# ANNUAL STATE OF THE RESIDENTIAL HOUSING MARKET IN CANADA

## YEAR END 2020

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MORTGAGE PROFESSIONALS CANADA

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# 1.0 Introduction and Summary

Since the Fall of 2005, Mortgage Professionals Canada has published annual reports on the residential mortgage market in Canada. The objective of the reports is to create and share data that would not otherwise be available, on mortgage activity and consumers' attitudes, and to interpret trends in the housing and mortgage markets, and in the realm of government policies related to mortgages and housing. The reports are based largely on consumer surveys.

In addition to discussing consumer choices, attitudes and expectations in the mortgage market, these reports look at the economic and housing market environments in which consumers are making their choices.

### *What a Year*

So many surprises.

But, looking back, a major surprise is that many things haven't changed materially.

At the middle of the year, Mortgage Professionals Canada decided to create a series of reports that would investigate the effects of the COVID-19 pandemic on consumer attitudes and expectations about housing and mortgages. The five reports that resulted can be found on this page: https://mortgageproscan.ca/membership/resources/covid-19-consumer-reports

Within those reports, the biggest story is that there was a huge rise in interest in changing housing situations (particularly first-time homebuying). As is discussed throughout this report, and especially in the final chapter, that desire to adjust our housing, combined with extremely low interest rates, has caused a fire in housing markets across Canada. (You already know this) Apart from that, attitudes and expectations about housing and mortgages haven't changed a lot.

Another major change (which I haven't tried to measure, but which I personally feel intensely) is that we are experiencing much greater uncertainty about our own futures, for the people around us, and about people and society in general. I talk about that from a narrow perspective—the impossibility of forecasting—in the fifth chapter.

In prior editions of this report, I have written about homeownership versus renting, and the economic and financial foundations for the opinion that most of us have: that we want to be homeowners. I'm not repeating that discussion this time, but anyone interested might look at "Owning vs Renting a Home in Canada," which was published in September 2018.[1] A subsequent

[1] The report can be found here: https://mortgageproscan.ca/docs/default-source/government-relations/owning-vs-renting-2018.pdf

report (published in August 2019) investigated whether people who choose ownership are being sufficiently thoughtful and are making good decisions.[2] Here, I'll just summarize two thoughts:

- Just because being a homeowner is stressful, it does not necessarily mean it is a bad decision. In looking at solutions for our housing needs, for many of us, the suitable options are challenging. So, an important question is this: Given the challenging options that are available to us, are we making reasonable choices? In the 2019 report on homebuying in Canada, Table 3-1 summarized consumers' responses about how much consideration they give to various factors. The short answer is that they give a lot of consideration to a lot of factors.
- People who make homebuying decisions that cause themselves stress might actually be acting successfully in their long-term best interests. I believe that most people are capable of making reasonably good decisions about what's best for them in their own circumstances.

Later in this report (the last section in chapter 5), there is a discussion about the mortgage stress tests that are mandated by the federal government, and three recommendations are offered (two for immediate policy action and the third is about starting a discussion).

- The maximum actual mortgage interest rate reported by the Bank of Canada, for new purchases, for 2013 to the present (3.76%) should be used as the hurdle rate.
- The stress tests' calculations of gross debt service (GDS) and total debt service (TDS) ratios should be based on the anticipated remaining mortgage principals at the time of the future renewals.
- A discussion should be started on how to incorporate income growth within the calculations.

Much more detailed discussions about the stress tests have been given in prior reports. Last year's edition can be found here: https://mortgageproscan.ca/docs/default-source/consumer-reports/housing-market-report---year-end-2019-(english).pdf

In some of the prior editions, these reports discussed the federal government's First-Time Home Buyer Incentive (FTHBI) program, in which the government would take part ownership of houses. The FTHBI has had negligible effects in the housing market.

[2] The report can be found here: https://mortgageproscan.ca/docs/default-source/consumer-reports/home-buying-in-2019_mid-year-report.pdf

## *Overview of this Report*

This report has been prepared for Mortgage Professionals Canada by Will Dunning, Chief Economist. It provides an overview of the evolving state of the residential mortgage market in Canada. Major sections of this report consist of:

- This Introduction and Summary
- Mortgage Choices
- Financial Parameters
- Consumer Sentiment
- Outlook for the Mortgage Market
- Housing Market Trends

Data used in this report was obtained from various sources, including an online survey of 1,957 Canadians. Just under one-half (45%) were homeowners with mortgages. The rest were homeowners without mortgages (29%), renters (20%), or others who rent or live with their families and are not responsible for mortgage payments or rent (5%). The survey was conducted by Bond Brand Loyalty for Mortgage Professionals Canada between January 19 and February 9.

## *Mortgage Choices*

Findings in this section include:

- There are estimated to be 10.01 million owner-occupied dwellings in Canada. About 6.08 million of these have mortgages.
- For homes purchased during 2020, 77% of mortgages are fixed rate, 18% are variable or adjustable rate, and 5% are a combination of the two types.
- Amortization periods (as originally contracted at the time of purchase) have gradually lengthened over time. For purchases from 2018 to 2021, the average is 21.5 years, versus 20.6 years for all purchase periods. Contracted amortization periods exceed 25 years for 10% of all mortgage holders.
- Each year, about one-third of mortgage holders makes new efforts to shorten their actual amortization periods (by increasing the regular payment to more than is required, by making a lump-sum payment or changing the payment frequency).
- During 2020, voluntary payment increases amounted to about $5.2 billion (annualized) and lump-sum payments amounted to about $28 billion, with a further $7 billion by people who made a lump-sum payment to fully pay out their mortgages.
- For new mortgage borrowers during 2020, 54% used a representative from a major bank and 40% used a mortgage broker.
- The rate of mortgage arrears remains very low in Canada, at just 0.22% (as of November). The most important (and difficult) cause of mortgage arrears is a reduction of income (most often due to job loss but, as we now appreciate, this can include a global pandemic). Arrears that are caused by higher interest rates are much easier to fix (for example, by

adjusting the required payment through an amendment of the amortization period). At this time, it is too early to draw firm conclusions about the impact of the ending of mortgage deferrals, but there is no evidence yet of severe deterioration of mortgage arrears.

### *Financial Parameters*

Findings in this section include:

- For new-purchase mortgages during 2020, the average interest rate was 2.32%. For renewals during the year, the average was 2.29%.
- For buyers during 2020 who took out a mortgage, the average principal amount was $435,000. For mortgages renewed during the year, the average remaining principal was $245,000.
- The average mortgage rate discount for 2020 is calculated as 2.70 points below "posted rates." This is by far the largest discount in the 16 years for which the calculation has been made.
- Home equity in Canada is equal to 72.7% of the value of the homes.
- Among homeowners who have Home Equity Lines of Credit ("HELOCs"), most have only partially (or not at all) accessed their available credit. This year's survey estimates that, on average, 28% of available credit has been accessed.
- An estimated 7.7% of homeowners (about 770,000 out of 10.01 million) took equity out of their home in the past year. The average amount is estimated at $96,800, with a combined total amount of $74.5 billion ($46.4 billion via mortgages and $28.1 billion via HELOCs).
- The most common use of funds from equity takeout is for home renovations or home repairs ($18.4 billion), followed closely by "to invest" ($18.1 billion). Equity takeout to assist a family member buy a home is a small total amount: just $2.8 billion.
- Among recent first-time homebuyers (purchases during 2018 to 2021), the average down payment was 21% of the purchase price. Many first-time buyers stretch their down payments to 20% or higher to avoid the cost of mortgage insurance.
- First-time buyers usually get their down payment funds from multiple sources.
- The survey data suggests that as many of 55% of recent buyers were first-time buyers (in the area of 400,000 per year). Of these, about one-third receive some help from family. A small minority (about 5%) of first-time buyers get all of their down payment from family. A much larger share (39% of recent buyers) get 100% of the down payments from their own savings and 89% get some funds from their own savings.
- Looking at total down payment dollars, the most significant source remains the buyers' own savings (62% of the total for recent buyers). Help from family remains a minority source of funds: Among recent buyers, 10% of down payment dollars came as gifts and 4% as loans from family members. Two other major sources for recent first-time buyers are loans from a financial institution (14%) and funds from an RRSP (8%—this includes funds taken via the Home Buyers Plan).

- The homeownership rate in Canada rose for a generation, but began to fall after 2011, due to: growing dollar amounts required for down payments, very large amounts of required principal repayment that result from insured mortgage maximum 25-year amortization schedules and changing federal mortgage regulations that have reduced access to financing. The ownership rate has likely fallen further in recent years, although movements during the pandemic (out of rentals and into ownership) may have partially reversed that trend.

### *Consumer Sentiment*

Findings in this section include:

- Consumers generally agree (average score of 6.68 out of 10) with the statement that "low interest rates have meant that a lot of Canadians became homeowners over the past few years who probably should not be homeowners."
- But, responses to questions about their own circumstances indicate that we have actually been somewhat cautious: Consumers rate themselves well on their ability to weather a potential downturn in home prices (average rating of 6.93) or higher interest rates (average of 6.44) and they have low levels of "regret" about their own mortgage choices (a low average of 3.62 on a 10-point scale).
- There is a strong belief that "real estate in Canada is a good long-term investment" (an average of 7.29 out of 10) and agreement that mortgages are "good debt" (6.98).
- Canadians are neutral on whether this is a good time to buy a home or condominium (an average rating of 5.53, virtually equal to the neutral score of 5.5). But, they also indicate that they have become more likely to buy a home in the coming year. A discussion within this report finds that this question has previously done a good job of predicting sales for the coming year, but concludes that it is uncertain whether the data will be as reliable this year.
- ***Expectations about house price increases have strengthened, to the highest level seen in the history of the survey.***
- By a very large margin, Canadian homeowners are happy with their decisions to buy their homes (90% are "happy"). To the extent that some of them regret the decision to buy, the regrets are about the particular property purchased (7%) rather than about homeownership in general (4%). This pattern holds for recent buyers. But, a deeper look finds that happiness levels are lower in the provinces that have been hurt by lower oil prices and are much lower for mortgage holders who expect difficulties with their mortgage payments due to COVID-19.

### *Outlook for the Mortgage Market*

Residential mortgage credit is currently expanding rapidly (up by 7.1% year-over-year, as of the fourth quarter). This section of the report normally concludes with a forecast of growth for the coming year. This time, the discussion is about the difficulties in forecasting (which have caused this economist to eschew forecasting for the past year, and perhaps for some time to come). The discussion describes major factors (some normal and some highly abnormal) that will affect housing demand and the demand for mortgages in the coming months.

### *Housing Market Trends*

Exceptionally strong homebuying is currently resulting from a combination of record low interest rates and a strong desire by many of us to change our housing arrangements. The supply (via flows of new listings into housing markets) has increased, but is falling short of demand. The result is that prices are increasing very rapidly.

Low interest rates have resulted in improved affordability. Strong demand is causing prices to rise to fill the "space" that has been created by low interest rates. It is unfortunate that the space is being filled: This is the result of under-production of housing in Canada during the past decade.

The strongest housing markets in Canada are in the medium sized cities to which people are moving (away from the largest cities). There is a possibility that price growth in those cities will encourage larger amounts of new housing construction. This, ultimately, could reduce the price pressures.

Rental markets are also seeing the effects of changing housing expectations: Vacancies have increased for apartments (especially in the largest cities) but have fallen for town homes (which more easily allow for social distancing).

This economist is not willing to commit to any forecasts for the housing market—there is too much uncertainty for too many critical factors. That said:

- The longer these conditions continue, the greater the risks are for stability, not just for the housing market, but for the broader economy.
- Existence of these conditions for a relatively short period of time is not very concerning, because the number of people who make home purchases each year is relatively small. (While it is not important in a macro sense, it is highly significant for the people involved.)
- The people making these purchase decisions have thought about their existing (and future) circumstances. I'm not convinced that we can accurately second-guess those decisions or predict how they will turn out for those people.
- Recent rises in interest rates are provoking a lot of discussion. As of today (I wrote this on March 5), the increases that have occurred will have very little consequence: Rates for fixed-rate mortgages have returned to the levels seen in September and October (which were record lows at the time) and are still considerably lower than a year ago. As calculations in the last chapter show, there is room for interest rates to rise even more and for affordability to remain a very positive factor.

## *About Mortgage Professionals Canada*

Mortgage Professionals Canada (MPC) is the national mortgage industry association representing over 13,000 individuals and 1,000 companies, including mortgage brokerages, lenders, insurers and industry service providers. Our members make up the largest and most respected network of mortgage professionals in Canada. MPC represents members' interests to government, regulators, media and consumers. Together with our members, the association is dedicated to maintaining a high standard of industry ethics, consumer protection and best practices.

The association ensures an effective and efficient mortgage marketplace by:

- Promoting consumer awareness of the benefits of dealing with the mortgage broker channel.
- Advocating for member interests on legislative and regulatory issues.
- Developing, monitoring and promoting responsible mortgage industry standards and conduct.
- Providing timely and relevant information to members and mortgage consumers.

## *About the Author*

Will Dunning is an economist, and has specialized in the analysis and forecasting of housing markets since 1982. In addition to acting as the Chief Economist for Mortgage Professionals Canada, he operates an economic analysis consulting firm, Will Dunning Inc.

## *About Bond Brand Loyalty*

Bond Brand Loyalty is a Canadian-owned global customer experience and engagement agency that specializes in building brand loyalty for the world's most influential and valuable brands. We build measurable, authentic, and long-lasting relationships through a combination of services that includes marketing research, loyalty solutions, customer experience measurement, marketing and management, customer analytics, live brand experiences and proprietary technology platforms.

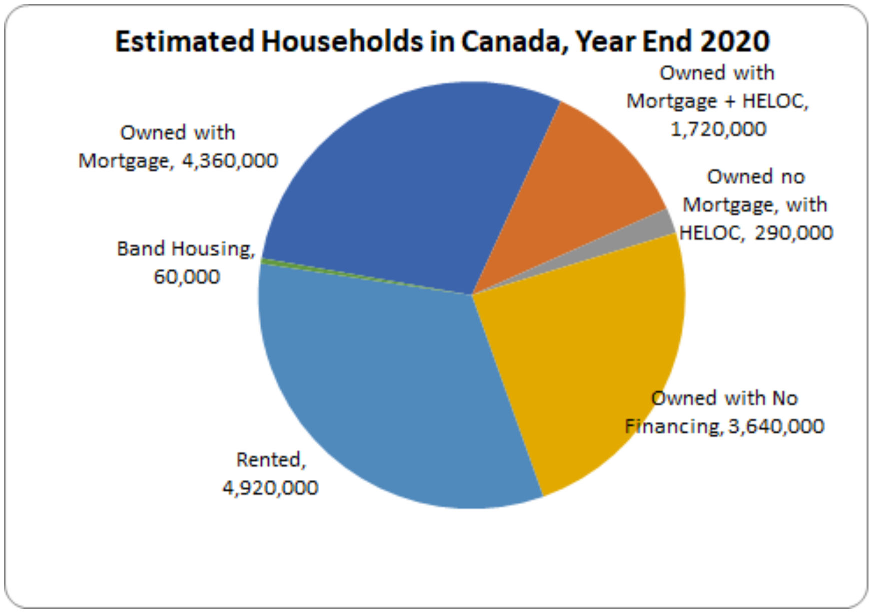
## *Disclaimer*

This report has been compiled using data and sources that are believed to be reliable. Mortgage Professionals Canada, Bond Brand Loyalty, Will Dunning, and Will Dunning Inc. accept no responsibility for any data or conclusions contained herein. The opinions and conclusions in this report are those of the author and do not necessarily reflect those of Mortgage Professionals Canada or Bond Brand Loyalty.

## 2.0 Mortgage Choices

This section uses data from the consumer survey to highlight consumer choices in the mortgage market.

### *Dimensions of the Mortgage Market*




Official data on numbers of households in Canada is available from the most recent Canadian census, which was in 2016. For this study, updated estimates have been created. There are currently about 14.99 million households in Canada,[3] including:

- 10.01 million homeowners, of whom 6.08 million have mortgages. Of these, 1.72 million also have Home Equity Lines of Credit (HELOCs) and 4.36 million have a mortgage without a HELOC.
- 3.93 million homeowners have no mortgages. Of these, 290,000 have HELOCs and 3.64 million have neither a mortgage nor a HELOC.
- Combining data on two groups of HELOC holders (with and without other mortgages), about 2.01 million homeowners have a HELOC.
- There are about 4.92 million tenants.
- 60,000 households are living in band housing.

### *Fixed-Rate Vs Variable-Rate Mortgages*

As is shown in the table below, the study found that 72% of mortgage holders (which would equate to 4.45 million out of 6.08 million) have fixed-rate mortgages, 22% (about 1.34 million) have variable-rate or adjustable-rate mortgages, and 5% (290,000) have "combination"

[3] The updated estimate of total households uses data on housing completions from Canada Mortgage and Housing Corporation. The estimates of types of finance are derived from our consumer survey, augmented with Bank of Canada data on growth of mortgage indebtedness and data from the Canadian Bankers Association on numbers of mortgages held by its members.

mortgages, in which part of the payment is based on a fixed rate and part is based on a variable rate.

As is shown in the first column of the table, among mortgages for homes that were purchased during 2020, fixed-rate mortgages were chosen by 77%. For mortgages that were renewed during 2020, the fixed-rate share is similar, at 79%. During 2020, rates fell for both fixed-rate and variable-rate mortgages. The reductions were larger for variables rates, and this caused the share for variable rates to rise compared to 2019 (during 2019, only 12% of new mortgages were variable rate). Early in the pandemic period, the Bank of Canada established an expectation that short-term interest rates will remain extremely low for some time. This made variable rates seem less risky. Still, a large majority of active borrowers chose the security of a fixed rate at the extremely low interest rates that were available during the year.

*Table 2-1*
*Percentages of Mortgages by Type,*
*for New-Purchase Mortgages and Recent Renewals*

| *Mortgage Type* | *Purchase During 2020* | *Renewal or Refinance During 2020* | *Did Not Purchase or Renew/ Refinance During 2020* | *All Mortgages* |
|---|---|---|---|---|
| Fixed Rate | 77% | 79% | 72% | 73% |
| Variable or Adjustable Rate | 18% | 17% | 23% | 22% |
| Combination | 5% | 4% | 5% | 5% |
| All Types | 100% | 100% | 100% | 100% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.
Note: Totals may not add to 100% due to rounding.

