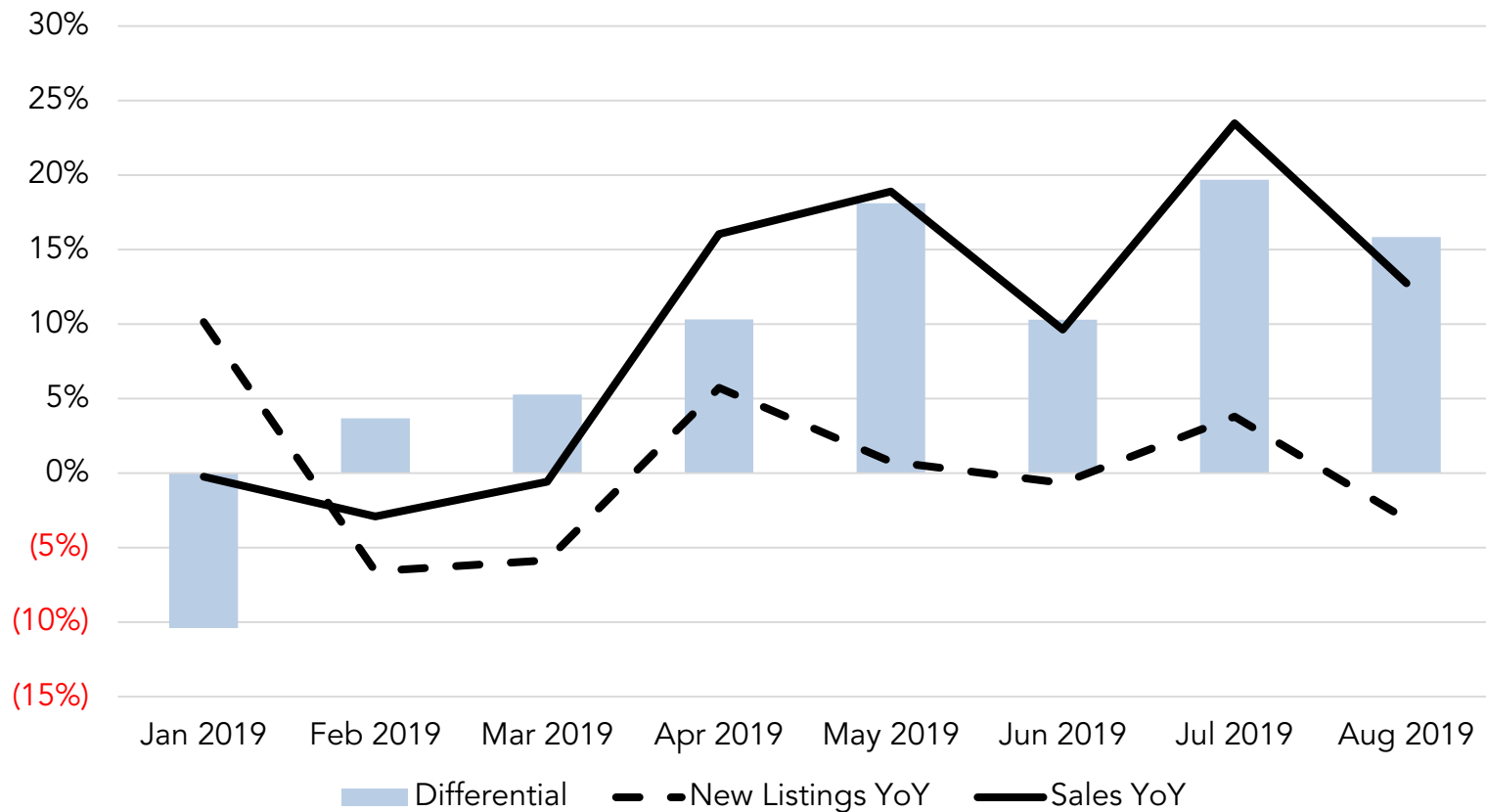
Nationally, demand has outpaced supply for real estate with sales increasing at a faster rate than new listings

Source: CREA, Veritas



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Greater Toronto Area: YoY Change in New Listings and Unit Sales



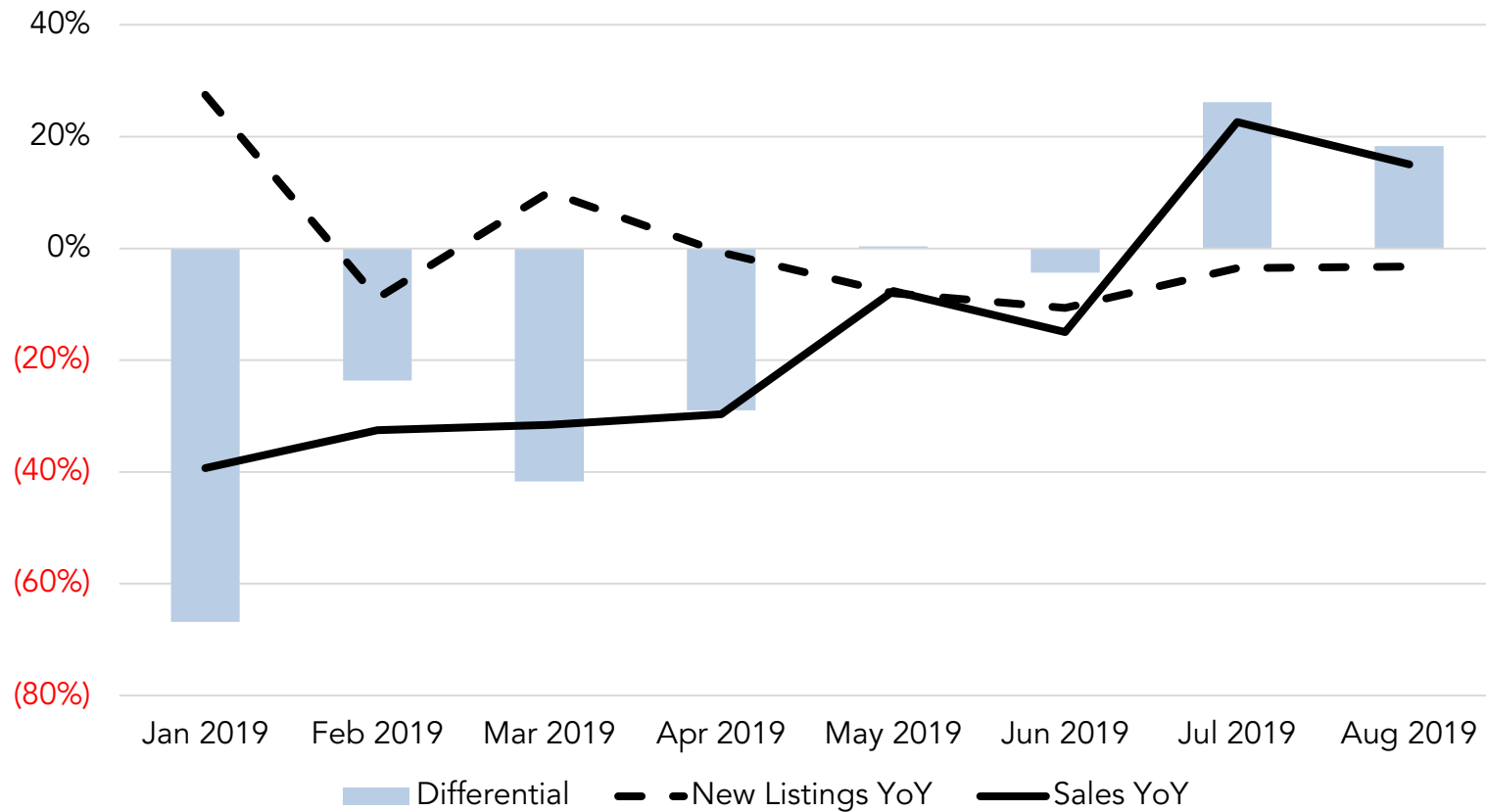
GTA real estate market has experienced higher demand than supply with sales outpacing new listings YoY

Source: CREA, Veritas



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Greater Vancouver Area: YoY Change in New Listings and Unit Sales



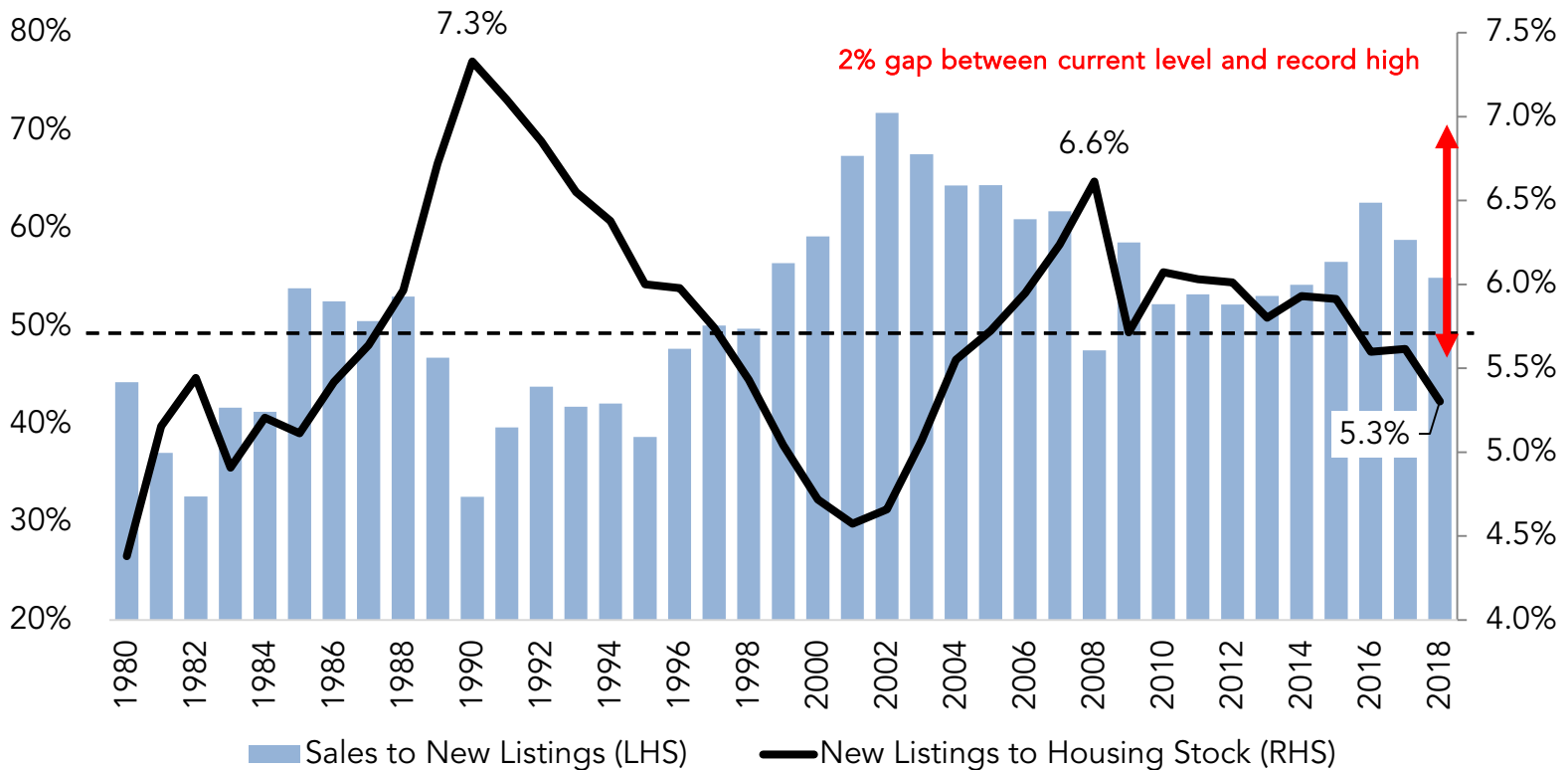
For most of 2019, supply has outpaced demand until recent months. However, despite recent support real estate prices continue to contract in the GVA market.

Source: CREA, Veritas



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Annual New Listings to Total Housing Stock Units



Difference between 15-year low and record high in supply is only 2% of total housing stock. The most likely forced seller of real estate will be real estate investors or speculators particularly those with negative cash flow real estate properties.

Source: Statistics Canada, National Energy Use Database, CREA, Veritas



Residential Real Estate Property Survey

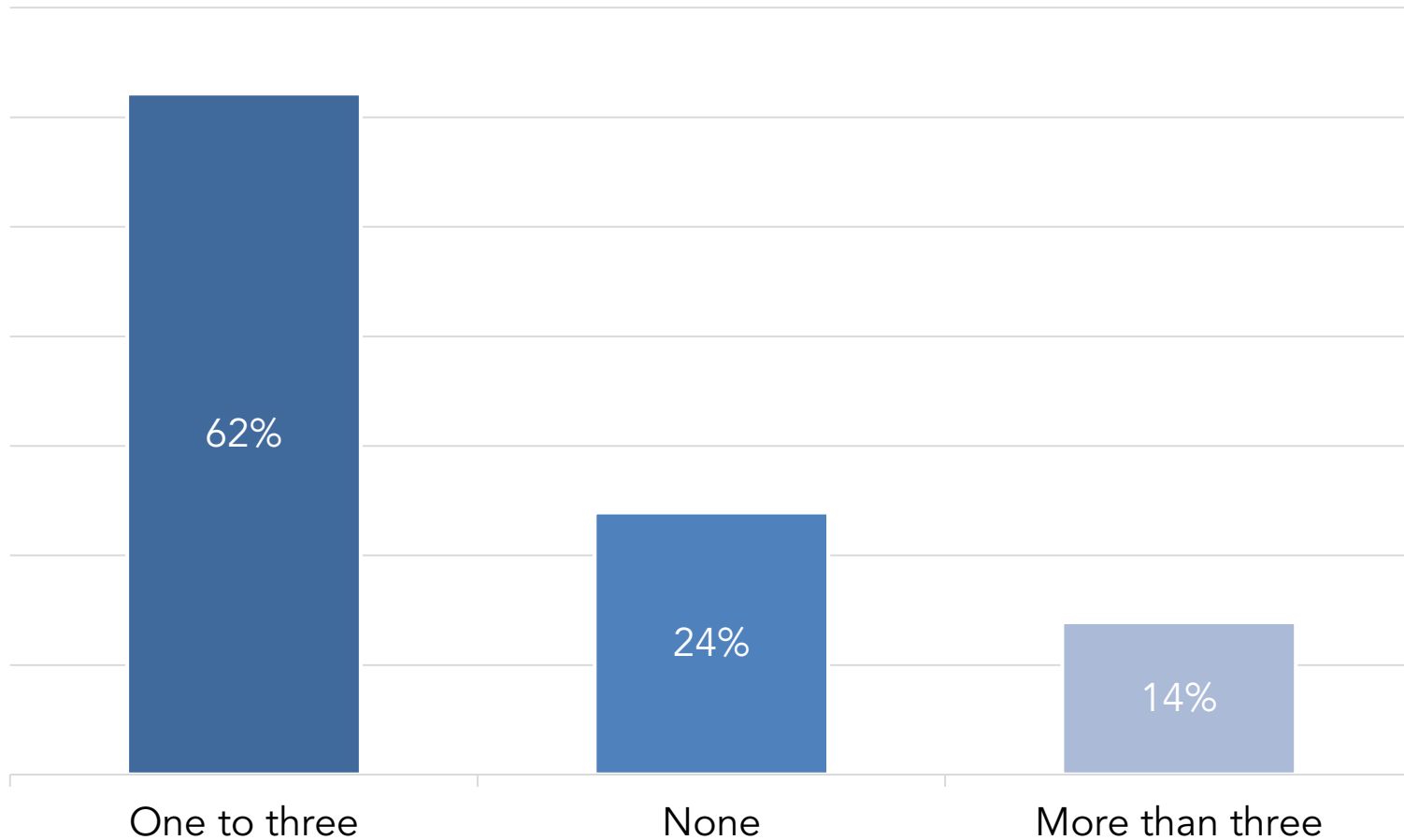


Residential Real-Estate Property Survey Overview

- **What we did:** We informally surveyed residential real estate property investors from September 23 to October 1, 2019 to get a picture of what their intentions are in the next 12 months. The survey was brief at six questions.
- **Why we did it:** Our belief is that house prices in the future will be driven by residential real estate property investors, whether they are selling or buying. If there is an economic shock, the first wave of selling is likely to come from this group, particularly investors with negative cash flow investment properties.
- **Who we surveyed:** This was an informal survey of Veritas clients and associates and it was our first survey of its kind. It therefore is not a statistically significant survey, but did convey some meaningful results.