### *Mortgage Amortization Periods*

A large majority of homeowners' mortgages in Canada have contracted amortization periods of 25 years or less. The last column of the next table indicates that 90% of the mortgages have original contracted periods of no more than 25 years and 10% have contracted periods exceeding 25 years.

For homes that have been purchased recently (during 2018 to the present), the proportion with amortization periods exceeding 25 years (at 14%) is slightly higher than for all purchase periods.

The data indicates that average contracted amortization periods have been extended slightly over time: The average for the most recent buyers (2018 to the present) is 21.5 years, which is a bit longer than the average of 20.6 years for all mortgage holders.

| *Table 2-2*<br>*Percentages of Mortgages by Length of Original Amortization Period,*<br>*By Period of Purchase* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Amortization Period* | *Before 1990* | *1990-1999* | *2000-2004* | *2005-2009* | *2010-2013* | *2014-2017* | *2018-2021* | *All Purchase Periods* |
| Up to 24 Years | 49% | 46% | 38% | 45% | 39% | 34% | 30% | 39% |
| 25 Years | 50% | 52% | 60% | 42% | 48% | 50% | 57% | 50% |
| 26-30 years | 1% | 1% | 2% | 8% | 11% | 14% | 13% | 9% |
| More than 30 Years | 0% | 1% | 0% | 6% | 2% | 1% | 0% | 1% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Average Period | 19.6 | 19.8 | 20.1 | 21.0 | 20.8 | 20.9 | 21.5 | 20.6 |
| % Exceeding 25 Years | 1% | 2% | 2% | 13% | 13% | 15% | 14% | 10% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.<br>Note: Totals may not add to 100% due to rounding. | | | | | | | | |

### *Actions that Accelerate Repayment*

The Mortgage Professionals Canada survey asked homeowners who have mortgages about actions that can change the number of years it takes to pay off a mortgage. Three different actions were listed. The responses are summarized in the next table. One-third (33%) of mortgage holders (2 million out of 6.08 million) took one or more of these three actions during the past year. As is shown in the table, the survey data indicates that the most recent buyers (2018 to 2021) are almost as likely to take one or more of these actions to accelerate repayment.

The second and third last rows of data in this table contrast the results for 2019 and 2020. Given the turmoil of the year, including uncertainty about employment situations and incomes, it might have been expected that consumers would decide to be less aggressive in repaying their mortgages, to conserve their financial cushions. The data shows that the results were highly similar for the two years.

| *Table 2-3*<br>*Actions Taken in the Past Year to Shorten Amortization Periods, by Period of Purchase* | | | | | |
|---|---|---|---|---|---|
| *Period of Purchase* | *Increased Amount of Payment* | *Made a Lump Sum Payment* | *Increased Frequency of Payments* | *Took One or More of these Actions* | *Took None of these Actions* |
| Before 2000 | 14% | 8% | 2% | 27% | 73% |
| 2000-2004 | 19% | 12% | 2% | 25% | 75% |
| 2005-2009 | 20% | 17% | 3% | 32% | 68% |
| 2010-2013 | 22% | 26% | 7% | 47% | 53% |
| 2014-2017 | 15% | 16% | 8% | 33% | 67% |
| 2018-2021 | 13% | 18% | 6% | 31% | 69% |
| All Purchase Periods | | | | | |
| Share in 2020 | 15% | 17% | 6% | 33% | 67% |
| Share in 2019 | 17% | 15% | 6% | 32% | 68% |
| Number Taking Action in 2020 | 925,000 | 1,050,000 | 375,000 | 2,000,000 | 4,075,000 |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author. | | | | | |

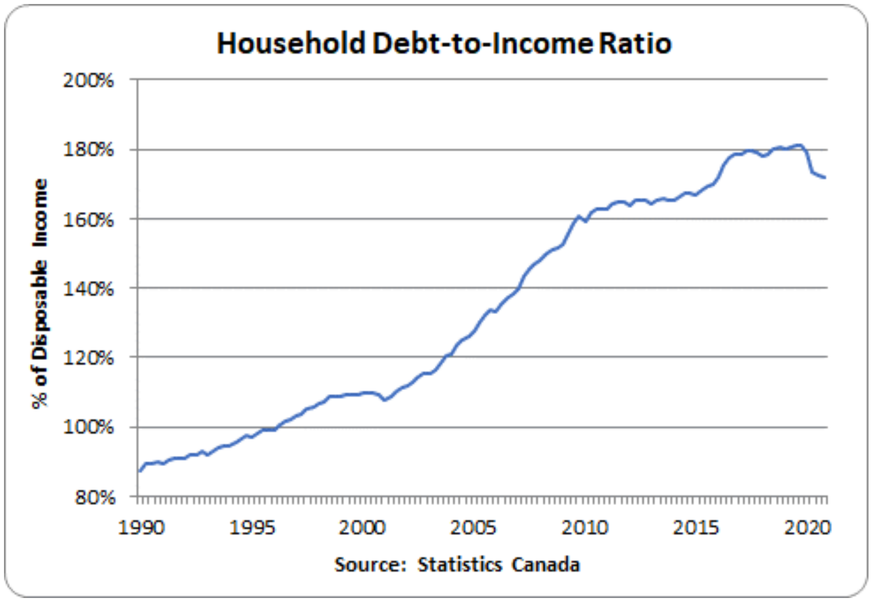
This data shows only actions taken during the past year. Our survey hasn't yet asked mortgage borrowers about whether they have ever taken these actions: That would show that a higher percentage of borrowers have taken steps to shorten their amortization periods.

The survey also collected data on the dollar amounts of increased payments and lump-sum payments. Various survey data can be combined to estimate total amounts.

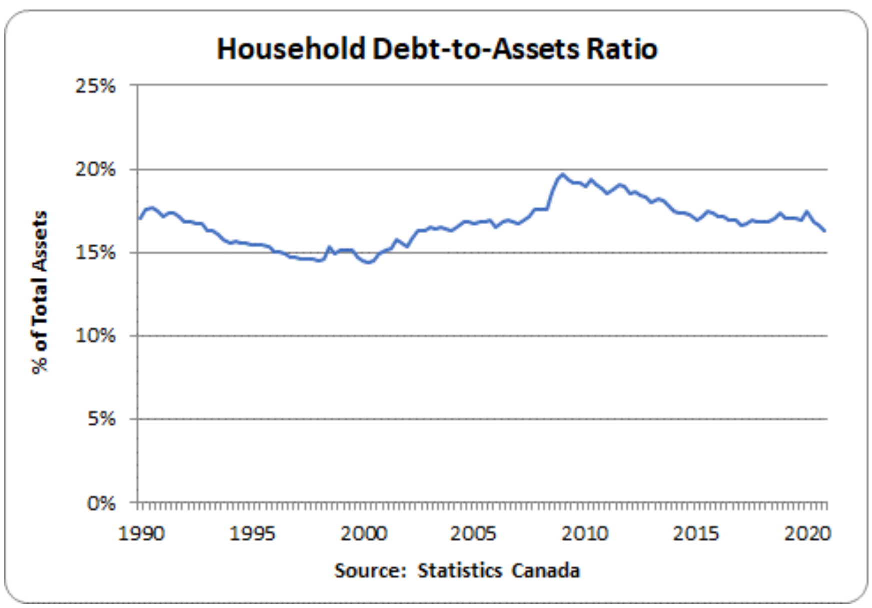
- About 925,000 mortgage holders voluntarily increased their regular payments during the past year. The average amount of increase was about $470 per month, for an estimated total of about $5.2 billion per year. This is the effect of increases that were made during the past year. In addition, voluntary increases that were made in prior years continue to contribute to accelerated repayment of mortgages. Among the most recent buyers (2018 to 2021), the average voluntary increase in payments was $450 per month, slightly less than the average amount of $470.
- About 1,050,000 mortgage holders made lump-sum payments during the past year. The average amount was about $26,700, for combined repayment of $28 billion. Among recent buyers (2018 to 2021) the average lump-sum amount ($15,600) was below the overall average.
- As shown above, 6% of mortgage holders (about 350,000) increased the frequency of their payments.

In addition, the survey has investigated lump-sum payments made at the time that mortgages are fully paid out. The survey data for this year indicates that about 175,000 mortgages were repaid during 2020. About 65% of mortgage retirements involve a lump-sum payment, averaging about $60,000. Combining these factors, the total amount of these payments would be about $7 billion per year.

### *The Burden of Indebtedness*



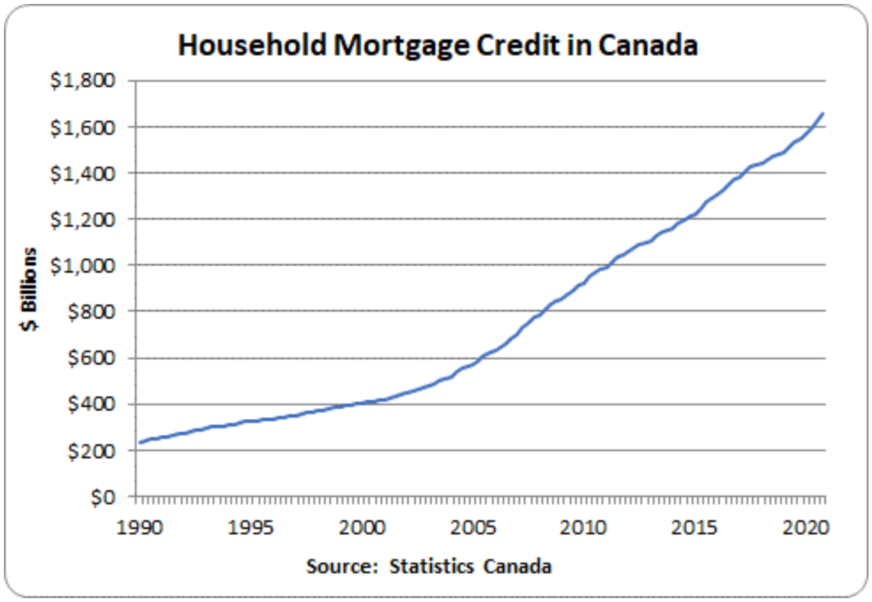

Canadians have become much more indebted.[4] The ratio of household debt to disposable income rose sharply from 2001 to 2009. The ratio then increased gradually for about a half decade, then rose sharply during 2016, with a further small rise since then. The ratio fell by a large amount during the second quarters of 2020, and by smaller amounts during the third and fourth quarters, due to a rise in incomes that resulted from income supports. From the first quarter of 1990 up to the fourth quarter of 2020, household debt expanded from $356 billion to $2.45 trillion, an annualized growth rate of 6.5%.



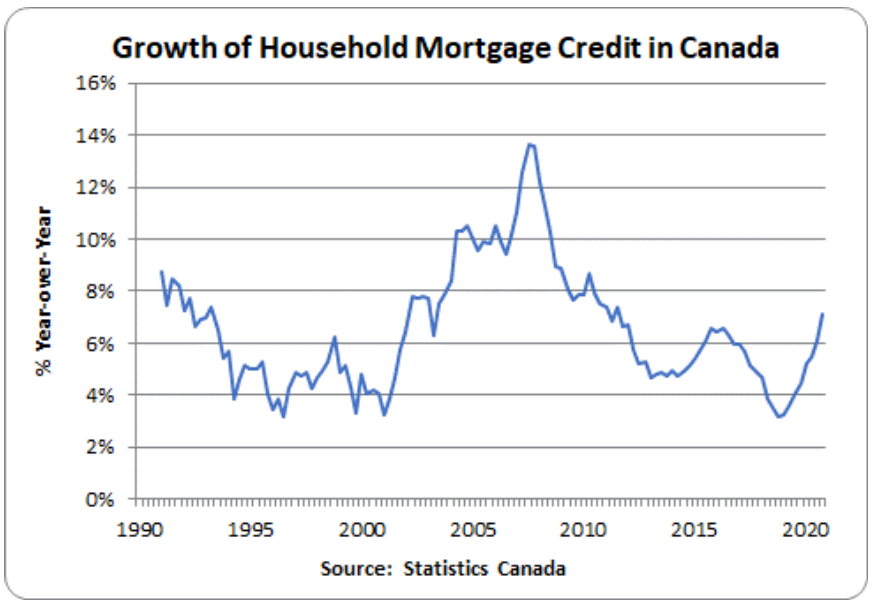

However, the expansion of indebtedness has been matched by growth of assets: The most recent ratio of households' debts to assets (16.3%) is virtually equal to the long-term average (16.7% for the period shown in this chart). The ratio has improved (fallen) slightly during the past decade.

[4] This section includes Statistics Canada data up to the fourth quarter, which was released on March 12.

Mortgage credit is the largest component of household debt (67.7%) and over the long term has accounted for a corresponding share of the growth. Total household mortgage credit rose from $234 billion at the start of the period to $1.66 trillion as of the fourth quarter of 2020 (an average rate of 6.6% per year).[5]




Rates of growth of mortgage credit have varied significantly over time. For the five years, up to 2008-Q3, mortgage credit expanded by an average of 11% per year. During the past five years (to 2020-Q4) the growth rate was 5.1%. For the past year, the growth rate was 7.1%.




Further commentary on the growth of mortgage credit, including the factors that

[5] This data is estimated by Statistics Canada (table 38-10-0234-01) and differs from the data on total residential mortgage credit that is published by the Bank of Canada (BoC, via StatsCan table 10-10-0129-01). The Bank of Canada includes residential mortgage debt that is owed by non-households. As well, this data may not capture mortgage debt that is owed to alternative lenders that are not included in the Statistics Canada and Bank of Canada surveys. The estimates of mortgage indebtedness that are generated from our consumer surveys differ in that they cover only mortgage debt related to owner-occupied principal residences and therefore exclude investment properties and second properties. On the other hand, our estimates may include mortgages owed to alternative lenders. For yearend 2020, our survey yields an estimate that outstanding residential mortgage credit for owner-occupied principal residences totals $1.59 trillion (including HELOCs).

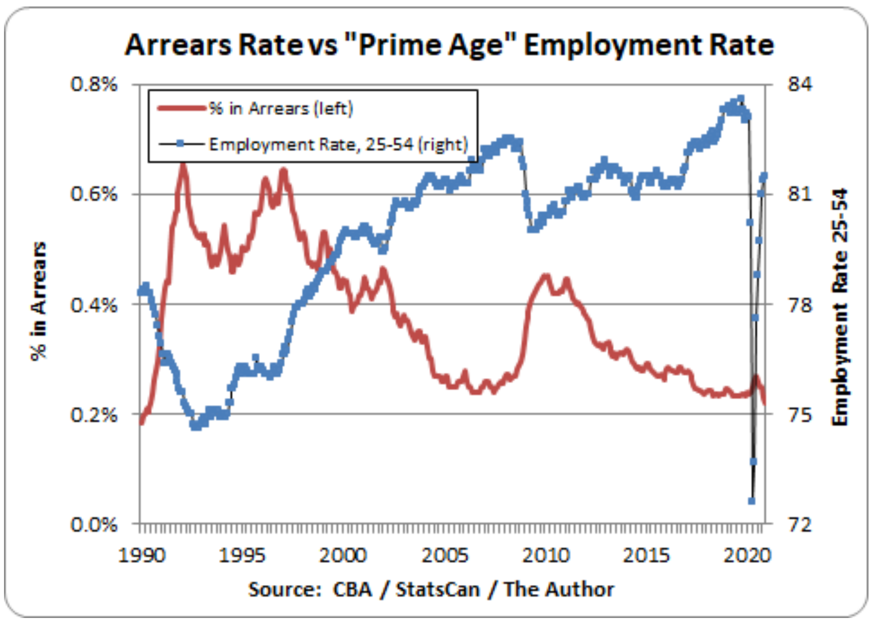
drive growth, is contained in section 5.0 of this report.

Non-mortgage debt has tended to grow at similar rates over long periods of time. However, during the past year (up to the fourth quarter of 2020), these non-mortgage debts have actually contracted (by 1.5%) while mortgage debt expanded by 7.1%. Interpretation of this change includes at least three major events:

- Home buying is currently one of the strongest parts of the economy, resulting in increased mortgage lending.
- Income supports from government have helped consumers reduce their debts.
- Some consumers are restructuring their debts (as is discussed in the later section on equity takeout), borrowing against their homes to replace other debts that have higher interest rates.

*Mortgage Arrears*

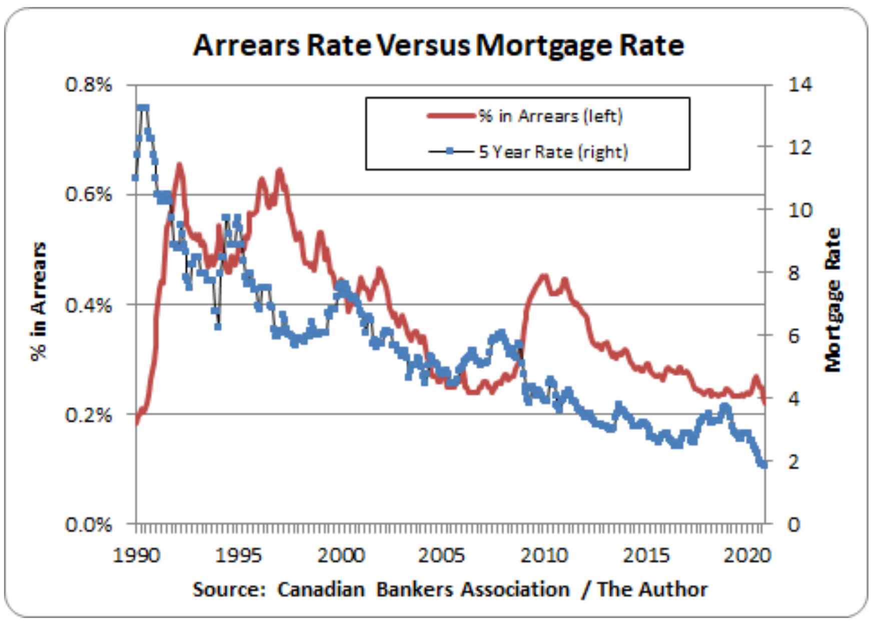
Data on mortgage arrears from the Canadian Bankers Association, covering 10 major banks, shows that a very small percentage of Canadian mortgage holders are behind on their payments (this data shows mortgages that are three or more months in arrears). As of November 2020, the arrears rate of 0.22% (1-in-427 borrowers) is very low in historic terms (lower rates were seen only at the start of the data set).