How many residential real estate investment properties do you own?



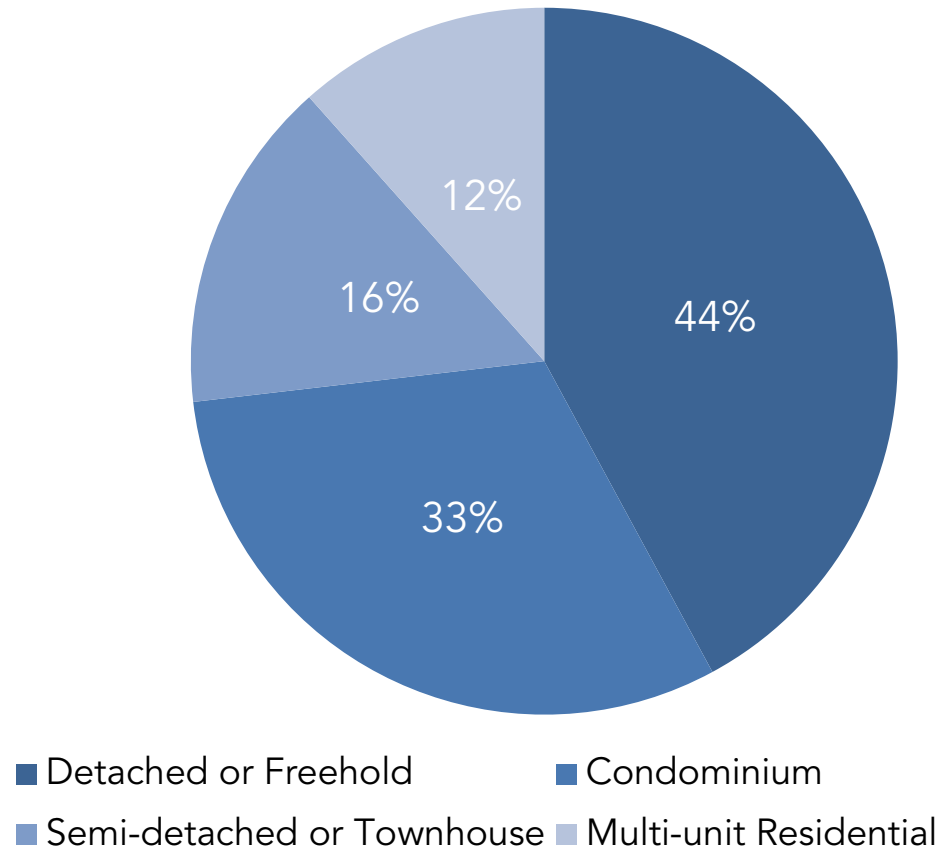
Most real estate investors own one to three investment properties.

Source: Veritas



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What type of investment property do you own?



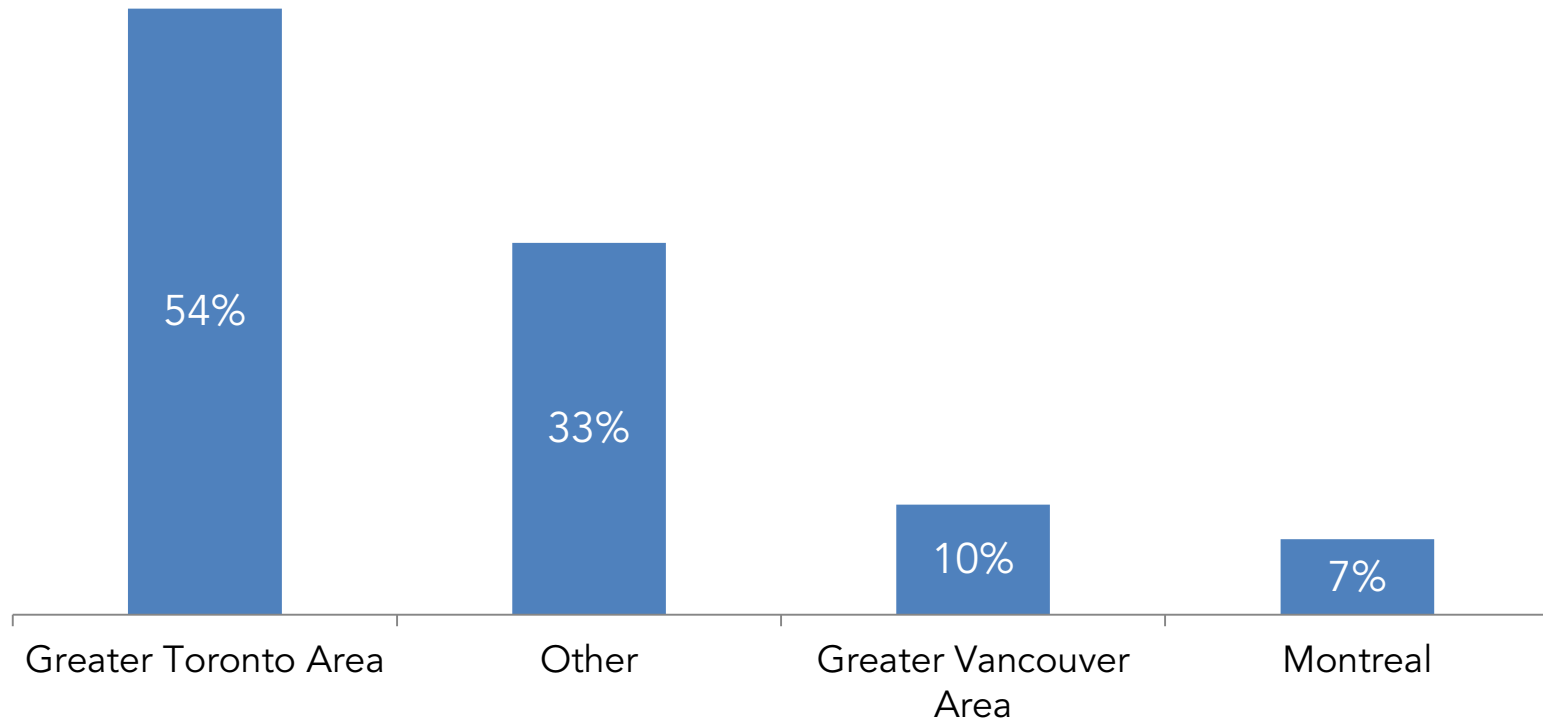
Detached or freehold investment properties made up the majority of real estate investment properties, followed by condominiums.

Source: Veritas



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Do you own residential real estate properties in any of the following locations?