In Canada, most mortgage defaults are due to reduced ability to pay, especially including job loss, but also income reductions due to reduced hours or reduced hourly pay rates. Marital breakdown can also reduce ability to pay. The chart above illustrates the importance of changes in the employment situation. It contrasts arrears rates with the Canadian "employment rate" (the percentage of adults in the "prime working ages" of 25 to 54 who are employed).[6] This data has

[6] The design of this chart has been changed compared to earlier editions: Previously the "all ages" employment rate was shown. However, the all ages employment rate has drifted downward because more people have reached their retirement ages, and therefore the data has shown a distorted picture of the evolving situation for people who want to work. This data shows that during the past few years, an exceptionally strong employment situation has resulted in an exceptionally low arrears rate.

shown very clearly that changes—up or down—in the employment rate are followed in a few months by changes in the arrears rate (in the opposite direction). That relationship was disrupted last spring: We might have expected that the very sharp drop in the employment rate that was caused by COVID-19 would have been followed a few months later by an equally sharp rise in the arrears rate. There was only a small rise in the arrears rate because of emergency policies, including income supports provided by the federal government as well as payment deferrals that were agreed to by lenders, with the consent of financial regulators. The most recent data point in this chart is for November 2020. There might be further surprises in the arrears data this year, because the deferrals have virtually all ended and meanwhile employment has not completely recovered. Another consideration is that the employment losses have been highly concentrated in low-wage occupations: Homeowners tend to have higher incomes and their employment situations have often been less affected by COVID-19. Furthermore, with exceptionally low interest rates and very strong housing markets across Canada, mortgage holders who have trouble with their payments will often be able to solve their problems by selling (a solution that is far from ideal, but is certainly preferable to losing a home due to a mortgage default). These issues have been explored in greater detail in the series of five special surveys that were conducted by Mortgage Professionals Canada from July to January. The reports can be found here:
https://mortgageproscan.ca/membership/resources/covid-19-consumer-reports




Mortgage defaults can also be caused by unaffordable rises in mortgage costs. Contrasting the arrears rate with mortgage interest rates hints that there is a relationship: Over the period shown in this chart, interest rates trended downward and so did the arrears rate. But in this chart there are several major episodes in which the relationship is "wrong," including the late 1990s, when interest rates were falling and the arrears rate was rising. A rise in interest rates that began in July 2017 was not followed by a material change in the arrears rate (in fact, the arrears rate fell fractionally). Most recently, the sharp drop for interest rates during 2020 did not have a material effect on arrears. This data confirms that changes in the employment situation and incomes (the ability to make payments) are much more important than movements of interest rates (the amounts of the payments).

Statistical analysis (looking at the combined effects of interest rates and the employment situation) has shown repeatedly that the employment situation is much more important than mortgage interest rates. This is because a problem with increased mortgage costs can usually be solved if the borrower has a steady income (for example, rescheduling payments by extending the amortization period), whereas problems caused by the loss of a job are more difficult to address.

### *Types of Mortgage Representatives Consulted*

Mortgage holders were asked from which type of representative they obtained their current mortgage on their primary residence. For all current mortgages on homes, 55% were obtained from a bank (in the last column of data in the next table). Mortgage brokers had a 31% share, credit unions were the source for 9% of these mortgages, followed by 4% from life insurance or trust companies and just 1% from an "other" source. For recent homebuyers (the first column of data), 54% of mortgages were obtained from banks, 40% from mortgage brokers, 3% from credit unions, just 3% from life insurance and trust companies, and none was reported for "other" this year. For renewals and refinances, a surprise in the data was a sharp rise in the share for credit unions (to 14%, from 7% in 2019). Could this be partly due to the federally mandated mortgage stress tests? (Provincially regulated credit unions are not subject to the federal guideline that requires stress testing of uninsured mortgages.) Half of renewals occurred through banks (51%) and one-third via mortgage brokers. Life insurance and trust companies, and "other," were negligible sources for renewals (combining for just 2%).

Measured as a share of total mortgage principals, for purchases during 2020, banks account for 55% and mortgage brokers for 40%. The other categories of mortgage professionals account for 5%.

*Table 2-5*
*Consumers' Use of Mortgage Representatives*

| *Type of Mortgage Representative* | *Purchase During 2020* | *Renew or Refinance During 2020* | *Not Active During 2020* | *All Mortgage Holders* |
|---|---|---|---|---|
| Mortgage Representative from a Canadian Bank | 54% | 51% | 55% | 55% |
| Mortgage Broker | 40% | 34% | 30% | 31% |
| Mortgage Representative from a Credit Union | 3% | 14% | 9% | 9% |
| Mortgage Representative from a Life Insurance or Trust Company | 3% | 1% | 4% | 4% |
| Other | 0% | 1% | 2% | 1% |
| Total | 100% | 100% | 100% | 100% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.
Note: Totals may not add to 100% due to rounding.

## 3.0 Financial Parameters

### *Interest Rates*

The consumer survey collected data on mortgage interest rates for current mortgage holders. At the end of 2020, the average mortgage interest rate for all borrowers is 2.6%, which is a substantial drop from 3.14% at the end of 2019.

Very few residential mortgages in Canada have high interest rates. In this survey, only 2% of existing mortgages have interest rates that exceed the 4.79% interest rate that has been used as the benchmark in the mortgage stress tests since August 2020. For the entire year, the average of the benchmark rate was 4.95%.

The next table looks at average mortgage interest rates by type of mortgage, for all mortgages and for three subsets: mortgages for homes purchased during 2020, renewals during this year and mortgages for which there was neither an initiation nor renewal. This survey data shows that for mortgages that were initiated or renewed during 2020, interest rates are even lower than the average for all outstanding mortgages (at 2.32% for purchases during the year and 2.29% for renewals).

The author's opinion/estimate is that for all of 2020, the average typical advertised rate for five-year fixed-rate mortgages was 2.28% and for variable/adjustable rate mortgages the average was 2.18%. At yearend, the opinion/estimates were 1.65% for fixed rates and 1.35% for variable/adjustable rate mortgages. As of March 5, the estimates are 1.9% and 1.3%.

***Table 3-1***
***Average Mortgage Interest Rates***

| *Activity During 2020* | *Mortgage Type* | | | *All Types* |
|---|---|---|---|---|
| | *Fixed Rate* | *Variable or Adjustable Rate* | *Combination* | |
| Purchases During 2020 | 2.37% | 1.93% | 2.86% | 2.32% |
| Renewals During 2020 | 2.36% | 1.92% | 2.25% | 2.29% |
| Not Active During 2020 | 2.77% | 2.44% | 3.06% | 2.71% |
| All Mortgages | 2.66% | 2.33% | 2.88% | 2.60% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.

For buyers during 2020, 5% did not take a mortgage. For buyers who did take a mortgage, the average principal amount was $435,000. For renewals during the year, the average remaining principal was $245,000.

The survey also asked those who have renewed a mortgage what the interest rate was prior to renewal, and those rates have been compared to the mortgage borrower's current rates. The results are summarized in the next table. It shows that, among borrowers who renewed a mortgage during 2020, most people experienced reductions in their interest rates (84%), and small minorities had either no change in their rate (7%) or had an increase (9%). On average, renewal resulted in a 0.67-point reduction in mortgage interest rates. Combining various data from the survey, people who renewed mortgages during the year saw their annual interest costs fall by an average of $1,500 (this calculation includes all renewers, whether they saw an increase or decrease in their interest rates). Changes in actual mortgage payments will depend on choices made (some will have decided to use some of the interest savings to increase the amounts of principal they repay). Among mortgage borrowers who renewed during 2020, 33% report that they are paying more than required.

*Table 3-2*
*Changes in Mortgage Interest Rates for Mortgages Renewed During 2020*

| *Change in Interest Rate* | *Fixed Rate* | *Variable or Adjustable Rate* | *Total* |
|---|---|---|---|
| % with Rate Decreased | 85% | 76% | 84% |
| % with Rate Unchanged | 6% | 12% | 7% |
| % with Rate Increased | 9% | 12% | 9% |
| Total | 100% | 100% | 100% |
| Average Change in Interest Rate (percentage points) | -0.69 | -0.58 | -0.67 |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.

### *Mortgage Rate Discounting*

As was reported earlier, for new homes purchased during 2020, the average mortgage interest rate was 2.32%. During 2020, the "posted rate" for five-year terms averaged 4.95%.[7] The much lower actual rates found by the survey confirm that there is a substantial amount of discounting in the mortgage market.

This section uses the survey data to generate an estimate of the extent of discounting.

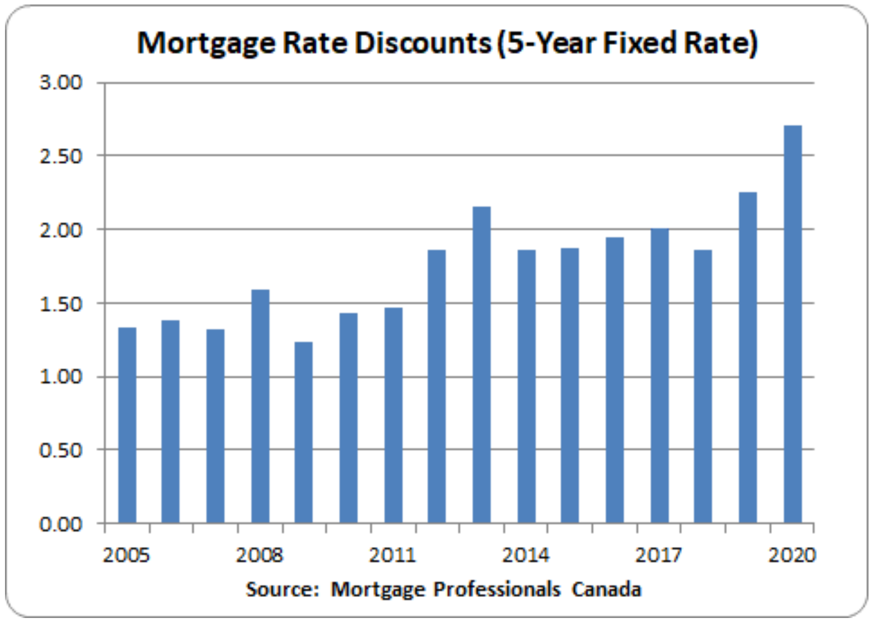
The study group includes a wide range of mortgages, including a range of lengths of term to renewal, fixed-rate versus variable-rate mortgages, and mortgages that have been originated over a prolonged period. This results in a wide range of mortgage rates. In order to produce a

[7] Source: Data on posted rates are obtained from the Bank of Canada "conventional mortgage" rates (estimated as of each Wednesday), averaged by the author.

meaningful summary of recently transacted interest rates, one subset of the study group was selected for further analysis:

- Mortgages that were initiated, renewed or refinanced during 2020.
- With fixed rates, rather than variable rates.
- With five-year terms.

For this group of mortgage borrowers:




- The average mortgage interest rate is 2.25%. In contrast, the average posted five-year mortgage rate over the same period was 4.95%. Based on this data it appears that Canadians negotiated mortgage rate discounts averaging 2.70 percentage points (for five-year terms). This is the highest average discount found in the history of this survey. It confirms that, increasingly, the banks' posted rates are not being set in reference to the actual marketplace.
- Within this subset of the database, the highest interest rate reported was 3%.

### *Future Mortgage Renewals*

Each year, about one-fifth of residential mortgages are renewed (an expected total of almost 1.2 million this year).[8] This section of the analysis looks at the current interest rates for mortgages, segmented by the anticipated periods of renewal, to draw tentative conclusions on future changes to mortgage interest rates when they are renewed. The data is summarized in the next table.

[8] Not all existing mortgages will be renewed, because they will be fully repaid by the end of the current mortgage term: The survey data indicates that 8% of mortgage holders (about 470,000) expect that they will not renew their mortgages. During 2020, about 175,000 mortgages were fully paid off. During the next five years about 150,000 will be paid off each year.

For the mortgages that are expected to be renewed this year, the current mortgage interest rate averages 2.74%. At the time of writing, interest rates are changing rapidly. At this time, typical "special offer" rates from major lenders are still in the area of 1.9% for five-year, fixed-rate mortgages. For five-year variable rate mortgages, a typical "special offer" rate is 1.3% (or even lower).

Looking at the distribution of mortgages rates for borrowers who expect to renew in the coming year, more than one-half (55%) have a current interest rate of 2.5% or higher, and therefore based on currently available rates, they might expect a notable reduction in their interest costs when they renew. Among those who expect to renew in the coming year, less than one-fifth (18%) have current interest rates below 2% and therefore their renewal might result in increased interest costs. About 200,000 to 225,000 mortgage borrowers are in this situation.

*Table 3-3*
*Current Mortgages Interest Rates, by Expected Period of Renewal, as of Yearend 2020*

| *Current Interest Rate* | *In the next 6 months* | *In the next 7 months to 1 year* | *In the next 1 to 2 years* | *In the next 2 to 3 years* | *In the next 3 to 5 years* | *I don't expect to renew this mortgage* |
|---|---|---|---|---|---|---|
| Below 1.5% | 1% | 4% | 3% | 3% | 7% | 10% |
| 1.5-1.74% | 8% | 7% | 5% | 4% | 11% | 6% |
| 1.75-2% | 5% | 10% | 3% | 6% | 21% | 10% |
| 2-2.24 | 8% | 16% | 5% | 11% | 10% | 17% |
| 2.25-2.49% | 18% | 12% | 9% | 11% | 10% | 7% |
| 2.5-2.74% | 20% | 14% | 26% | 13% | 14% | 20% |
| 2.75-2.99% | 10% | 13% | 17% | 12% | 10% | 15% |
| 3-3.24% | 7% | 5% | 9% | 12% | 9% | 4% |
| 3.25-3.49% | 6% | 2% | 7% | 14% | 3% | 0% |
| 3.5-3.74% | 3% | 6% | 6% | 8% | 4% | 2% |
| 3.75-3.99% | 5% | 2% | 3% | 4% | 0% | 0% |
| 4% and over | 9% | 9% | 5% | 3% | 1% | 9% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |
| Average Interest Rate | 2.73% | 2.74% | 2.78% | 2.83% | 2.34% | 2.50% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.
Note: Totals may not add to 100% due to rounding.

For those who experience increased rates, the impacts will depend, of course, on the circumstances. Combining the data on pending renewals with other survey responses (and focusing on a subset of borrowers who expect to renew this year):

- 30% indicate that they are currently paying more than required. Therefore, they have some capacity to reduce their future payments, if their interest rates increase. Among those with the lowest current interest rates (below 2.0%), 28% are currently paying more than required.

- Almost three-quarters (72%) of the mortgage borrowers who expect to renew during the coming year are currently in a term of five or more years. The passage of time should have given most of these people more capacity to handle higher mortgage interest rates due to:
    - Substantial reductions in their mortgage principals through their regular payments as well as any additional efforts they have made (lump-sum payments and/or voluntary increases in monthly payments), meaning that the future interest rate will be applied to a smaller amount of principal.
    - Income growth. During the past 23 years, the average weekly wage in Canada (for full-time employees) has increased by 2.7% per year, or 14.4% per five-year period.
- There is a small minority of mortgage borrowers who will renew during the coming year, whose current mortgage term is less than five years (and therefore may have seen limited income growth) who currently have low interest rates (below 2%) and therefore may see substantial rises in their mortgage costs. Combining various data from this survey, this group represents about 5% of mortgage holders who will renew during the current year. This at-risk group amounts to about 1% of all mortgage holders (about 60,000 out of 6.08 million borrowers).
- Some of the people who experience higher rates in future have already renewed their mortgages at least once, and some of these people previously were able to pay interest rates that were higher than they may face on their next renewal. The survey data suggests that among people who renew mortgages during 2021, one-quarter will be in that situation.

Higher interest rates will cause some degree of additional stress for some mortgage renewers this year. Based on the survey data, it appears that about one-fifth of renewers (200,000 to 225,000) will see increased interest rates. Based on other survey data, a large majority of them will be able to make adjustments and continue to fully meet their mortgage obligations.

For borrowers who are unable to afford their higher mortgage costs upon renewal (which the data suggests may be a small minority), some may be able to renegotiate (lengthen) their repayment schedules, to reduce their required payments to levels that they can afford. This would be an outcome that they would not feel good about, but it would certainly be preferable to defaulting on their mortgages (being forced to sell their home or having it repossessed by their lender). Whether these best-in-the-circumstances outcomes can be arranged will depend on multiple factors, including the borrowers' circumstances, the attitudes of the lenders, and mortgage-related regulations established by the federal and provincial governments.

Data shown earlier on mortgage arrears hints very strongly that mortgage borrowers who have faced increased mortgage costs during the past few years have largely been able to successfully adjust. The arrears rate remains exceptionally low, at just 0.22%. It should be noted that this data from the Canadian Bankers Association includes data from major mortgage lenders. It excludes data from other lenders, some of which may have mortgage portfolios that contain higher risks and may have higher arrears rates.

### *Housing Equity*

The consumer survey provides data that can be used to generate estimates of home equity in Canada: The equity amounts are calculated by comparing the current value of owner-occupied homes in Canada (as estimated by the owners) to the associated mortgages and HELOCs.

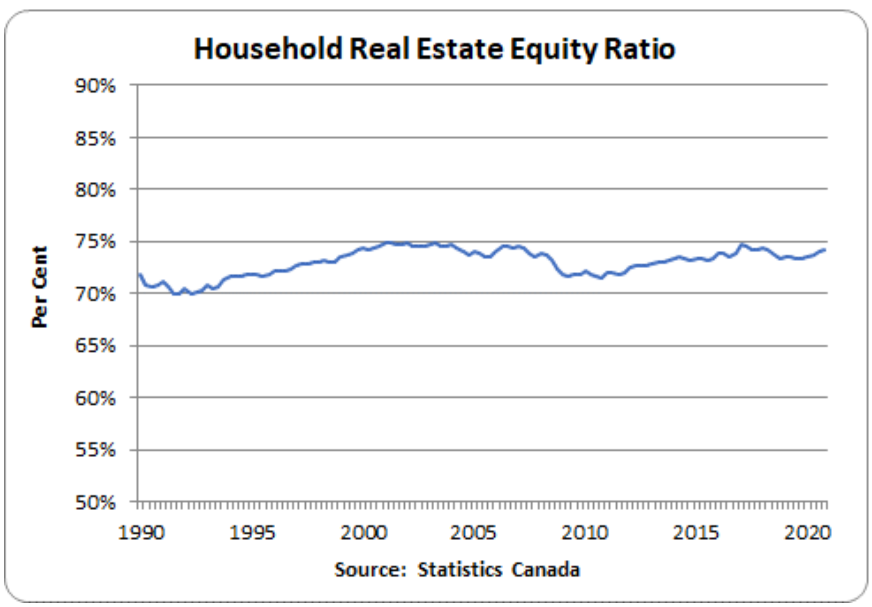
The next table shows the estimates of equity positions for four groups of homeowners. In the current survey, the overall equity position is estimated at 72.7%. (Conversely, the average loan-to-value ratio is just 27.3%.) In other words, for every $1,000 in house value in Canada, there is about $273 of debt (mortgage and/or HELOC) and $727 of homeowner equity. The data for yearend 2020 indicates that out of 10.01 million homeowners in Canada, about 9.1 million (91%) have 25% or more equity. On the other hand, about 200,000 (2% of homeowners) have less than 10% equity.

Two main findings have been consistent across these annual surveys:

- Prior surveys have consistently found that at least 85% of homeowners have equity ratios of 25% or higher. (This includes owners with housing-related debt and those with no housing-related debt.) This year, the figure is 91%.
- Even among the 6.08 million homeowners who have mortgages (with or without a HELOC), 86% have equity ratios of 25% or higher.

Combining data from the survey, the total value of owner-occupied primary residences in Canada is estimated at $5.81 trillion. Associated finance (mortgages and HELOCs) on these dwellings is estimated to total $1.59 trillion. In consequence, as of the end of 2020, total homeowner equity in Canada is estimated at $4.22 trillion.

| *Table 3-4*<br>*Equity Ratios for Canadian Homeowners, as of Yearend 2020* | | | | | |
|---|---|---|---|---|---|
| *Equity as Percentage of Home Value* | *HELOC only* | *Mortgage only* | *Mortgage and HELOC* | *Neither Mortgage Nor HELOC* | *All Home-owners* |
| Negative Equity | 0% | 0% | 0% | 0% | 0% |
| 0-4.99% | 0% | 1% | 3% | 0% | 1% |
| 5-9.99% | 0% | 1% | 2% | 0% | 1% |
| 10-14.99% | 0% | 2% | 0% | 0% | 1% |
| 15-24.99% | 0% | 11% | 6% | 0% | 6% |
| 25-49.99% | 0% | 34% | 31% | 0% | 20% |
| 50-74.99% | 4% | 29% | 32% | 0% | 18% |
| 75-99.9% | 92% | 21% | 27% | 0% | 16% |
| 100% | 4% | 0% | 0% | 100% | 36% |
| Total | 100% | 100% | 100% | 100% | 100% |
| Number of Households | 290,000 | 4,360,000 | 1,720,000 | 3,640,000 | 10,010,000 |
| 25% or more | 100% | 84% | 89% | 100% | 91% |
| Average Equity Ratio | 92% | 56% | 58% | 100% | 72.7% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.<br>Note: Totals may not add to 100% due to rounding. | | | | | |




The estimates of home equity that have been generated by these surveys have been quite similar to estimates published by Statistics Canada. As is shown in the chart to the right, Statistics Canada estimates an equity ratio of 74.2% as of the fourth quarter of 2020. The Statistics Canada estimates have not shown much variation over time (as is the case for our estimates). These estimates from Statistics Canada include all real estate, residential and non-residential, and may include vacation and investment properties, whereas the estimates developed in this report are for owner-occupied principal residences only.

Another view of our survey data looks at how equity ratios vary according to the period of home purchase. As shown in the table below, for homes purchased in the 1990s or earlier, the average equity ratios are close to 100%. For the most recent purchases (2018 to 2021[9]), the average ratio is 49%. Even within that group, 78% have 25% or more equity. For all of the homes purchased prior to 2010, virtually all have 25% or more equity, and 67% have 100% equity.

*Table 3-5*
*Equity Ratios for Canadian Homeowners,*
*By Period of Purchase, as of Yearend 2020*

| *Equity as Percentage of Home Value* | *Before 1990* | *1990s* | *2000-2004* | *2005-2009* | *2010-2013* | *2014-2017* | *2018-2021* | *All Periods* |
|---|---|---|---|---|---|---|---|---|
| Negative Equity | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| 0-4.99% | 0% | 0% | 0% | 0% | 0% | 2% | 2% | 1% |
| 5-9.99% | 0% | 0% | 0% | 1% | 0% | 1% | 2% | 1% |
| 10-14.99% | 0% | 0% | 0% | 0% | 0% | 1% | 2% | 1% |
| 15-24.99% | 0% | 0% | 1% | 3% | 2% | 5% | 16% | 6% |
| 25-49.99% | 0% | 0% | 2% | 8% | 11% | 26% | 40% | 20% |
| 50-74.99% | 2% | 3% | 15% | 18% | 25% | 20% | 15% | 18% |
| 75-99.9% | 23% | 14% | 14% | 20% | 25% | 12% | 7% | 16% |
| 100% | 75% | 83% | 67% | 50% | 37% | 33% | 17% | 36% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | | | | | | | | |
| 25% or more | 100% | 100% | 99% | 97% | 98% | 91% | 78% | 91% |
| Average Equity Ratio | 96% | 98% | 89% | 83% | 79% | 66% | 49% | 72.7% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.
Note: Totals may not add to 100% due to rounding

### *Utilization of HELOCs*

Among Canadian homeowners who have HELOCs, not all of the available funds have been accessed. The survey data indicates that the average approved HELOC is $166,000, but the actual amount owed averages about $47,000. Based on these average amounts, and applied to an estimated 2.01 million Canadian households that have HELOCs, it is estimated that the total

[9] When the survey was conducted, a small number of consumers indicated that they had purchased their home in 2021.

approved amount is $333 billion, while the total amount owed is $94 billion. As such, HELOC holders have, on average, accessed 28% of the available amounts. The survey found that 27% of HELOC holders do not currently owe anything on their HELOC. On the other hand, 6% have fully utilized the available HELOC.

| *Table 3-6*<br>*Percentages of Available HELOCs Advanced, as of Yearend 2020* | |
|---|---|
| *% Advanced* | *% of HELOC Holders* |
| 0% | 27% |
| 0.1% to 10% | 12% |
| 10.1% to 25% | 10% |
| 25.1% to 50% | 17% |
| 50.1% to 75% | 16% |
| 75.1% to 90% | 7% |
| 90.1% to 99.9% | 5% |
| 100% | 6% |
| Total | 100% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author. | |

### *Equity Takeout*

The survey data indicates that 7.7% of all homeowners (770,000 out of 10.01 million homeowners) took out equity from their homes within the past 12 months, by increasing the amount of the mortgage principal and/or borrowing via a HELOC. This is slightly lower than in prior years: The 2019 estimate was 8.6%.

The average amount taken out this year is estimated at $96,800, indicating that the total amount taken out was $74.5 billion. While there as a reduction in the number (and share) of consumers who took out equity this year, there was a large rise in the average amount (from $72,000 last year). In consequence, in dollar terms, equity takeout this year is a substantial increase from $62 billion a year earlier.

Out of the $74.5 billion, $46.4 billion was via increases to mortgage principals and $28.1 billion was via HELOCs.

Those who took out equity were asked what they used the money for. Starting in the 2019 survey, a new category of purpose has been investigated: “To gift or lend money to a family member to purchase a home.”

Some people indicated more than one purpose. Based on the responses, it is estimated that:

- $18.4 billion (25%) of the money would be used for debt consolidation or repayment (versus $14.1 billion a year ago).
- $17.1 billion (23%) would be used for renovation or home repair (versus $23.8 billion).
- $14.1 billion (19%) would be used for purchases, including spending for education (versus $7.3 billion).
- $18.1 billion (24%) would be used for investments (versus $11.4 billion).
- These responses indicate that a surprisingly small amount of equity takeout (just $2.8 billion, or 4%) is to gift or lend money to a family member to purchase a home (versus an even smaller $1.4 billion a year earlier). The survey responses indicate that the number of people withdrawing equity for this purpose was small (in the area of 35,000). The estimates for 2019 and 2020 are both based on quite small sample numbers and are subject to margins-of-error. Therefore, the change that is shown for 2020 versus 2019 might not be statistically reliable. The interesting finding in this data is the orders of magnitude of the estimates, which indicate that this activity isn't very large. The survey data indicates that there were about 400,000 first-time home purchases during 2020, but about 35,000 cases where parents withdrew equity to assist the purchases. However, a later discussion on sources of down payments looks more broadly and finds a higher proportion of first-time buyers received assistance from other family members (in the area of 125,000 to 150,000, which comes from the parents' home equity or from other resources).
- $4.0 billion (6%) is for "other" purposes (versus $3.6 billion).

Further analysis found that takeout was most frequent among owners who purchased about a decade ago (during 2010 to 2013), and least frequent for those who purchased before 2000.

***Table 3-7***
***Percentages of Homeowners Taking Out Equity During the Past Year, by Period of Home Purchase***

| *Period of Purchase* | *% Taking Equity* |
|---|---|
| Before 1990 | 5% |
| 1990s | 4% |
| 2000-2004 | 8% |
| 2005-2009 | 9% |
| 2010-2013 | 12% |
| 2014-2017 | 9% |
| 2018-2021 | 8% |
| All Periods | 7.7% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.

The next table looks at equity takeout depending on current equity positions (that is, the position they have after the takeout). The first column of data shows that among homeowners with low equity ratios, a few did take out equity during the past year. But, the second column shows that, since most owners have large amounts of home equity, most of the people who do take out equity still have large equity positions: 17% of owners taking out equity have equity positions below 25%, about one-quarter (27%) have positions in the range of 25-49,9%, and 56% have 50% or more equity. Out of 770,000 who took out equity, about 130,000 have an equity ratio below 25% and 640,000 have 25% or more equity.

*Table 3-8*
***Equity Takeout During the Past Year, by Equity Positions***

| *Equity as Percentage of Home Value* | *% Taking Out* | *% of Total Who Took Equity* |
|---|---|---|
| Less than 10% | 6.9% | 1% |
| 10-14.99% | 0.0% | 0% |
| 15-24.99% | 25.5% | 15% |
| 25-49.99% | 13.7% | 27% |
| 50-74.99% | 14.0% | 26% |
| 75-100% | 4.3% | 30% |
| Total | 7.7% | 100% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.
Note: Totals may not add to 100% due to rounding.

### *Current Debts Versus Original Purchase Prices*

A recent conversation raised an interesting question: How many of us, as the values of our homes have risen, have taken out equity very aggressively, to the extent that we owe more than the original purchase price? Well, it turns out that this is quite rare. The next table provides the estimates. As shown, less than 3% of Canadian homeowners (about 275,000) currently have financing that exceeds the original purchase prices of their homes. For the small number of owners whose current financing exceeds the original purchase price, all have positive housing equity: Among this group, the average current equity ratio is 40%, meaning that the amount they owe is, on average, 60% of the current property value.

Most of the homeowners in this group (165,000 out of 275,000) purchased their homes during the decade 2000-2009. Within that cohort of buyers, 7% have aggressively refinanced and owe more than the original purchase prices. Even so, most of them (three-quarters) have current financing that is less than one-half of the original purchase prices. Among owners who purchased in 2010 or later, less than 2% owe more than the original purchase prices. For those who purchased before 2000, the share is less than 1%.

| *Table 3-9*<br>*Ratios of Current Home Financing Versus Original Purchase Prices,*<br>*By Period of Purchase, as of Yearend 2020* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Ratio* | *Before 1990* | *1990s* | *2000-2004* | *2005-2009* | *2010-2013* | *2014-2017* | *2018-2021* | *All Periods* |
| 0% | 75% | 83% | 67% | 50% | 37% | 33% | 17% | 45% |
| 0.1-49.9% | 13% | 9% | 10% | 25% | 30% | 15% | 12% | 17% |
| 50-74.9% | 10% | 4% | 8% | 11% | 22% | 26% | 33% | 19% |
| 75-99.9% | 0% | 4% | 8% | 9% | 11% | 22% | 39% | 17% |
| 100% or more | 2% | 0% | 7% | 6% | 0% | 4% | 1% | 3% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Average Ratio | 11% | 6% | 25% | 27% | 30% | 43% | 58% | 34% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.<br>Note: Totals may not add to 100% due to rounding. | | | | | | | | |

### *Home Renovations*

Recent editions of the survey have investigated renovation activity by homeowners. The first table below indicates that 49% of homeowners have renovated their current home (approximately 4.9 million out of 10.01 million homeowners). Not surprisingly, the share is highest for people who have been in their homes for the longest periods of time.

| *Table 3-10*<br>*Percentages of Homeowners Who Have Renovated Their Current Homes,*<br>*by Period of Purchase* | |
|---|---|
| *Period of Purchase* | *Percent of Homeowners Who Have Renovated* |
| Before 1990 | 84% |
| 1990-1999 | 71% |
| 2000-2004 | 64% |
| 2005-2009 | 55% |
| 2010-2013 | 50% |
| 2014-2017 | 38% |
| 2018-2021 | 32% |
| Total | 49% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author. | |

Detailed data indicates that 20% of homeowners (or approximately 2 million out of 10.01 million owners) renovated their home between 2018 and 2021. Among the owners who purchased their home during 2018 to 2021, 32% have renovated the homes.

The survey data indicates that homeowners who have renovated recently spent an average of $37,000. For the 2 million renovators, the total expenditure during the three-year period totaled about $72 billion,[10] or $24 billion per year.

*Table 3-11*
*Average Expenditures for Owners Who Renovated During 2018 to 2021, by Period of Purchase*

| *Period of Purchase* | *Average Expenditure* |
|---|---|
| Before 1990 | $50,000 |
| 1990-1999 | $42,000 |
| 2000-2004 | $40,000 |
| 2005-2009 | $38,000 |
| 2010-2013 | $28,000 |
| 2014-2017 | $32,000 |
| 2018-2021 | $40,000 |
| Total | $37,000 |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.

The homeowners were asked which types of renovations were done (they could select as many items as applied, from a list of six). Most of the consumers indicated that they had completed more than one type of renovation.

[10] Statistics Canada reports much larger values for residential renovation (averaging $56 billion per year), but those figures cover a broader range of activity, including renovations on properties owned by contractors or investors, rental dwellings and vacation properties.

| *Table 3-12*<br>*Types of Home Renovations,*<br>*For Renovations During 2018 to 2021* | | |
|---|---|---|
| *Type of Renovation* | *% Mentioning* | |
| | *All Purchase Periods* | *Purchased 2018-2021* |
| Maintenance and Repair (e.g. window or door replacement, landscaping, roof replacement, foundation repairs, plumbing or electrical repairs, etc.) | 63% | 55% |
| Expansion (e.g. finished basement or attic, addition of rooms or levels, etc.) | 26% | 22% |
| Energy Efficiency (e.g. energy-efficient lighting or insulation, addition of solar panels, etc.) | 36% | 24% |
| Cosmetic changes (e.g. painting, finishes, etc.) | 75% | 62% |
| Updates (e.g. kitchen, bathroom, landscaping, flooring, etc.) | 68% | 60% |
| Other | 3% | 3% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author. | | |

They were also asked about reasons for renovations (once again, selections were made from a list and more than one reason could be selected). By far, the most common reason was "personal preference." Increasing the value of the home was mentioned by a substantial minority. Safety and protecting the physical integrity of the home were each mentioned by about one-fifth of the renovators. Only a tiny minority indicated that the purpose was to create space that could be rented out.

| *Table 3-13*<br>*Reasons for Home Renovations, for Renovations During 2018 to 2021* | | |
|---|---|---|
| *Reason for Renovations* | *% Mentioning* | |
| | *All Purchase Periods* | *Purchased 2018-2021* |
| Increase the value of my home for resale | 39% | 47% |
| Add additional space for myself/my family | 20% | 20% |
| Add additional space to rent out a portion of the home | 2% | 2% |
| Upgrade the home for my personal preference | 78% | 76% |
| Necessary work for safety | 14% | 10% |
| Protect the physical integrity of the building | 20% | 15% |
| Other | 4% | 2% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author. | | |

### *Down Payments by First-Time Homebuyers*

According to our survey data, about 710,000 homes were purchased during 2020. This includes resales as well as newly built homes.[11] Of these, 55% were purchased by first-time buyers, or 400,000.

Starting with the fall 2014 report, this survey has explored down payments made by first-time buyers. In each report, we have calculated the percentage of down payments, segmented by the periods of purchase. The responses indicate that average down payment amounts have been relatively stable over time, at about 20% of the purchase prices, as is shown in the first column of data. The second column shows that among the most recent first-time buyers, fewer are making down payments of less than 20% (and therefore more are making down payments of 20% or more). This may be related to three events that have made insured mortgages less attractive, and thereby encouraged homebuyers to increase their down payments to more than 20%, to avoid mortgage insurance. Firstly, since 2012, mortgage insurance has no longer been allowed for mortgage amortization periods that exceed 25 years, and this caused a drop in the share with low down payments for the 2010-2013 period. Secondly, the stress test has applied to all insured mortgages since the fall of 2016, but the stress test for non-insured mortgages didn't start until the beginning of 2018. Thirdly, large increases in the cost of mortgage insurance took effect early in 2017.[12] The survey data also indicates that a small minority (4%) of first-time buyers make down payments equal to 100% of the purchase price.

*Table 3-14*
*Average Down Payment for First-Time Homebuyers,*
*by Period of Purchase*

| *Period of Purchase* | *Average % Down Payment* | *% With Down Payment of Less than 20%* |
|---|---|---|
| Before 1990 | 20% | 62% |
| 1990-1999 | 24% | 63% |
| 2000-2004 | 22% | 58% |
| 2005-2009 | 19% | 61% |
| 2010-2013 | 23% | 53% |
| 2014-2017 | 23% | 53% |
| 2018-2021 | 21% | 52% |
| Total | 21% | 58% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.

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[11] Data on resales from CREA and new construction from CMHC suggests a slightly lower number for total sales in 2020 (in the area of 675,000 to 700,000). Sales through other channels (resales conducted without the assistance of an agent, and property transfers between family members) might explain the difference.
[12] Effective March 17, 2017, the insurance premium rates increased as follows: For mortgages with loan-to-value ratios ("LTV") in the range of 80.1% to 85%, the premium increased from 1.8% to 2.8%; for LTVs from 85.1% to 90%, the premium rose from 2.4% to 3.1%; for LTVs from 90.1% to 95%, the premium rose from 3.6% to 4.0%. Premium rates also increased for LTVs of 80% or lower.