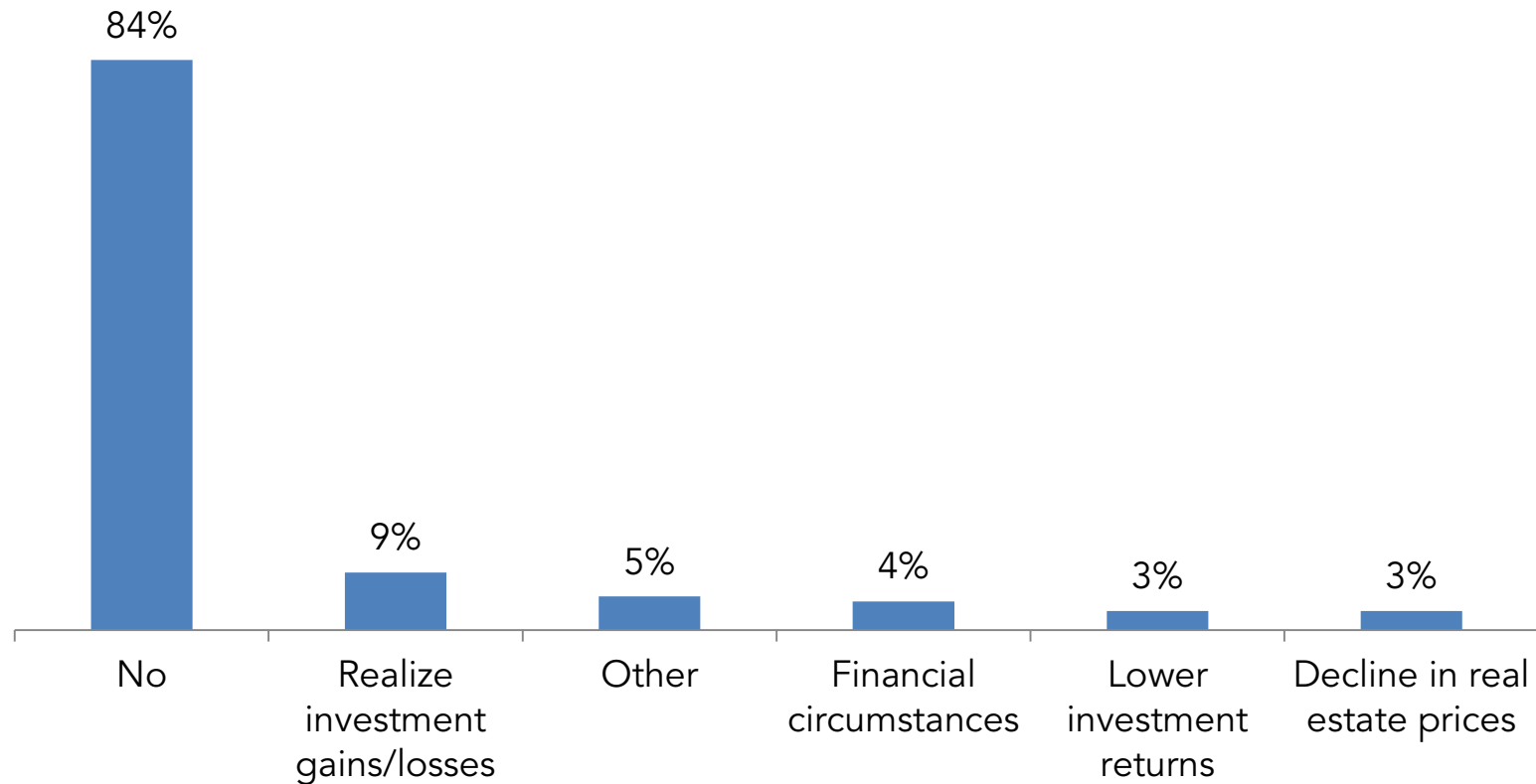
Most survey respondents had investment properties in GTA followed by investors in more suburban areas or smaller cities like London, Victoria, Kelowna, or Ottawa.

Source: Veritas



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Do you plan to sell one or more investment properties within the next 12 months?



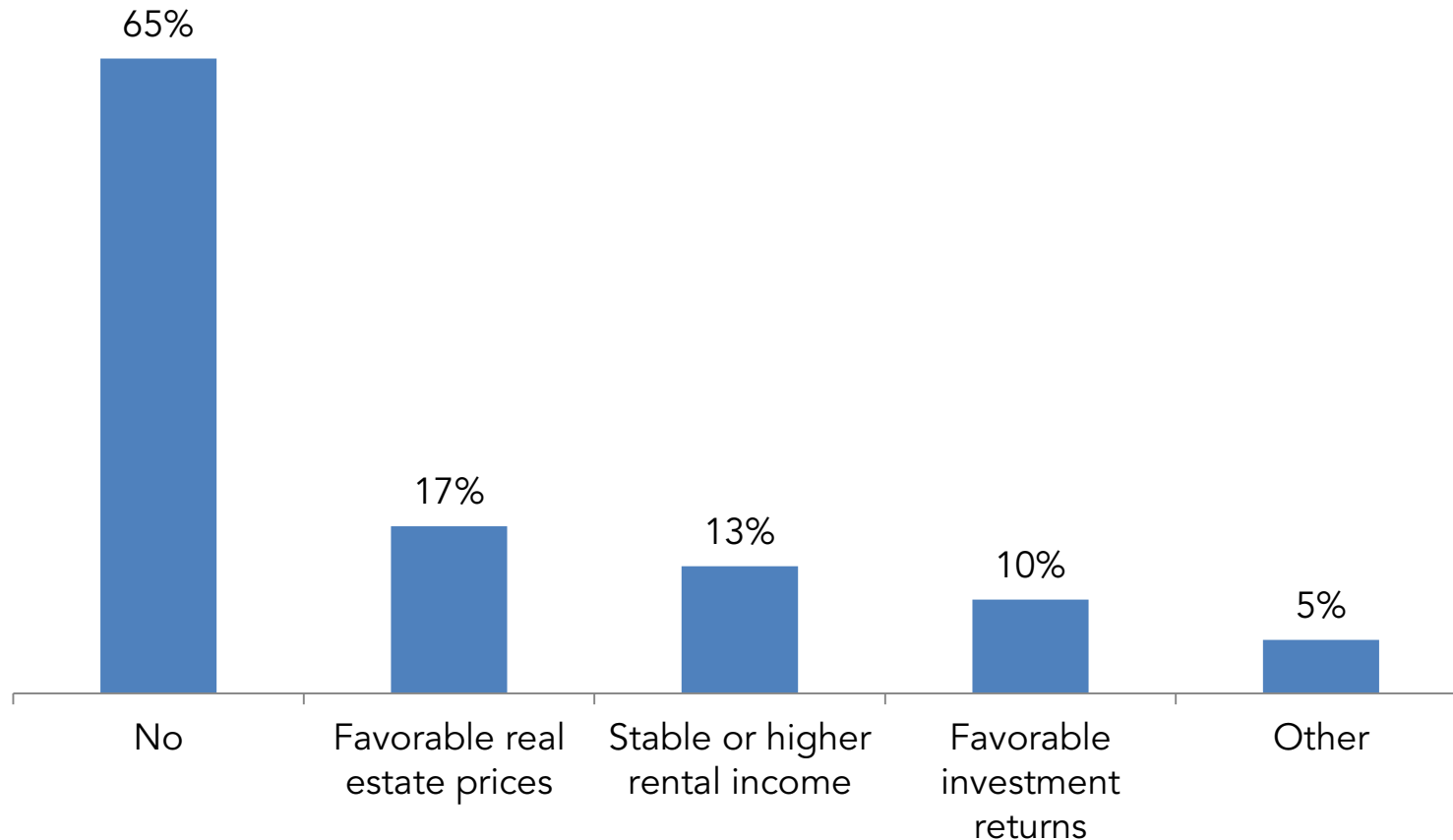
Most real estate investors do not plan to sell their real estate investment properties. Those that plan to sell are looking to realize investment gains or losses. Few are selling for bearish reasons like expectations for lower investment returns or a decline in real estate prices.

Source: Veritas



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Do you plan to purchase one or more investment properties within the next 12 months?



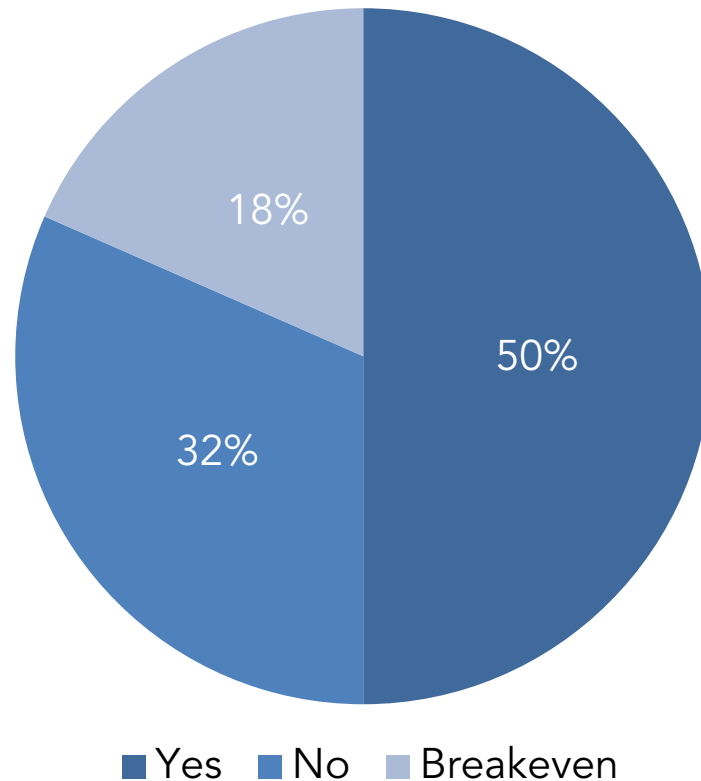
A significant portion of current real estate investors expect to buy additional investment properties for bullish reasons such as favorable prices or higher expected returns or rental income.