### *Sources of Down Payments by First-Time Homebuyers*

The survey has also investigated sources of the funds that first-time buyers have used for down payments. The survey listed six sources, plus an "other" category. Most first-time buyers use more than one source of funds: Less than half (46%) of first-time buyers used only one source. A further 35% used two sources and 19% used three or more sources. On average 1.9 sources have been used. For the most-recent first-time buyers (2018 to 2021), a slightly higher average number of sources (2.0) were used. The next two tables summarize the data on sources of down payments.

The first table looks at whether each source was used. The first column of data indicates that, consistently over time, a large majority of buyers has relied to some extent on their own savings, and therefore there have been few first-time buyers who did not bring any of their own savings: For all periods of first-time purchases, 84% of the buyers brought their own savings (thus, only 16% brought none). The survey data indicates that the share is even higher for the most recent buyers (2018 and later): In this group, 89% brought some of their own savings.

Deeper examination finds that for all periods of first-time purchases, 34% of the buyers obtained all of their down payment from their own savings. For the most recent buyers, the share is slightly higher, at 39%.

Looking at the next column of data, 25% used a gift from family members (again, for part of or all of the down payment) and the third column shows that 14% used a loan from a family member. These shares have tended to increase over time (however, as will be discussed shortly, the survey data indicates that this trend has been reversed for the most recent first-time buyers). The chief reason to expect a rising trend in support from family includes escalation of house prices, which results in larger required down payments and, at the same time, the parents might be more able to provide assistance, because of the considerable growth that has occurred in the value of the parental home. As well, because the time required to save for a down payment has lengthened (as is discussed in the next section), parents might be more anxious to help their children. The Bank of Mom and Dad is certainly playing a more important role, but the size of that role might not be as large as is sometimes believed.

- The data in this table shows that for the most recent buyers, the share who received gifts (28%) is lower than for the prior purchase period (39% for 2014-2017 purchases). There was also a small reduction in the share who received loans from family (to 14% from 15% for the prior purchase period).
- Some of these first-time buyers received both a loan and a gift from family. The survey data indicates that 33% of recent first-time buyers (or about 125,000 to 150,000 out of 400,000 buyers per year) got help from family. It was estimated earlier that in 2020 about 35,000 people took equity out of their homes to provide down payment assistance. This means that somewhere around 100,000 parents (or other family members) provided down payment assistance from their other financial resources.

- A small minority of first-time buyers get 100% of their down payment from family. For first-time purchases made during 2018 to 2021, the share is estimated at 5%, or about 20,000 to 25,000 per year.
- Only 11% of recent first-time buyers (less than 50,000 per year) got 50% or more of their down payment from family.
- Most recent first-time buyers (67%, or 250,000 to 275,000 out of 400,000 per year) received no down payment assistance from family.
- More than one-quarter of first-time buyers received part of their down payment via a loan from a financial institution, and similar shares take funds from RRSPs.

***Table 3-15***
***First-Time Buyers' Use of Down Payment Sources, by Period of Purchase***

| *Period of Purchase* | *Personal savings or co-buyer's personal savings* | *Gift from parents/ other family members* | *Loan from parents/ other family members* | *Loan from a financial institution* | *Loan from my employer* | *Withdrawal from RRSP (including Home Buyers' Plan)* | *Other* |
|---|---|---|---|---|---|---|---|
| Before 1990 | 87% | 15% | 17% | 32% | 1% | 9% | 5% |
| 1990s | 79% | 20% | 11% | 31% | 1% | 27% | 7% |
| 2000-04 | 78% | 21% | 10% | 32% | 3% | 34% | 2% |
| 2005-09 | 81% | 29% | 10% | 32% | 1% | 44% | 6% |
| 2010-13 | 87% | 35% | 18% | 28% | 9% | 38% | 3% |
| 2014-17 | 83% | 39% | 15% | 27% | 7% | 32% | 4% |
| 2018-21 | 89% | 28% | 14% | 27% | 5% | 30% | 4% |
| Total | 84% | 25% | 14% | 30% | 3% | 26% | 5% |

Source: Mortgage Professionals Canada survey, Yearend 2020; Analysis by the author.

The next table makes a different calculation: the percentages of the total dollar amounts that come from each of the sources. This data shows that support from family amounts to 14% of the total down payment for the most recent buyers (this includes 10% in the form of gifts and 4% in the form of loans). The 14% share is lower than for the prior purchase period, and is similar to the long-term average of 15%. In any event, help from family has consistently provided a relatively small minority of funds for down payments.

Loans from financial institutions have historically been important sources, although the share has been lower during the past decade than previously. For the most recent buyers, the share from financial institutions is 14%.

The share of down payments provided by withdrawals from RRSPs peaked more than a decade ago and has fallen for recent first-time buyers. This is because the maximum amounts allowed under the "Home Buyers' Plan" (which allows tax-free access to RRSP funds, starting in 1992) have not kept up with rising prices. In the 2019 federal budget, the withdrawal limit was raised to $35,000 per person from the prior $25,000.

*Table 3-16*
*Shares of Down Payment Funds for First-Time Homebuyers, By Source, by Period of Purchase*

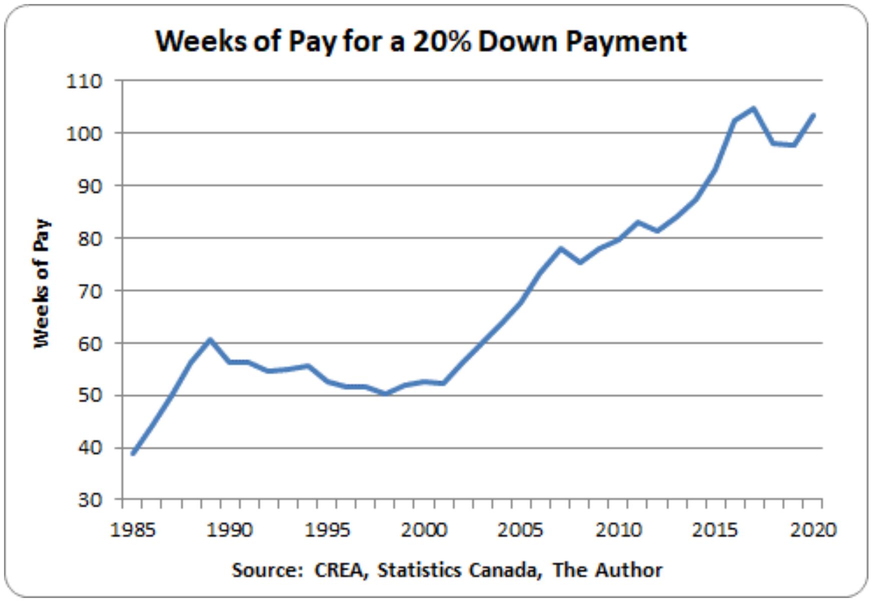
| *Period of Purchase* | *Personal savings or co-buyer's personal savings* | *Gift from parents/ other family members* | *Loan from parents/ other family members* | *Loan from a financial institution* | *Loan from my employer* | *Withdrawal from RRSP (including Home Buyers' Plan)* | *Other* | *Total* |
|---|---|---|---|---|---|---|---|---|
| Pre-1990 | 59% | 6% | 7% | 22% | 0% | 2% | 3% | 100% |
| 1990s | 50% | 8% | 4% | 22% | 0% | 12% | 5% | 100% |
| 2000-04 | 49% | 9% | 3% | 20% | 1% | 16% | 2% | 100% |
| 2005-09 | 46% | 11% | 1% | 21% | 0% | 17% | 4% | 100% |
| 2010-13 | 55% | 13% | 5% | 14% | 1% | 11% | 2% | 100% |
| 2014-17 | 52% | 16% | 3% | 14% | 1% | 11% | 2% | 100% |
| 2018-21 | 62% | 10% | 4% | 14% | 1% | 8% | 2% | 100% |
| Total | 54% | 10% | 5% | 19% | 1% | 9% | 3% | 100% |

Source: Mortgage Professionals Canada survey, Yearend 2019; Analysis by the author.
Totals may not add to 100% due to rounding.

### *The Rising Cost of Down Payments*

Previous editions of this report have discussed that deep reductions for interest rates have created "space" in which house prices could rise more rapidly than incomes, and still be affordable. That discussion is updated in the last section of this report.

A separate issue is that during the past two decades, the rapid rise in house prices has made it increasingly more difficult to save down payments. The chart explores this. It results from comparing the dollar amounts for 20% down payments (based on the average resale house price, reported by the Canadian Real Estate Association) versus average weekly earnings (as estimated by Statistics Canada's Survey of Employment, Payrolls and Hours). It now takes about twice as long to save for a down payment as it did two decades ago.



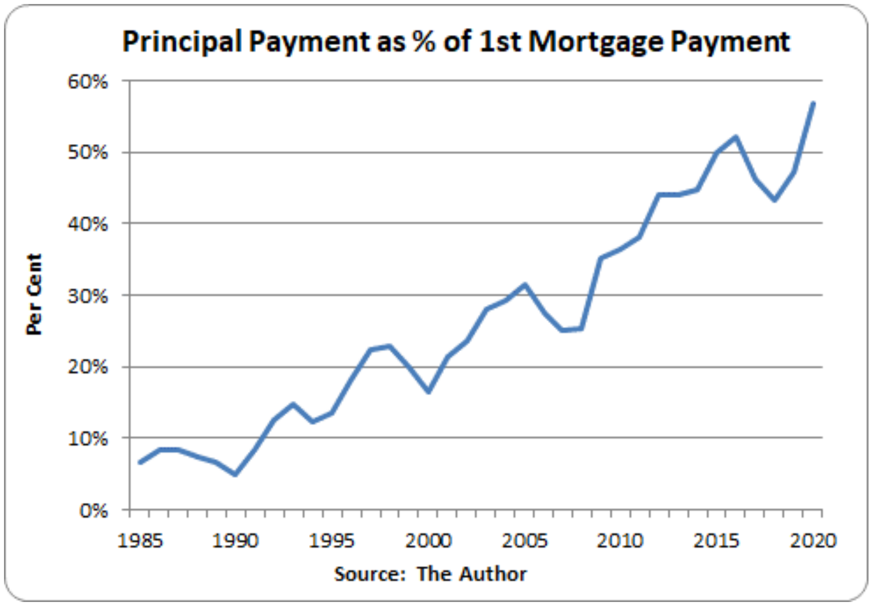

This is a simplistic presentation, as potential first-time homebuyers do not save all of their income (obviously). Moreover, most of them do not have average incomes or buy average-priced homes. In consequence, actual times required to accumulate down payments will vary. For many prospective first-time homebuyers, the time required will be longer than the periods shown, depending on individual circumstances.

Job creation is one of the two main drivers of homebuying activity (the other being interest rates and affordability). History shows that it takes time for jobs to actually result in purchases, because of the amount of time required to save for down payments. Higher house prices are causing those delays to become even more prolonged.

### *Homeownership as "Forced Saving"*

Mortgage payments include a blend of interest and repayment of principal. At the start of a mortgage, the blend between principal and interest depends on the interest rate (and, of course, on the amortization period). At lower interest rates, the monthly payments include a higher amount of principal repayment, as a percentage of the monthly payment.

During the past three decades, mortgage interest rates have trended downward, which has caused the mix to shift. At the 2020 average interest rate of 2.28%, 57% of the first payment is repayment of principal.[13]



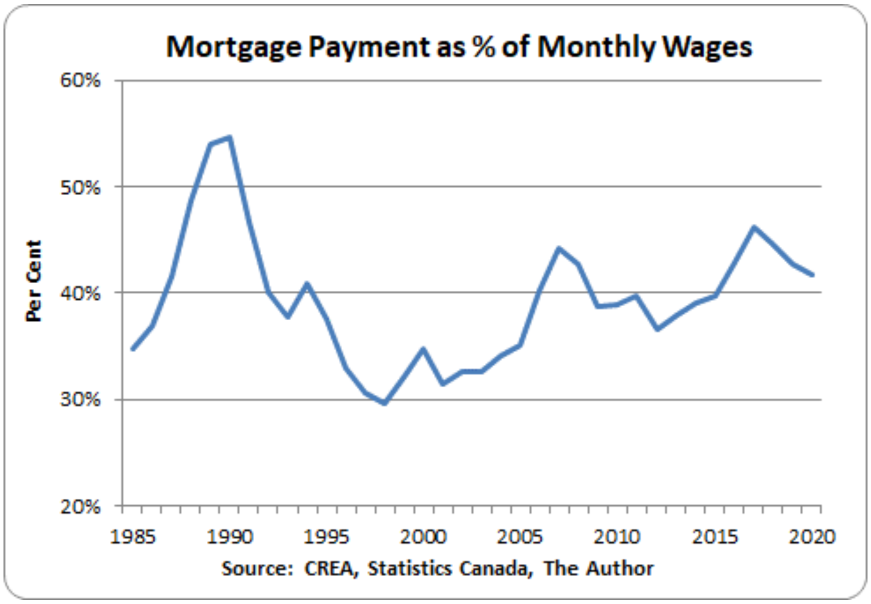

A set of charts below looks at how mortgage costs have evolved over time, and the division of those costs between interest and principal repayment—as of the very first mortgage payment. In these charts:

- It is assumed that the mortgage amount is 80% of the average resale house price.
- The mortgage interest rates are the author's opinion/estimates of typical "special offer" rates that are advertised by major lenders.
- The amortization period is 25 years.
- Monthly income is derived from average weekly wages as measured by Statistics Canada's Survey of Employment, Payroll and Hours.

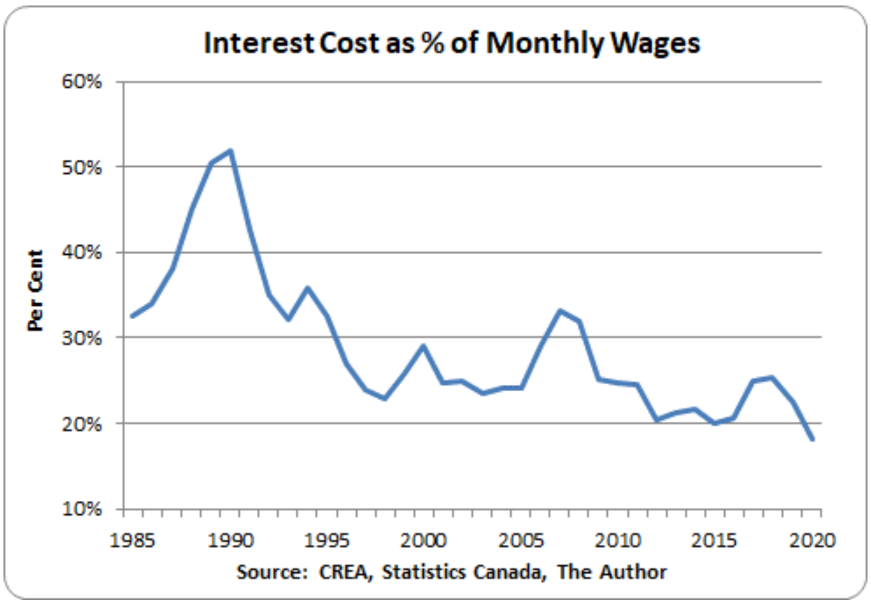
These calculations result in relatively high cost-to-income ratios, in large part because they assume just one income, whereas a large share of home buying households have two (or even more) income earners. The reader should look at how the data has changed over time, rather than at the levels of the estimates.

[13] The calculations assume that the amortization period is 25 years, and the interest rates are the author's opinion/estimates of "special offer" rates from major lenders for five-year, fixed-rate mortgages.

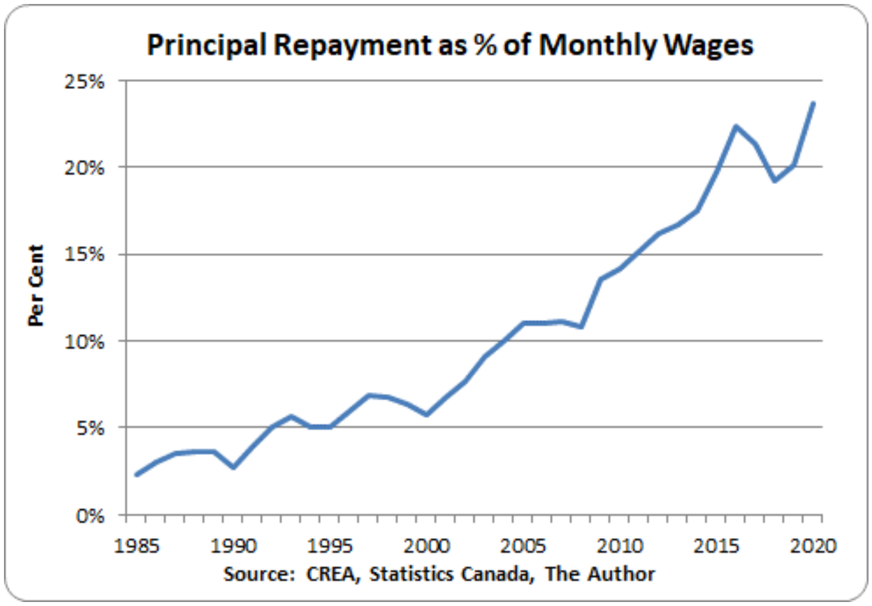
The first chart looks at the total mortgage payment relative to the assumed income. As of 2020, the ratio of mortgage cost to income is 41.7%, which is above the average of 39.3% for the entire period shown. On this basis, the monthly cost burden of ownership is currently higher than the historic average, but it is within the range that has been seen historically.




Recalling that mortgage payments are a mix of interest and principal, many home- buyers will surely consider the components: How much they will actually pay in interest versus how much they pay toward the principal. The chart to the right shows that the interest burden (in relation to wages, as of the first month) has been far below the long-term average during the past decade. For 2020, the ratio was 18%, which is far below the long-term average of 29%. On this interest-only basis, for Canada as a whole, housing affordability is very favourable.



The part of the payment that goes to principal should be viewed differently than the interest part. It is a form of saving (although it is "involuntary" or "forced" saving). The forced saving component of mortgage payments has risen sharply in relation to incomes. In 2020 forced savings via mortgage payments amount to 23.6% of monthly incomes, which is far above the long-term average of just 10.4%).