Source: Veritas



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Do your investment properties generate positive cash flow net of all expenses?



However, only 50% of investors are positive cash flow. One in three real estate investors are negative cash flow. An external or economic shock, such as a recession, could result in real estate investors with negative cash flows listing their properties for sale and flooding the market with supply.

Source: Veritas

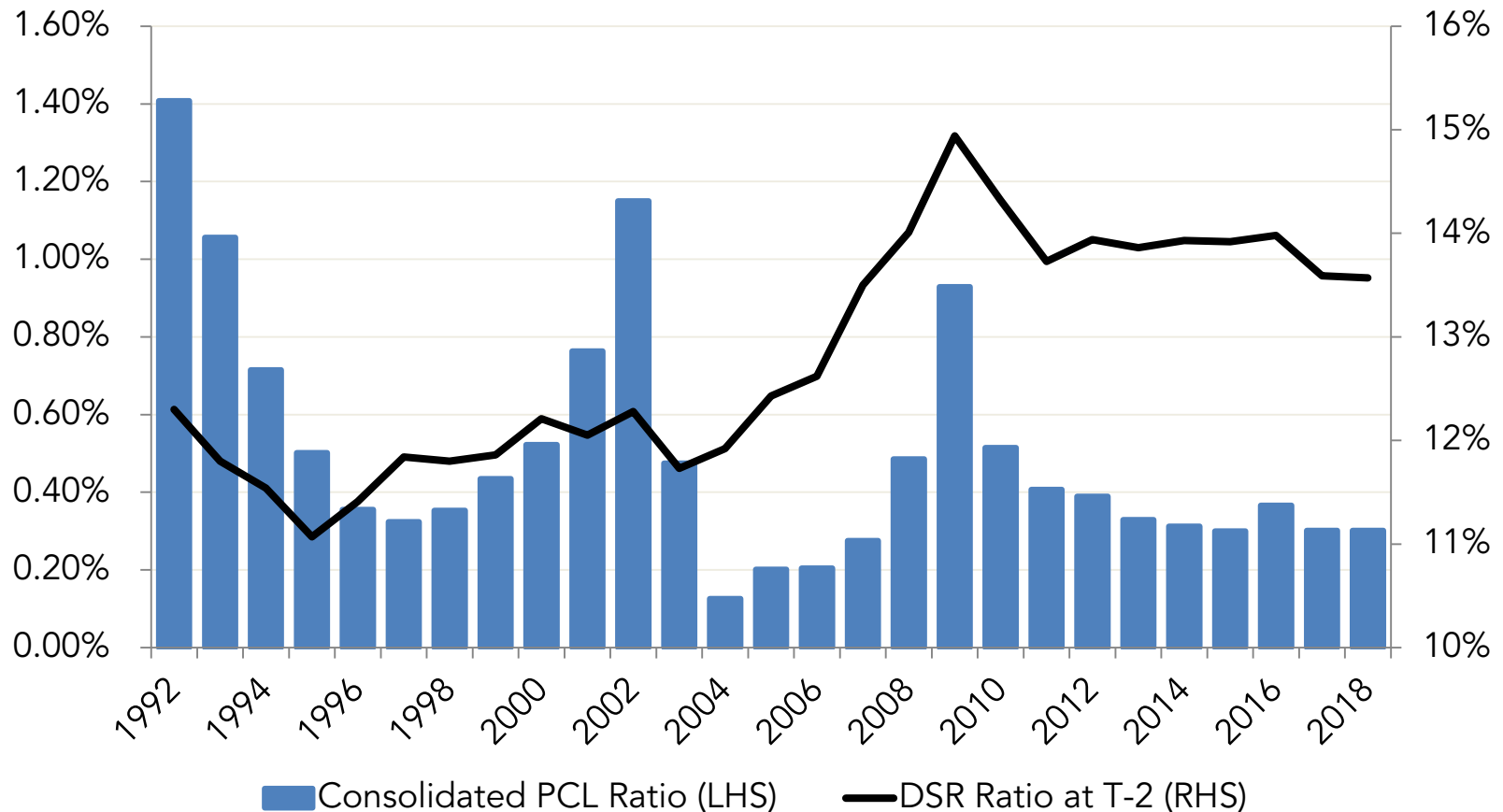


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Credit Conditions



Household DSR and PCL Ratio for Big Six Banks



Historically, a rising Household Debt Service Ratio has resulted in rising credit losses for Canada's Big Six banks over the subsequent two years.

Source: Statistics Canada, Company filings, Veritas



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Classifying the Coming Credit Cycle and Economic Headwinds

Category	Damage	Last seen	Credit Risk
1	<i>Minor</i>	<i>Today?</i>	Current market expectation: A minor uptick or controlled normalization in sector PCLs of a 10% to 15% YoY increase.
2	<i>Extensive</i>	<i>2015-2016</i>	Oil and gas credit exposure boosted sector PCLs by ~5 bps, with a less than 5% earnings impact to the Big Five banks.
3	<i>Devastating</i>	Veritas Base Case	Veritas expectations for 2019/2020; Significant uptick in PCLs (~60% YoY increase) amidst a slowing growth environment, with no impact on Banks' capital or solvency.
4	<i>Catastrophic</i>	<i>2008-2009</i>	The Financial Crisis: Banks would need to shore up capital and actively lower or manage balance-sheet risk.
5	<i>Absolute Worst</i>	<i>No precedent</i>	Solvency of the banks is threatened alongside a significant real estate market crash.

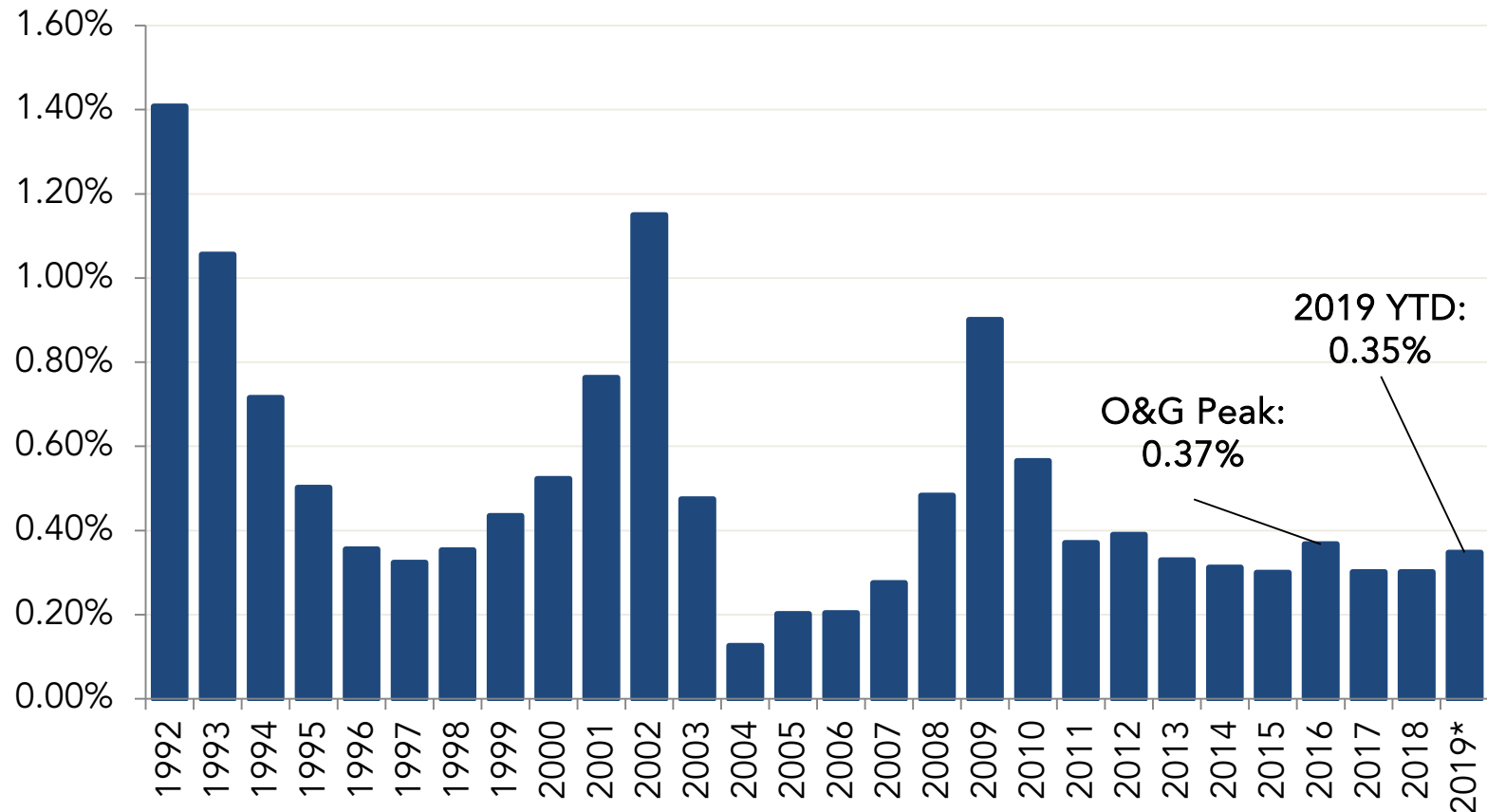
We expect credit losses to be worse than loan losses experienced during the O&G commercial cycle but not as severe as the Great Financial Crisis.

Source: Company filings, Veritas



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Annual Consolidated Provisions for Credit Losses ('PCLs') – Big Six



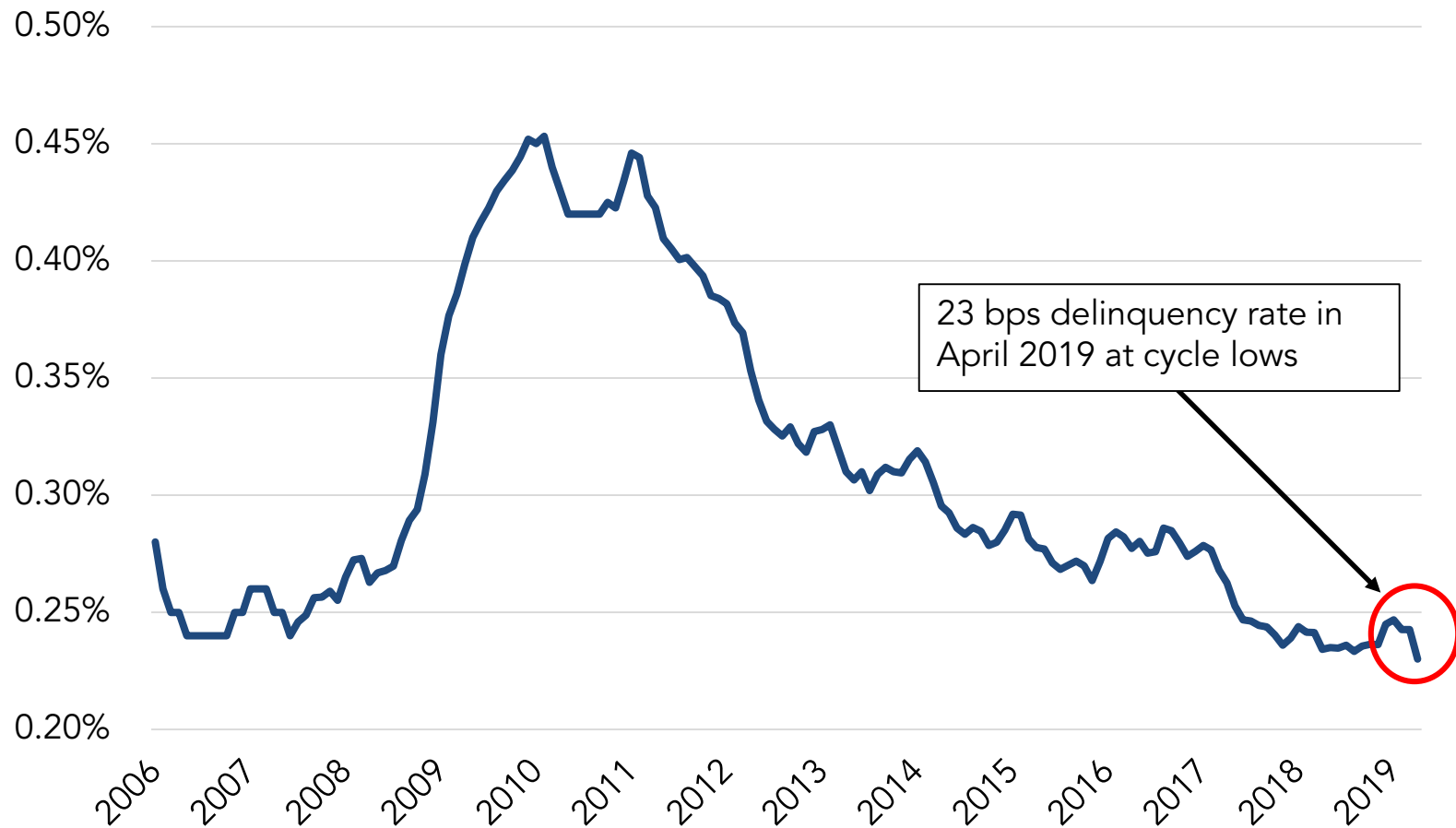
Year-to-date the sector PCL ratio is on track to match or exceed the peak PCL ratio experienced during the O&G cycle. Management expects credit losses to continue to increase and "normalize".

Source: Company filings, Veritas



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Domestic Mortgages 90-day Delinquency Rate – CBA



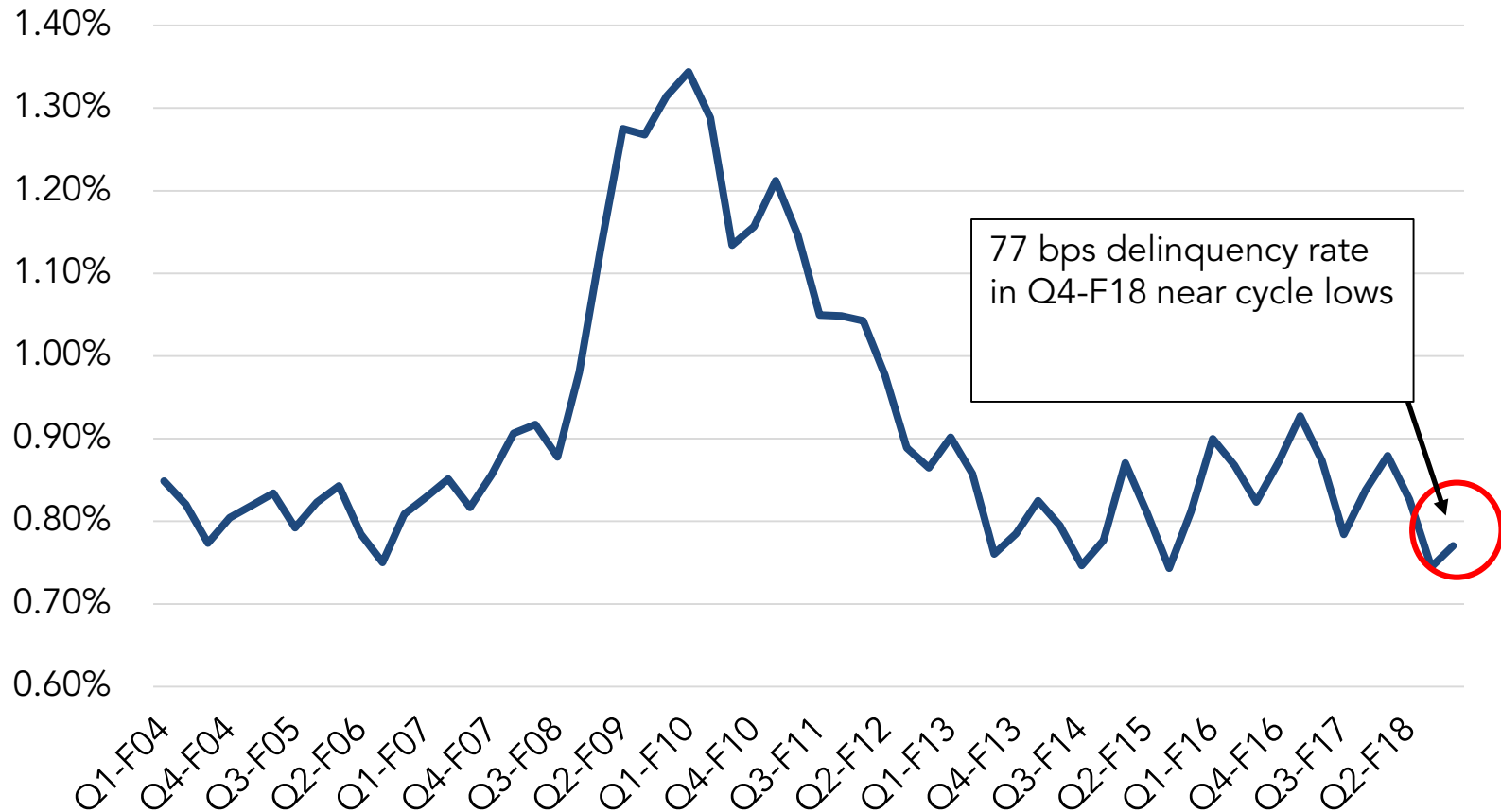
Mortgage delinquency rates remain at cycle lows