To conclude this discussion:

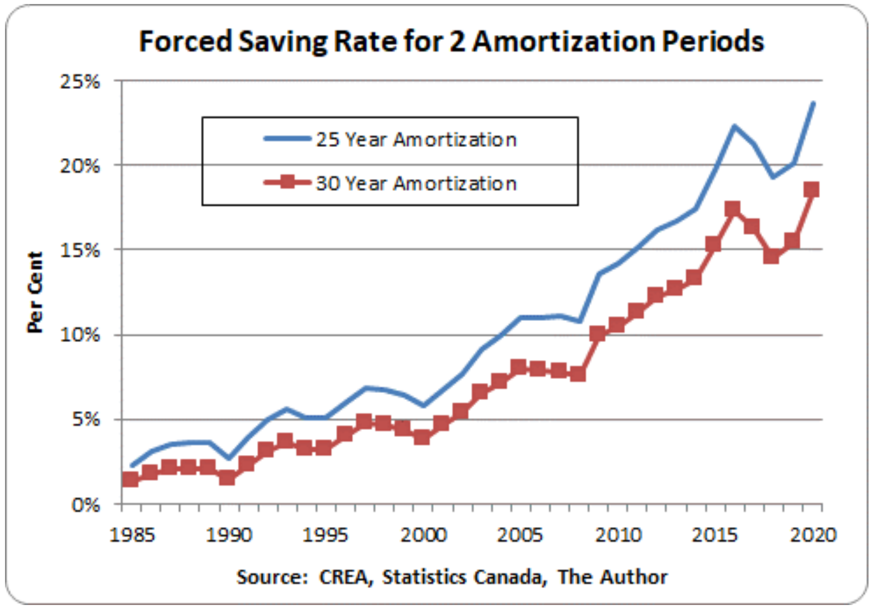
- The affordability of homeownership is usually calculated on a "gross" basis (considering the total blended mortgage payment of principal plus interest). On this basis, homeownership affordability was at an average level from 2009 to 2016, but has been slightly worse than average since then.
- But, we should also consider affordability on a "net" (interest-cost) basis because, while principal repayment is a cost, it improves the homeowner's bottom line by reducing mortgage indebtedness. On this net basis, homeownership has been, during the past decade, very affordable.

Homeownership represents a very aggressive forced saving program. As a result (and even before we consider the impact of price growth) housing equity is built very rapidly.

This excellent "net affordability" goes a long way to explaining why homebuying activity has remained strong in Canada and why a large majority of Canadians see homeownership as financially better than renting, despite the rapid run-up in house prices and the higher burden of mortgage (principal plus interest) payments.

But, the large amounts of forced saving that occur through homeownership are indeed a burden in terms of consumers' cash flows, and this has impaired buying activity.

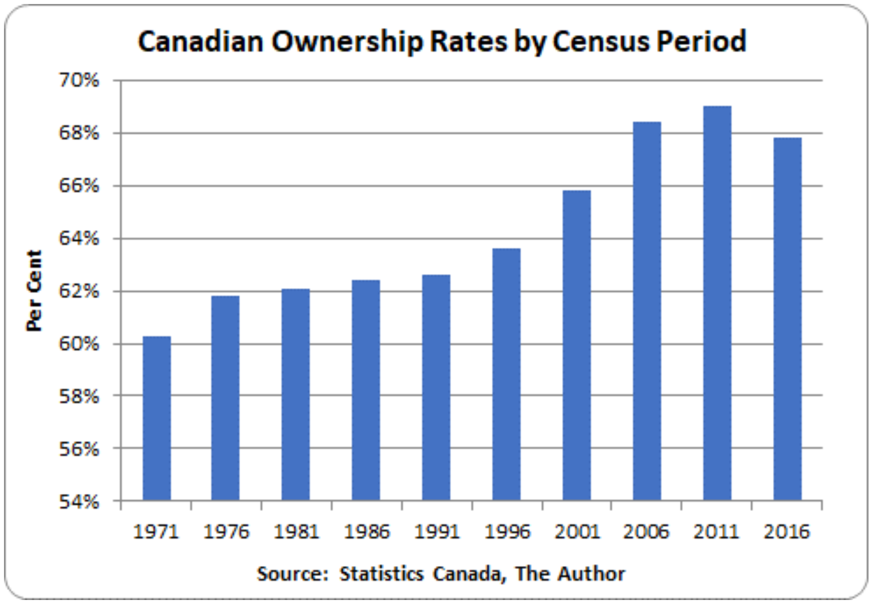
Under current conditions, 25-year amortization places results in a very high rate of "forced saving" for homebuyers, which prevents many of us from taking advantage of this very favourable "net affordability." Use of 30-year amortization would result in a forced saving rate of 18.5% of the borrowers' incomes for 2020, versus the 23.6% that results from 25-year amortization. This would still result in rapid growth of home equity.




*A Falling Homeownership Rate in Canada*

Each five years, the Census of Canada produces very detailed information on social and economic conditions. The data provides portraits of housing conditions and costs, including the types of dwellings that we occupy and the tenures (ownership versus renting). The most recent data is still from the 2016 census. Data collection for the 2021 census is expected to start soon (with an effective date in May). Normally, the housing data would be released around the end of the following year, but these are not normal times, so we'll have to see what happens. For now, we are relying on data from 2016, and using data from other sources to make informed guesses about what might be happening to socio-economic and demographic conditions across the country.

As has been discussed in prior editions of these reports, the homeownership rate in Canada rose for a generation, from 1971 to 2001, but then reversed direction in 2016.

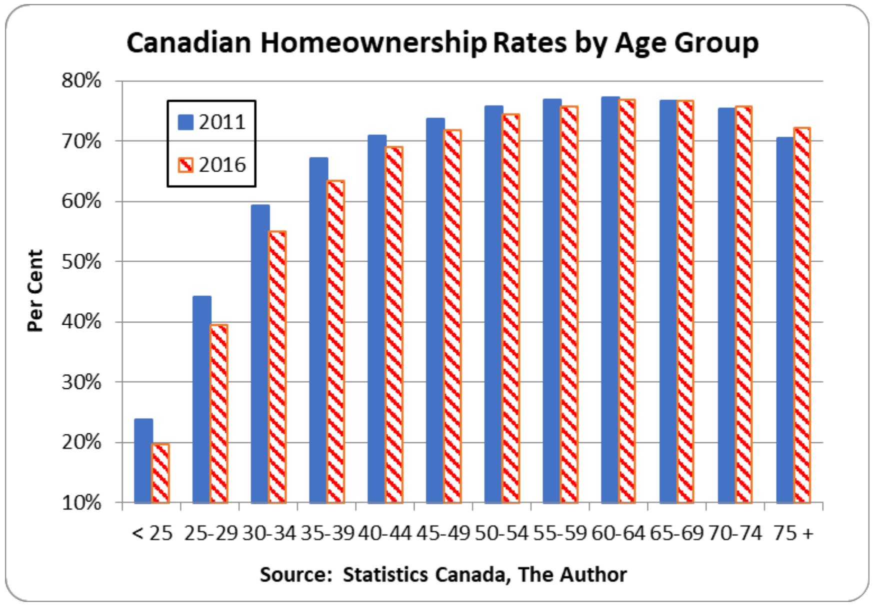



The gradual rise in the ownership rate during 1976 to 1991 can be attributed to economic progress: A rising share of the population was employed and, among them, more had completed higher education and were earning incomes that supported homeownership. In addition, two-income families became more common. Then, the rapid rise during 1996 to 2011 was supported by on-going reductions in interest rates that began in the early 1990s, plus expansion and acceptance of lower-cost housing forms that made ownership feasible for more Canadians (including condominium apartments, as well as higher-density low-rise housing options, such as townhomes).

The reversal in the ownership rate during 2011 to 2016 can be seen as the result of the two factors discussed above:

- Longer periods of time are required to save down payments.
- Increased "forced saving" means that even though interest costs are highly affordable, large shares of income must be devoted to principal repayment.
- As well, five changes were made to mortgage insurance between July 2008 and February 2016, which made finance less available and impaired homebuying activity.

These events and policies contributed to sharp reductions in the ownership rate among younger Canadians, and small drops for older age groups, as can be seen in this chart. The 2016 rate of 67.8% was 1.2 points lower than the 69% rate for 2011. Homeownership rates fell quite sharply for the youngest (first-time buyer) age groups. For the three youngest age groups, the drops were: 4.1 points, 4.6 points and 4.2 points. Ownership rates also fell for the age groups covering 35 to 69 years, but rose for Canadians aged 70 and over.




Since the time of the 2016 census, additional policies of the federal government (the stress test for mortgage insurance that took effect late in 2016 and the requirement by the Office of the Superintendent of Financial Institutions for stress testing, which took effect January 1, 2018) are adding to the difficulties faced by prospective homebuyers.

Data on housing construction suggests that the ownership rate has likely fallen further since 2016. Data from Canada Mortgage and Housing Corporation (CMHC) shows that an increased share of new homes is being made available as rentals. Formally, about three-quarters of new housing is "intended" for owner occupancy, but a large share of new condominiums has been purchased by investors and is, in actuality, rentals. Consequently, it is likely that since 2016, about 40% of new housing has been rented. On top of this, the vacancy rate in Canada was 3.7% in 2016 but fell to 2.2% in 2019 (although there was a rise to 3.2% in 2020). This combination of data points to the likelihood of a further reduction in the ownership rate for 2021.

More recently, COVID-19 has encouraged movement away from "high density" apartments toward lower-density options. In addition to this shift in preferences, extremely low interest rates are making ownership more feasible. A surge in homebuying during the second half of 2020 may have partially reversed the drop in the ownership rate that was quite likely to have occurred since 2016.

All of this considered, I expect that the 2021 census data (whenever it becomes available) will show a drop in the Canadian homeownership rate.

Looking farther ahead, trends in the ownership rate will be the result of multiple factors, including:

- Financing conditions (including mortgage regulations).
- Affordability calculations that result from the combination of pricing, interest rates and incomes.
- Growth of employment and incomes, and consumers' confidence about their long-term economic prospects.
- Supplies of housing, in existing dwellings and housing that will be created by new construction.
- Evolving consumer preferences, including longer-term consequences of COVID-19 for working arrangements (and therefore, to what extent will housing demand shift to locations where homeownership is more feasible financially).

# 4.0 Consumer Sentiment

### *Attitudes to Topical Questions*

Since 2010, the consumer surveys have investigated attitudes on current issues related to housing markets and mortgages. The survey respondents have been offered various statements and asked to indicate the extent to which they agree or disagree with each, on a 10-point scale. A response of 10 would indicate complete agreement and a response of 1 would indicate complete disagreement. Average responses of 5.5 out of 10 would indicate neutrality.

The next table summarizes responses, showing the histories of the average scores. The responses have changed relatively little over time.

- There has been moderately strong agreement that "low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners." During the last three years, the average scores have been below the average seen during the 11-year history of this question (which is 6.93 out of 10). For 2020, the average score (6.68) is the lowest recorded to date. Scores show small variations across the country: We might expect that there would be more concern about this in the highest cost provinces, but that isn't the case.
- On the other hand, consumers are satisfied with the mortgage choices they have made: They have low levels of regret about their mortgage choices (this question is asked only of mortgage holders). The average score this year (3.62) is below the average of 3.75 for the entire period (and is the third-lowest average rating for the 11-year period). As house prices have increased rapidly and there has been similar rapid growth in average mortgage amounts, we might expect that recent buyers would have more regrets. But, in this year's survey, for buyers who purchased during 2018-2021, the average score of 3.60 is essentially equal to the overall average of 3.62. A very small minority indicated high levels of regret about their mortgages (4% gave ratings of 9 or 10). On the other hand, 42% indicated very low levels of regret (1 or 2 out of 10).
- As we have commented in prior years, the combination of these two questions poses a paradox: On a collective basis, consumers believe their choices have been responsible, but collectively they also believe that other people are being irresponsible. This inconsistency suggests that these beliefs about "other people" are shaped by messages in the media and from pundits more so than by actual behaviour.
- Levels of regret about mortgages show minor variations across the provinces: In the highest-price provinces (British Columbia, at an average score of 3.56, and Ontario, at 3.78) the scores are close to the national average of 3.62. The highest levels of regret were found in Saskatchewan (3.92) and Alberta (3.91). The lowest levels are in Quebec (3.27) and the Atlantic provinces (3.44).
- Canadians remain largely confident about their ability to weather a downturn of home prices. The average rating for this year (6.93) is fractionally higher than the long-term average (6.87). Variations across the country include that the strongest confidence is in

Quebec (7.25) followed by Saskatchewan (7.11). The lowest confidence is in Alberta (6.27). Fully 72% of Canadians are optimistic on this score (giving ratings of 6 to 10 on the 10-point scale) while 13% gave negative ratings (1 to 4 out of 10).

- Canadians have strongly agreed with the proposition that real estate is a good long-term investment. The average score this year (7.29) is virtually equal to the historic average of 7.27. There are minor variations across the country. The lowest ratings are found in Alberta (6.84), Newfoundland and Labrador (6.95) and Saskatchewan (6.84), which have experienced some price erosion in the wake of the lower oil prices. (But even in these provinces, the average ratings are well above the neutral level). The highest rating was in Quebec (7.45), which has seen robust price growth during the past four years.
- The level of confidence about the economy has, not surprisingly, fallen sharply this year, to an average of 5.67 versus the long-term average of 6.10. Still, the average rating this year is slightly above the neutral level of 5.5. Looking across the country, confidence is slightly below the neutral level in Alberta (5.37) and Manitoba (5.46). The highest ratings are in New Brunswick (6.03), Nova Scotia (5.88) and Quebec (5.78).
- There is agreement that mortgages are "good debt." The figure for this year (6.98) is fractionally below the historic average of 7.04. Opinions show very little variation across the country.
- In 2019, we added a proposition that is a slight variation of an existing one: "I/My family would be well positioned to handle a potential increase in mortgage interest rates." This year, the average response was above neutral, at 6.44 (and a small increase from 6.36 in 2019). This score is, however, notably lower than for thoughts about the effect of lower home prices (an average rating of 6.93 this year). The most positive responses were found in Quebec (6.97). The least positive responses were in Alberta (5.79) and the Atlantic provinces (5.78, with the lowest scores in Newfoundland and Labrador).
- This year, we added a highly topical issue: "As a result of COVID-19, I am anxious about my/my family's financial situation over the next few months." On average, there is a moderate level of concern (5.14 on the 10-point scale, only slightly below the neutral level of 5.5). The highest levels of anxiety are in Alberta (5.92), Ontario (5.34), British Columbia (5.19) and Saskatchewan (5.11). The lowest anxiety is in Manitoba (4.65), Quebec (4.70) and the Atlantic provinces (4.76). Very high levels of anxiety about the economic effects of COVID-19 (ratings of 9 or 10) were reported by 13% of Canadians, while 23% reported very low levels (1 or 2).

| *Table 4-1*<br>*Summary of Consumer Responses to Topical Question, by Year of Survey*<br>*(Average Scores on a Scale of 1 to 10)* | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *2010* | *2011* | *2012* | *2013* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *2020* |
| Low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners | 6.88 | 7.11 | 7.01 | 7.04 | 6.98 | 6.80 | 7.03 | 7.15 | 6.76 | 6.76 | 6.68 |
| I regret taking on the size of mortgage I did | 3.86 | 4.04 | 3.88 | 3.82 | 3.89 | 3.67 | 3.60 | 3.67 | 3.37 | 3.81 | 3.62 |
| I/My family would be well-positioned to weather a potential downturn in home prices | 6.54 | 6.72 | 6.67 | 6.93 | 6.95 | 6.92 | 7.02 | 7.09 | 7.02 | 6.81 | 6.93 |
| Real estate in Canada is a good long-term investment | 7.13 | 7.27 | 7.26 | 7.44 | 7.35 | 7.37 | 7.17 | 7.15 | 7.22 | 7.34 | 7.29 |
| I am optimistic about the economy in the coming 12 months | N/A | 6.02 | 6.13 | 6.36 | 6.25 | 6.23 | 5.99 | 6.26 | 6.01 | 6.05 | 5.67 |
| I would classify mortgages as "good debt" | N/A | 7.07 | 7.05 | 7.20 | 7.15 | 7.06 | 7.02 | 6.94 | 6.87 | 7.09 | 6.98 |
| I/My family would be well positioned to handle a potential increase in mortgage interest rates. | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 6.36 | 6.44 |
| As the result of COVID-19, I am anxious about my/my family's financial situation over the next few months | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 5.14 |
| Source: Mortgage Professionals Canada survey, Fall 2010 to Yearend 2020; Estimates by the author. | | | | | | | | | | | |

The next table looks at the 2020 survey results in terms of purchase periods:

- Agreement with the statement that "low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners" is strongest for those who bought many years ago. Recent buyers also agree with the statement, but less vigorously. This year, "non-owners" (people who rent or live with their parents) show a lower level of agreement with this proposition than owners.
- Levels of regret about mortgages vary, depending on when the homes were purchased. Regret is higher for the most recent buyers (2014 or later), but is also slightly elevated for the earliest buyers (purchased before 1990—however, this is a very small group of people,

who bought their home more than 30 years ago and still have a mortgage).[14] Prior editions of this report have commented that we might expect this regret to erode gradually over time. In the early years of repayment:

  - The borrowers' levels of indebtedness (relative to their incomes) are at the highest levels they will see in their lives.
  - Making regular mortgage payments (and at a high percentage of their incomes) is a new experience for many of them (the first-time buyers).
  - They can foresee very long periods of making mortgage payments, and many of them will have high levels of uncertainty (and even fear) about what will happen during that time period (to their incomes, to their interest rates, to their other costs of living, etc.).
  - These conditions will improve gradually over time, which may result in these most-recent buyers having less regret in future. To illustrate this: In the 2014 report, we found that the most recent buyers (2010-2014) had an average regret of 4.06 versus the overall average of 3.89 at the time. That cohort (now grouped as 2010-2013) now has an average regret of 3.21 (a drop of 0.85 points from six years earlier). For those who bought during 2005 to 2009, the average score was 3.98 in 2014 and has now fallen to 3.27. Based on this history, we should not read too much into the elevated levels of regret for recent buyers. Notably, for today's group of most-recent buyers (2018-2021) the average regret (3.60) is lower than was seen for new buyers in 2014 (4.06).

- Opinions about whether mortgages are "good debt" show minor variations among the different vintages of homeowners. Owners who purchased their homes before 2005 have a more positive attitude on this question than more-recent buyers. Non-owners have considerably lower opinions about this (although the average score of 6.58 is still above the neutral score of 5.5).
- For the proposition about real estate as a long-term investment, the most-positive responses are from owners who purchased before year 2000. Opinions among non-owners are less positive than for owners.
- Optimism about the economy is highest for buyers who purchased before 2005, but also for the most recent buyers (which makes sense, since a decision to make this major purchase requires optimism about one's own prospects). Renters and others are considerably less optimistic than owners.
- Opinions about resilience (ability to withstand a fall in housing prices and a rise in interest rates) are weaker for recent buyers than for all owners (by about one-third of a point). But even among recent buyers, confidence—at 7.03 about house prices and 6.65 about interest rates—is above the neutral level.
- Similar to the discussion about regrets, we shouldn't be surprised that recent buyers feel most vulnerable to adverse events in the housing market (and they, no doubt, are truly

[14] Attentive readers might notice that the average level of regret appears to be higher than is implied in the detailed data (by purchase period). This occurs because buyers who don't report or can't remember when they bought their home have higher levels of regret (averaging 4.93).

more vulnerable). But, we should expect that their sense of vulnerability will improve over time. And, similar to the discussion about regrets, the evolution of the survey data over time shows this happening. In the 2014 survey, the average confidence was 6.81 for the most-recent buyers versus 7.38 versus for all homeowners. For that cohort, the average score (7.13) is now much closer to the average for all owners (7.21).

*Table 4-2*
*Summary of Consumer Responses to Topical Question,*
*As of Yearend 2019, by Period When Homes Were Purchased*
*(Average Scores on a Scale of 1 to 10)*

| | *Pre-1990* | *1990s* | *2000-2004* | *2005-2009* | *2010-2013* | *2014-2017* | *2018-2021* | *All Owners* | *Non-Owners* | *All Responses* |
|---|---|---|---|---|---|---|---|---|---|---|
| Low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners | 7.30 | 6.98 | 6.70 | 6.66 | 6.88 | 6.73 | 6.77 | 6.80 | 6.43 | 6.68 |
| I regret taking on the size of mortgage I did | 3.55 | 2.89 | 2.97 | 3.27 | 3.21 | 3.75 | 3.60 | 3.62 | NA | NA |
| I/My family would be well-positioned to weather a potential downturn in home prices | 7.89 | 7.70 | 7.53 | 7.25 | 7.13 | 7.10 | 7.03 | 7.21 | 6.29 | 6.93 |
| Real estate in Canada is a good long-term investment | 7.90 | 7.88 | 7.52 | 7.54 | 7.31 | 7.31 | 7.47 | 7.46 | 6.92 | 7.29 |
| I am optimistic about the economy in the coming 12 months | 6.06 | 5.88 | 5.87 | 5.50 | 5.56 | 5.74 | 5.99 | 5.80 | 5.40 | 5.67 |
| I would classify mortgages as "good debt" | 7.45 | 7.34 | 7.41 | 7.17 | 7.21 | 7.12 | 7.11 | 7.15 | 6.58 | 6.98 |
| I/My family would be well positioned to handle a potential increase in mortgage interest rates. | 7.35 | 7.54 | 7.22 | 6.83 | 6.73 | 6.53 | 6.65 | 7.54 | 6.81 | 6.44 |
| As a result of COVID-19, I am anxious about my/my family's financial situation over the next few months | 4.32 | 4.21 | 4.00 | 4.76 | 4.84 | 5.13 | 5.08 | 4.86 | 5.77 | 5.14 |

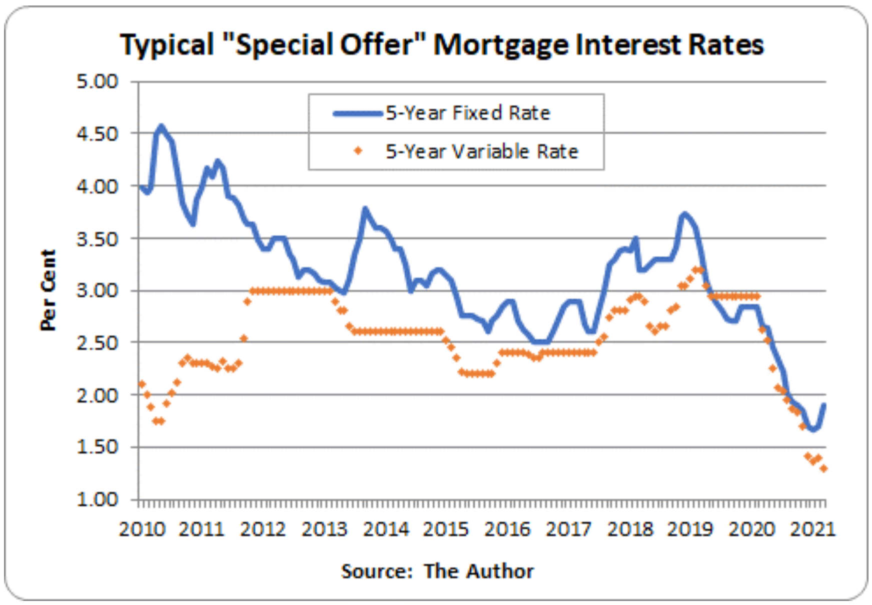
Source: Mortgage Professionals Canada survey, Yearend 2020; Estimates by the author.

### *Expectations*

Since 2010, questions have been asked about expectations. Again, the responses are given on a 10-point scale. The history of the survey results is shown in a table below.

- For the question of whether this is a good time to buy a home or condominium in their own community, the responses had seemed to be stable until 2015, at above the neutral level of 5.5, indicating moderately positive attitudes. The average scores have been lower since then, at close to the neutral level. The average score this year was 5.53 (unchanged from the prior year).

- Attitudes are currently least positive in Quebec (average of 5.18) and Ontario (5.39), but above the neutral level of 5.5 elsewhere. The most positive response was found in Alberta (average of 6.14) and Saskatchewan (5.91). Attitudes are also above neutral in Atlantic Canada (5.83), British Columbia (5.82) and Manitoba (5.73).
- Concerning house price growth for the coming year, the responses show the highest expectations in the 11-year history, at an average of 6.94, up from the record of 6.73 that was set in 2019, and far above the long-term average (6.44). Average ratings were well above the neutral level in all of the regions, at 6.57 in Atlantic Canada, 7.28 in Quebec, 7.09 in Ontario, 6.52 in Manitoba, 6.07 in Saskatchewan, 5.78 in Alberta and 7.25 in British Columbia.
- Throughout the entire history of this line of questioning, Canadians have expected some rises for mortgage interest rates, as the average scores have always been above the neutral level of 5.50 (even though interest rates have tended to fall during that history). Expectations were reduced this year, to the lowest recorded in the history of this survey (an average of 5.92, which is far below the long-term average of 6.43), but still above the neutral level of 5.5. In previous editions of this report, it has been commented that expectations about interest rates (and on other economic issues) may be "adaptive" (influenced by recent events, not by thorough economic analysis). At the time the survey was conducted (late January to early February) rates for fixed-rate mortgages were the lowest ever recorded and had not yet begun to rise, which happened during February. The drop in expectations about interest rates this year reflects what had recently happened (and did not anticipate what was about to happen).




- For expectations about buying homes, the average scores are low and tend to show only minor variations from year to year. This makes some sense, because only a small percentage of the population buys a home in any given year. For 2020, there was a large rise in the average rating, to a new record of 3.3, which is notably above the long-term average of 3.01. Expectations rose in most of the regions, to 2.95 in Atlantic Canada (from

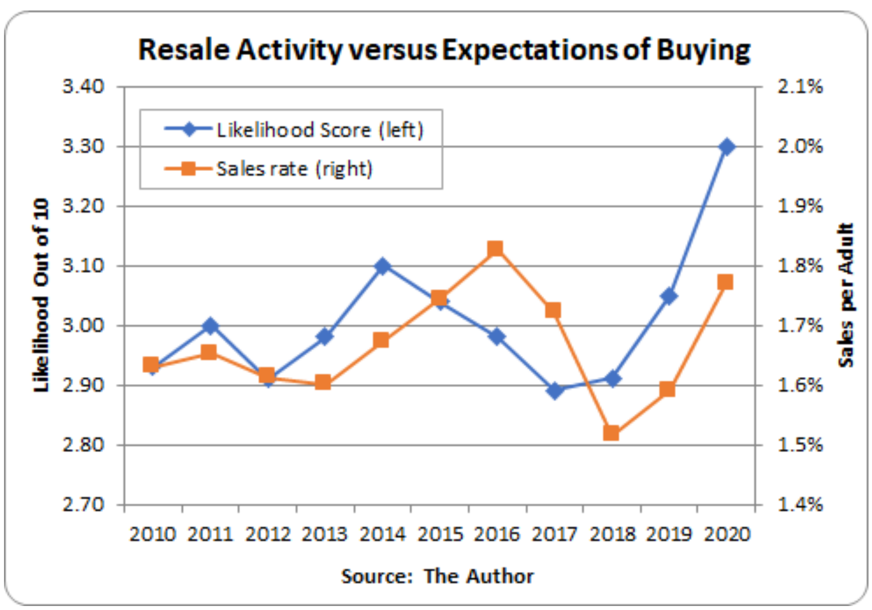
2.66 a year ago), 3.15 in Quebec (versus 2.78), 3.39 in Ontario (3.20), 3.29 in Manitoba (2.76), 2.58 in Saskatchewan (essentially no change from 2.55), 3.63 in Alberta (3.33) and 3.45 in British Columbia (3.32).

*Table 4-3*
*Summary of Consumer Responses on Expectations, by Date of Survey*
*(Average Scores on a Scale of 1 to 10)*

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Now is a good or bad time to buy a home/condominium in my community | 6.08 | 6.21 | 6.10 | 6.00 | 6.05 | 6.03 | 5.60 | 5.40 | 5.50 | 5.53 | 5.53 |
| Expectations for housing prices in my community (the coming year) | 6.18 | 6.64 | 6.34 | 6.22 | 6.31 | 6.35 | 6.43 | 6.36 | 6.38 | 6.73 | 6.94 |
| Expectations for mortgage interest rates (the coming year) | 6.54 | 6.56 | 6.51 | 6.21 | 6.21 | 6.16 | 6.24 | 6.93 | 7.15 | 6.30 | 5.92 |
| How likely are you to purchase a new property in the next year? (This could be a primary residence, a second residence or investment property) | 2.93 | 3.00 | 2.91 | 2.98 | 3.10 | 3.04 | 2.98 | 2.89 | 2.91 | 3.05 | 3.30 |
| Sales rate (resale per adult) | 1.62% | 1.64% | 1.60% | 1.59% | 1.66% | 1.73% | 1.82% | 1.72% | 1.52% | 1.59% | 1.77% |
| Price growth (based on CREA's HPI) | 2.5% | 4.9% | 2.9% | 4.3% | 5.3% | 6.4% | 14.0% | 8.6% | 1.9% | 3.2% | 13.2% |
| Source: Mortgage Professionals Canada survey, Fall 2010 to Yearend 2020; Estimates by the author. | | | | | | | | | | | |

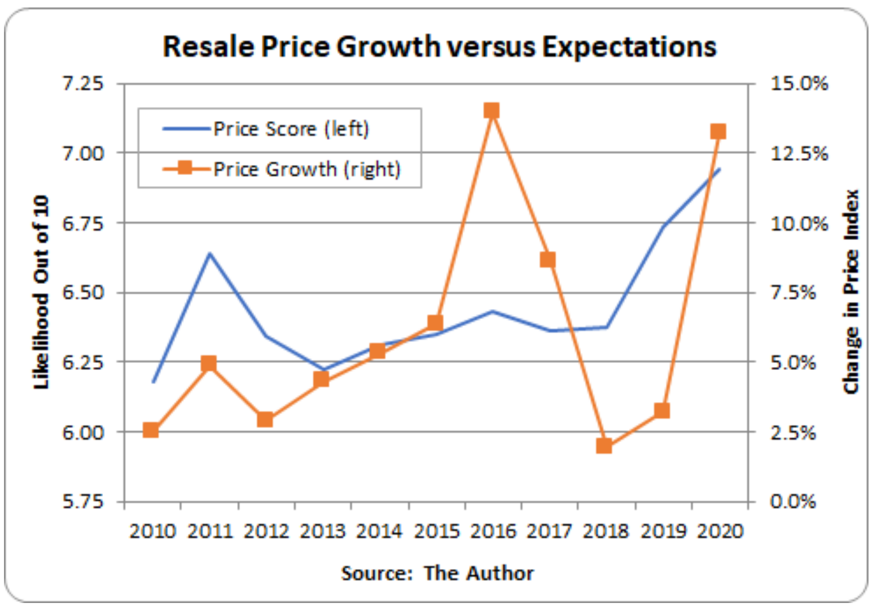
Updating commentary from last year, it appears that the data on buying expectations has some predictive value.

- This chart shows that expectations (about home buying) sometimes foreshadow what will happen to sales in the following year. (Please accept my apology for how complicated this chart is—I find it



quite interesting.[15]) In this chart, there isn't a substantive relationship during the first three years. But then, a rise in the likelihood in 2013 was followed by increased sales in 2014. A higher likelihood in 2014 was followed by more sales in 2015. The relationship didn't work for 2015: The likelihood fell, but sales rose again in 2016. Then, the data once again did what it's supposed to. A fall in the likelihood in 2016 was followed by lower sales in 2017, and there was a repeat the next year. The 2018 likelihood data predicted that sales would improve (slightly) in 2019, and that did happen! Similarly, a large increase in the likelihood for 2019 was followed by a large rise for sales in 2020. That final result, however, has to be acknowledged as an accident.

- In the 2020 survey, there was a further very large rise in expectations about homebuying for 2021. At this time, conditions are very supportive for continued very strong sales this year: The combination of low interest rates plus a desire by many of us to adjust our housing situations is very powerful. But it remains to be seen what will happen to fundamental conditions (What will happen to interest rates and affordability? Will the employment situation be favourable?) and to psychological factors. Just because this survey data has done a reasonably good job of predicting the future during the past few years does not mean that it will in the future.
- A similar analysis looks at the relationship between expectations for price growth and actual changes for prices in the following year: There is no relationship. For example, based on the flat average scores in the middle part of this chart (2015 to 2018), we would expect a stable rate of price growth. But that, clearly, did not happen.




- These findings actually make some sense: People have a lot of influence over the purchases that they will make. Therefore their individual expectations can influence the collective result—what happens to total sales. But there isn't such a direct mechanism by which their expectations about price growth will influence actual growth.

[15] This chart portrays sales activity with an unusual statistic—sales per adult. There is more discussion of this data in the final section of this report.

### *Housing as an Investment*

These surveys have occasionally investigated to what extent people see their housing as a place to live versus as an investment. The respondents give two numbers (the percentage "place to live" and the percentage "investment," and the two numbers must add to 100). At different times, this has been asked of varying subsets of the survey samples (sometimes all owners, sometimes mortgage holders only). This time, we asked the entire sample.

In the 2020 survey, we found that Canadians see their housing as 76% a place to live and 24% as an investment. The "place to live" share has increased very gradually over time. The first time we asked this question, the average response was 70%.

Analysis looked at variations across different groupings of the population. Over time, the data has consistently shown that the split is quite stable across different sub-groups of the population: in high-cost and low-cost provinces; across the age groups of the population; for owners versus renters; for periods when homes were purchased; for values of homes; and for different levels of household incomes. This data hints, but certainly does not prove, that buying decisions (being made by people who will occupy the dwellings themselves) are not being excessively driven by an "investment motive."

### *Happiness with Decision to Buy a Home*

Since the spring of 2014, homeowners have been asked whether they are happy with their decision to buy their home. This question once again finds a very high degree of satisfaction with homeownership. Three optional responses were available:

- By far, homeowners are happy with the decision to buy their home (90%).
- A very small minority (4%) indicated that "I regret my decision and—I wish I did not choose to own a home."
- In addition, 7% indicated "I regret my decision—I wish I had purchased a different home/property."
- For the most recent buyers, 91% are "happy with…" However, there is a lower degree of happiness for buyers who purchased between 2014 and 2017 (87%).
- Looking across the country, responses are most positive in Atlantic Canada, Quebec and British Columbia (each at 92%). The least favourable responses are in Saskatchewan and Alberta (both at 82%). In both of those provinces, the concern is more with the home purchased rather than with homeownership in general. In Ontario and Manitoba, the positive responses are equal to the national average.
- For the first time, this survey asked people who are unhappy with their homes for reasons. Among people who wish they hadn't bought a home, reasons given are largely about costs or their incomes. For those who wish they had purchased a different home, a very wide

array of reasons was mentioned, including wishing for a bigger or better home or better location.

| *Table 4-4*<br>*Happiness with Decision to Buy a Home, by Period of Purchase* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | *Pre-1990* | *1990s* | *2000-2004* | *2005-2009* | *2010-2013* | *2014-2017* | *2018-2021* | *All Periods* |
| I am happy with my decision | 95% | 95% | 93% | 90% | 90% | 87% | 91% | 90% |
| I regret my decision—I wish I did not choose to own a home | 0% | 1% | 1% | 3% | 3% | 5% | 3% | 4% |
| I regret my decision—I wish I had purchased a different home/property | 5% | 4% | 6% | 7% | 7% | 8% | 6% | 7% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; analysis by the author.<br>Note: Totals may not add to 100% due to rounding. | | | | | | | | |

### *Effects of COVID-19*

Starting last July, Mortgage Professionals Canada conducted a series of consumer surveys that investigated impacts of COVID-19 on attitudes and expectations related to homebuying and mortgages. The survey was completed five times (the last occurred during the second half of January). The reports can be found here:
https://mortgageproscan.ca/membership/resources/covid-19-consumer-reports

For this report on the state of the residential mortgage market, we have included this question from the COVID survey:

> Thinking only of the impact of COVID-19, what level of difficulty do you expect to have in making your regular mortgage payments during the coming months?

(Of course, this question was asked only for people who have mortgages.)

In this section, the survey results for the topical questions are looked at in relation to the responses to the COVID question.

Firstly, though, the next table summarizes the responses on expected difficulties with mortgage payments. A substantial majority (69%) expects that they will have "No problem." This represents about 4.2 million out of 6.08 million mortgage holders. More than one-fifth (about 1.4 million) think there might be “some difficulty.” This leaves a minority who expect more than “some difficulty.” In total, less than half a million expect more than “some difficulty,” including 340,000 who expect “a lot of difficulty,” 70,000 who “will only be able to make partial or infrequent payments” and 60,000 who “will not be able to make any payments.”[16]

The data shows that the most recent purchasers do not expect more difficulty compared to prior purchase periods.