Source: Canadian Bankers Association, Veritas



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Domestic Credit Cards 90-day Delinquency Rate – CBA



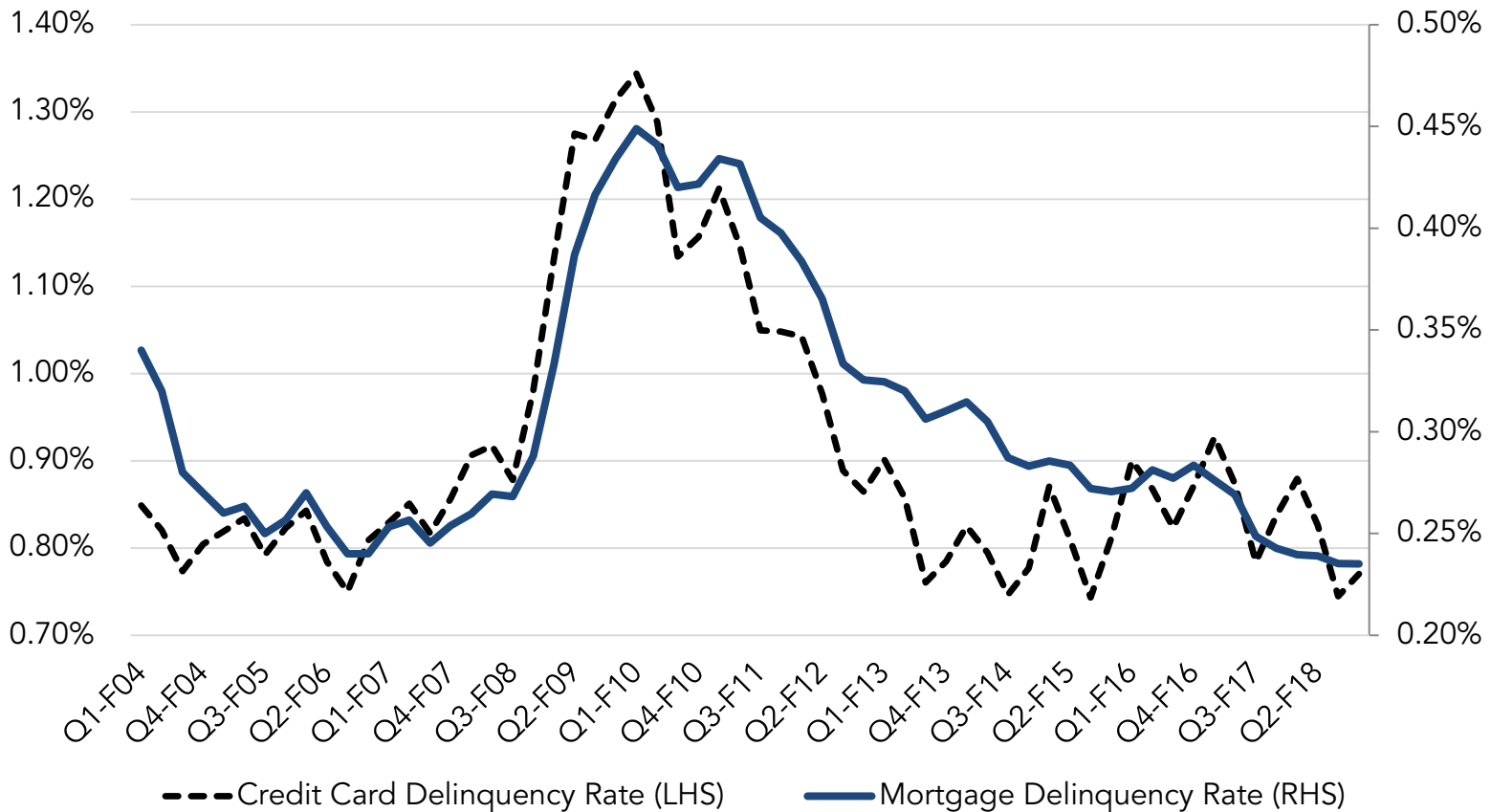
Credit card delinquency rates are also near cycle lows

Source: Canadian Bankers Association, Veritas



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90-Day Delinquency Rates: Mortgages vs. Credit Cards



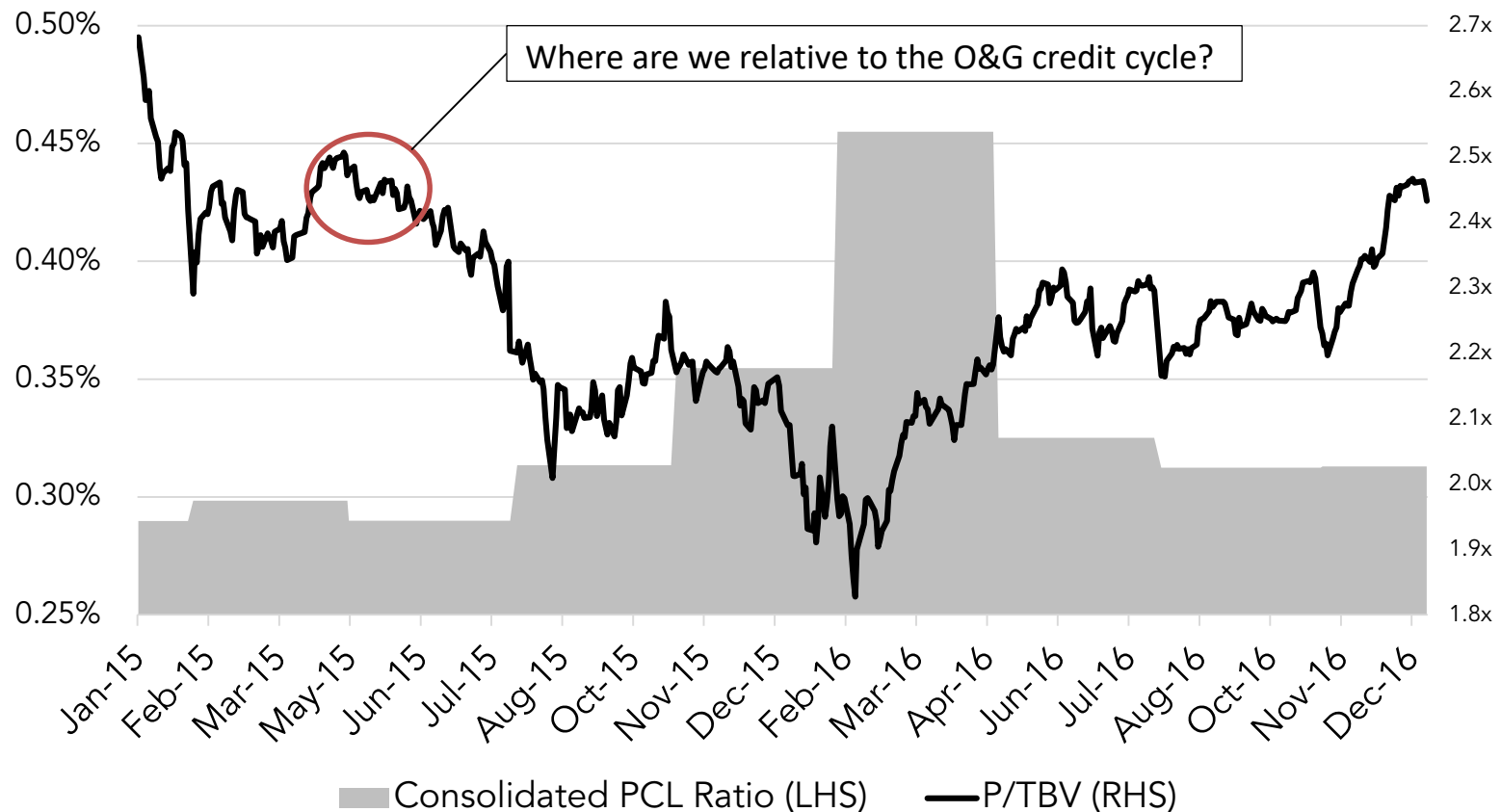
Mortgage and credit card delinquency rate patterns are coincident. In other words, Canadian borrowers default on mortgage and credit card debt at the same time. Credit cards are not a leading indicator for the credit cycle.

Source: Canadian Bankers Association, Veritas



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Oil & Gas Credit Cycle as a Reference for Current Credit Cycle



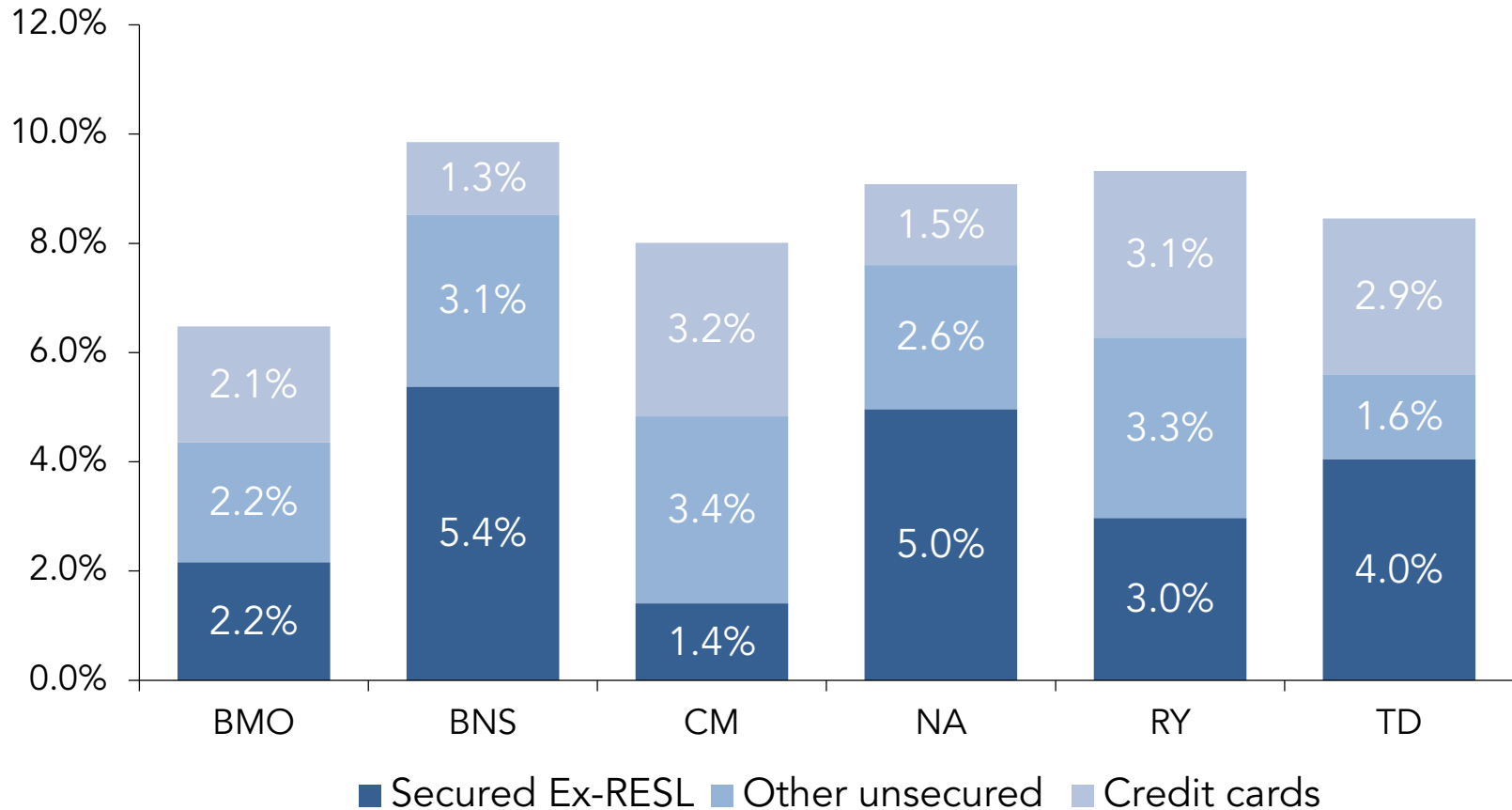
Investors in Canadian bank stocks have to sell shares or underweight the sector one-year before credit losses peak. Investors should purchase or overweight Canadian bank stocks when credit losses peak.

Source: Company filings, Capital IQ, Veritas



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Personal Lending ex-RESL (% of net loans as of Q3-F19)



Secured Ex-Real Estate Secured Lending (i.e. auto loans) are expected to experience higher delinquencies early in the cycle with credit cards expected to go delinquent later in the cycle.

Source: Company filings, OSFI, Veritas



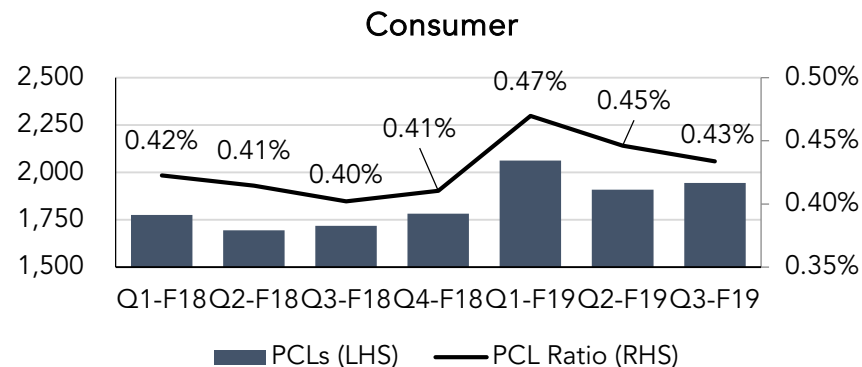
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Prepare to Enter Credit Cycle as Headwinds Build

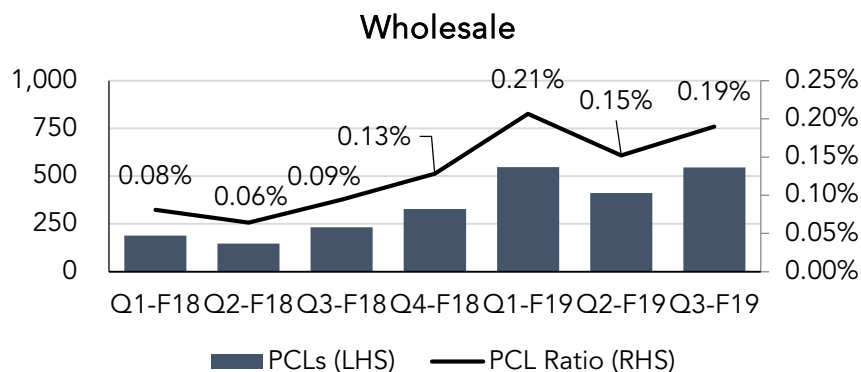
Pay attention to bank-specific credit exposures

	Consumer Credit Risk	Commercial Credit Risk	IFRS 9 Volatility	Overall Credit Risk
BMO	Lower	Neutral	Lower	Lower
BNS	Higher	Lower	Higher	Higher
CM	Higher	Neutral	Neutral	Neutral
NA	Neutral	Neutral	Neutral	Neutral
RY	Higher	Higher	Neutral	Higher
TD	Higher	Lower	Higher	Higher

Economic headwinds to accelerate retail loan losses



Elevated commercial losses a late cycle signal



Veritas Investment Research Recommendations

Recommendation	Name	Target Price
BUY	Bank of Montreal	C\$91.00
SELL	Bank of Nova Scotia	C\$65.00
SELL	CIBC	C\$95.00
SELL	National Bank	C\$56.00
SELL	Royal Bank of Canada	C\$87.00
SELL	TD Bank	C\$65.00
SELL	Canadian Western Bank	C\$25.00



QUESTIONS

Please contact Nigel D'Souza for any questions or comments:

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