*Table 4-5*
*Anticipated Difficulty Making Mortgage Payments*
*Due to COVID-19, by Period of Purchase*

| | *Pre-1990* | *1990s* | *2000-2004* | *2005-2009* | *2010-2013* | *2014-2017* | *2018-2021* | *All Periods* |
|---|---|---|---|---|---|---|---|---|
| I/we will have no problem making our regular payments | 84% | 79% | 79% | 65% | 74% | 71% | 72% | 69% |
| I/we will make our regular payments, but there may be some difficulty | 16% | 17% | 12% | 30% | 19% | 23% | 22% | 23% |
| I/we will make our regular payments, with a lot of difficulty | 0% | 0% | 8% | 3% | 5% | 5% | 4% | 6% |
| I/we will only be able to make partial or infrequent payments | 0% | 0% | 0% | 2% | 2% | 1% | 1% | 1% |
| I/we will not be able to make any payments | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 1% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Subtotal - More than "Some" | 0% | 4% | 8% | 5% | 7% | 6% | 5% | 8% |

Source: Mortgage Professionals Canada survey, Yearend 2020; analysis by the author.
Note: Totals may not add to 100% due to rounding.

In the survey data, there were few people reporting more than “some difficulty,” which results in volatile data for the individual categories of difficulty. Therefore, in the table below, the responses have been combined. The data in the next table shows a clear relationship between expected difficulties with mortgage payment and attitudes to the topical questions: People who expect “no problem” are more optimistic compared to people who expect “some difficulty” and people who expect more than “some difficulty.”

[16] Readers might notice that the totals for all periods are slightly inconsistent with the results by period of purchase. This occurs because many of the people who can’t remember or wouldn’t say when they bought their homes are much more pessimistic than the others. (This pessimism has also been seen for other questions.) Within this group, less than one-half expect “no problem” and one-quarter expect more than “some difficulty.” These responses are included in the totals.

| *Table 4-6*<br>*Summary of Mortgage Holders' Responses to Topical Question, by Expected Difficulty with Payments (Average Scores on a Scale of 1 to 10)* | | | | |
|---|---|---|---|---|
| | *I/we will have no problem making our regular payments.* | *I/we will make our regular payments, but there may be some difficulty* | *Subtotal - Expect More than "Some Difficulty"* | *Total* |
| Low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners | 6.71 | 6.68 | 6.32 | 6.68 |
| I regret taking on the size of mortgage I did | 3.07 | 4.65 | 5.33 | 3.61 |
| I/My family would be well-positioned to weather a potential downturn in home prices | 7.29 | 6.04 | 5.88 | 6.89 |
| Real estate in Canada is a good long-term investment | 7.45 | 7.15 | 6.55 | 7.31 |
| I am optimistic about the economy in the coming 12 months | 6.01 | 5.88 | 5.52 | 5.87 |
| I would classify mortgages as "good debt" | 7.51 | 6.88 | 6.22 | 7.26 |
| I/My family would be well positioned to handle a potential increase in mortgage interest rates | 6.86 | 5.29 | 5.21 | 6.37 |
| As the result of COVID-19, I am anxious about my/my family's financial situation over the next few months | 4.32 | 6.67 | 6.74 | 5.05 |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Estimates by the author. | | | | |

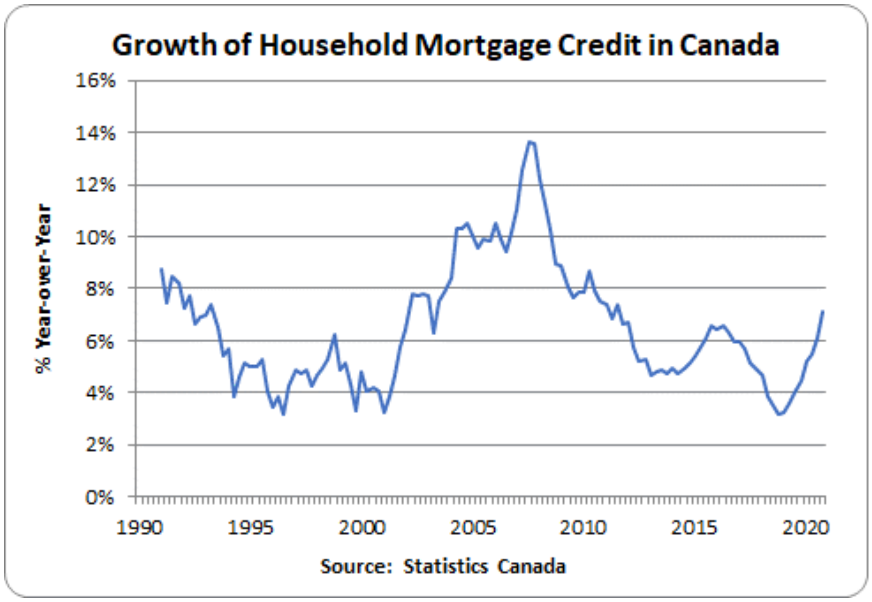
The next table shows that people who expect to have difficulty with mortgage payments are considerably more likely to regret the purchase of their home.

| *Table 4-7*<br>***Happiness with Decision to Buy a Home, by Expected Difficulty with Mortgage Payments*** | | | | |
|---|---|---|---|---|
| | *I/we will have no problem making our regular payments.* | *I/we will make our regular payments, but there may be some difficulty* | *Subtotal - Expect More than "Some Difficulty"* | *Total* |
| I am happy with my decision | 95% | 74% | 62% | 88% |
| I regret my decision—I wish I did not choose to own a home | 1% | 12% | 25% | 5% |
| I regret my decision—I wish I had purchased a different home/property | 4% | 14% | 13% | 7% |
| Total | 100% | 100% | 100% | 100% |
| Source: Mortgage Professionals Canada survey, Yearend 2020; Estimates by the author. | | | | |

## 5.0 Outlook for the Mortgage Market

### *Shifting Trends for Mortgage Growth*

Repeating a chart that was shown earlier, Statistics Canada data indicates that mortgage lending has accelerated recently. As of the fourth quarter of 2020, year-over-year growth was estimated at 7.1%. This is slightly greater than the long-term average for the period covered in this chart (6.6% per year). Given recent extraordinarily high amounts of homebuying and rapid price growth across the country, the growth rate might increase further.




### *Uncertainty Remains Very High*

Late last March, I decided that it is impossible to do economic forecasting in the midst of a once-in-a-century global pandemic, so I removed the forecast sections from my reports.

That said, I realized late in the year that I actually had published a forecast, in the title that I put on the reports about the impacts of COVID-19: "Rapidly Evolving Expectations in the Housing Market." It turns out that this forecast was wrong, as expectations didn't actually change very much (apart from the huge rise in homebuying interest). Otherwise, within those reports I avoided forward-looking conclusions, with one main exception: The first edition (published in August), said "there is a suggestion of a rise in purchases and a drop in listings. If this occurred, the result would be a tightening of the overall "balance" in the market, which would increase pressures for prices to rise."

I see two basic approaches to economic forecasting:

- Guessing.

- Structured forecasting.[17]

In structured forecasting, the analyst:

- Has an opinion about what factors might be important for the matter being forecast. For example, in forecasting home sales, I expect that the most important "explanatory" factors might be job creation, interest rates, affordability and past movements in prices.
- Then, statistical analysis is used to measure the relationships. (Asking, for example: In the past, how strongly have home sales reacted to those factors, and over what periods of time?)
- The analyst assumes that those statistical relationships from the past can be used to predict the future.
- To make the forecasts, we need opinions (or assumptions) about what will happen to those explanatory factors: How many jobs will be created? What will happen to interest rates? etc.

During a once-in-a-century emergency, the emergency becomes the most important factor, and we have no history that we can use to estimate or predict the statistical effects of the emergency. What's more, even if we did know what the statistical relationships are, we would need to know how the emergency would evolve. And there's more: We would need to know what other events might occur that would worsen or lessen the effects (such as new government policies and programs like income supports or mortgage payment deferrals). We would need to know how effective those policies would be, plus how those policies would change over time.

As the result, any time I've seen a forecast during the past year, I've had a complicated reaction to it (a mixture of respect, pity, incredulity…).

In the popular understanding, we economists are probably best known as forecasters. But the truth is that forecasting is not what we're best at, and it isn't the most important work we do. We are most useful when we give advice on issues that have economic content. During this period, my main public response to forecasts has been that it would be more useful to talk about the range of assumptions one could make and the implications of those varying assumptions. That way, the discussion can be shifted away from arguing and toward having healthy dialogues about how policies should respond to conditions as they evolve. The discussions can also identify new data needs. (Statistics Canada has done a wonderful job on this. Mortgage Professionals Canada made a big investment in surveys and reporting.)

I'm still not ready to produce any forecasts, because:

[17] Some people might argue that there is a third approach ("technical analysis") in which forecasts for the future are based on prior movements in the data. To be annoying, I consider that a fancy form of guessing.

- We still don't know which specific assumptions are "most likely" for the major factors, including the normal factors and the abnormal ones.
- We should not be confident that the statistical analysis from the past will be reliable for the future, in telling us how the key factors will affect economic activities. (Under normal conditions, the statistical relationships shift in unpredictable ways, which leads to erroneous forecasts, and this will be even worse in abnormal times.)
- On that point, my expectation is that, for several years, the statistical analysis that is at the centre of structured forecasting will be even more unreliable and untrustworthy.

For some time to come, economic forecasts are going to depend a lot more on the analysts' expectations (and guesses) than on "science." Even at the best of times, economic forecasts have told us more about the people doing the forecasts than about the future.

### *Normal and Abnormal Factors*

All of this said, here are some factors that I think will be important for the rest of this year (and beyond).

*The employment situation*

Employment has not fully regained the losses that occurred last spring. In theory, this reduces the number of people who might be able to buy homes in future. Changes in employment take relatively long times to affect home sales, because it takes time to get ready to buy. The people who are buying now have mostly been in stable employment situations for long periods of time.

As of this January, employment in Canada is still 4.5% lower than last February. But, the job losses have been concentrated among the younger population (down by 14.5% for people aged 15 to 24, who rarely buy homes). For people aged 25 and older (who are the homebuyers), the reduction is less, at 2.9%. Moreover, job losses have been highly concentrated in low-wage service industries. For higher income levels, employment has been less affected. During the past year, the employment data has been a stream of constant surprises, and there are more surprises ahead.

*Interest rates and affordability*

Recent trends in affordability are discussed in the next chapter. In a nutshell: Even though housing prices are rising very rapidly, very sharp drops in interest rates have resulted in a big improvement in affordability, which is strongly encouraging for homebuying.

As I write this, in early March, interest rates are increasing. But, as of today, they have only returned to the levels seen during September and October (which were record lows at the time) and interest rates are still considerably lower than a year ago. My current estimates of typical "special offer" rates are: For five-year fixed-rate mortgages—1.9%, up from 1.7% at the end of the year, but the rate a year ago was 2.85%; for five-year variable-rate mortgages—the current opinion/estimate is 1.3%, down slightly from 1.4% at year end, and sharply lower from 2.95% a year ago. The interest rate increases seen in the past few weeks will change the details of the calculations that people make, but overall, they are not a big deal. Of course, if there are significant rises in the future, negative impacts will occur for homebuying.

*Price growth*

On a statistical basis, changes in house prices affect home sales. Rising prices make people more interested in buying (and sellers become more hesitant). The analysis indicates that the strength of these effects varies from place to place and changes over time. But, in most communities, the impacts are quite small. This has repeatedly caused me to conclude that the "investment motive" in home buying is insignificant in most places. (By "investment motive," I'm, not talking about purchases by investors, I mean to what extent price changes affect the decisions made by people who will occupy the dwellings themselves.)

At this time, it appears quite likely that the investment motive (or it could alternatively be considered "fear-of-missing-out") might have become more significant in many places across Canada. But, but at the same time, urgency to buy is being amplified by the very good affordability that is resulting from low interest rates, and by strongly-felt desires to change living arrangements. I can't prove this, but I believe that the urgency that currently exists quite possibly has more to do with exceptionally low interest rates and the very good affordability of homeownership than with thoughts about future price growth.

The drive that results from price growth is a psychological factor, and its effects could change in unpredictable ways (for better or worse) in the coming months.

*The impact of employment arrangements on housing choices*

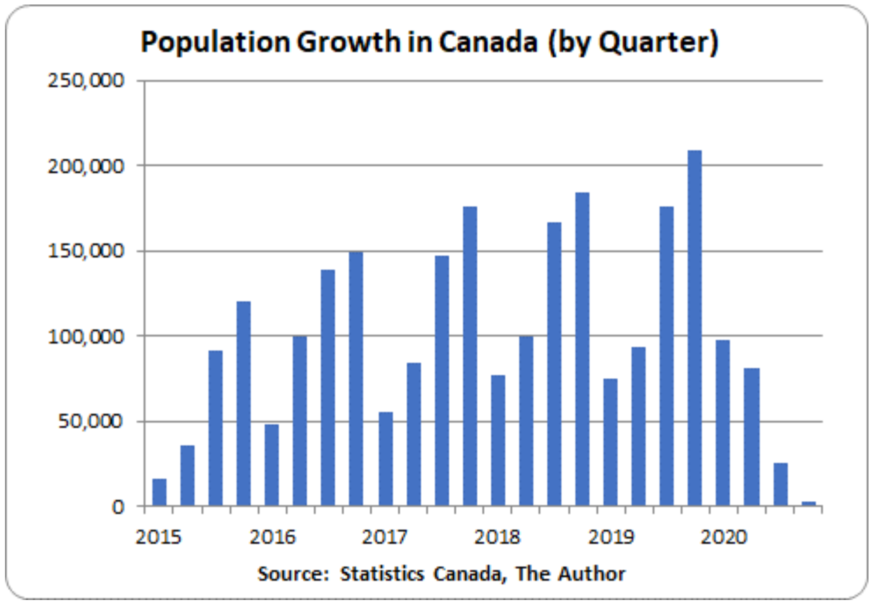
This is an abnormal factor. It appears to be quite powerful at present, and I see this as one of the most important factors for the near-term future of Canadian housing markets.

Evolving housing market data is showing very substantial consequences of the changed employment arrangements:

- Demand is shifting away from the most congested areas and housing types, to situations where social distancing is easier and less stressful.
- Working at home is strongly motivating desires to change housing.
- As is discussed in the next chapter, the strongest housing markets in Canada are now "move-to" locations for people exiting the largest cities. Even quite small movements away from large cities (in percentage terms) can have very large impacts on smaller cities.
- Even in the rental sector, demand has shifted away from high density to low density,

I have no idea what percentage of people will return to offices (and to what extent employers will relocate workplaces), for what percent of their working time: These arrangements will strongly influence future housing choices. (I see a lot of comments to the effect that people who buy in those smaller cities will regret it later when they have to return to the office. I think those comments are premature, as we don't have good data on who the movers are or what their situations are.)

*Immigration and population growth*




During the pandemic, population flows into Canada have collapsed, with the result that the rate of population growth has plunged. In this chart, the last two data points show population growth for the quarterly periods that ended July 1 and October 1. For 2020, Statistics Canada estimates that the population of Canada grew by just 2,767 in the last period (October 1) and 25,834 in the second-last period (July 1), for a total of 28,151. By contrast, for the same period in 2019, the combined amount was 384,888 and in 2018 it was 350,750. The 2020 data are preliminary estimates and they could very well be revised upward or downward by large amounts. But, for now, the data indicates that population growth is creating much less pressure within Canadian housing markets.

The federal government has announced increased immigration targets, including 401,000 new "permanent residents" in 2021. A higher rate of population growth would obviously result in stronger housing demand, in both the ownership and rental sectors.

While this is an important factor for the housing market outlook, there is uncertainty about what these increased targets will really mean. New "permanent residents" can include people who move into Canada during the year, but it can also mean changes in status for people who are already here (from work and study permits or refugee status). Therefore, even if the targets are met, it is uncertain how this will affect the rate of population growth or housing demand.

*Housing preferences*

Many of us are thinking (more than usual) about our living arrangements and housing situations, and not just because of changes to employment.

*Mortgage defaults*

There were fears that interruptions of employment could result in large numbers of mortgage defaults, which would add a further severe disruption to the economy and to the lives of a very large number of Canadians. In response, the lenders, with the consent of regulators, allowed mortgage payments to be deferred for up to six months. (This is additional to the generous income supports that have been provided through various federal government programs.)

Last spring and summer, there was concern about what might happen when the deferral periods ended.

To this point, available data shows that mortgage deferrals have almost completely ended and to this point there is no public evidence of large increases in mortgage defaults. As is discussed in more length in the fifth COVID-19 report (especially pages 39 to 41), this is still early days.

*Fear turning to excitement*

We are all hopeful that the second half of this year will be vastly better. Everything will change, to some degree, at some time.

### *The Mortgage Stress Tests*

Once again, I feel compelled to comment that the federally mandated mortgage stress tests are unduly interfering with homebuying by many thousands of Canadians, who are very good candidates for responsible and successful homeownership. The stress tests are compromising their long-term financial well-being.

I realize that in the current housing market environment there will not be much sympathy for what I'm saying. Yet, in the long term, the federal government has to deal with this.

The chief complaint about the stress tests is that they use an inappropriate interest rate. (There are at least two other issues that get less attention.)

The reference rate used (the "posted rate" from the major chartered banks, for five-year fixed-rate mortgages) is established by the banks for their own administrative purposes. The rates are set arbitrarily (that is, they are not based on any interest rates that are determined in the marketplace). There is no pretense that these posted rates provide any guidance on what might happen to interest rates in future, nor is there any sense that they come out of any analysis that is relevant to the risk-management purpose of the stress tests.

During 2020, the posted rate (and therefore the hurdle rate for the stress tests) averaged 4.95%. At present, the rate is 4.79%. As was noted earlier, our consumer survey indicates that for five-year, fixed-rate mortgages that were initiated, renewed or refinanced during 2020, the average interest rate was 2.25%.

Bank of Canada data on actual contracted interest rates for 2020, for fixed-rate mortgages with terms of five-years or longer, averaged 2.4% for insured mortgages and 2.47% for uninsured mortgages.[18]

The risk-management concern, of course, is about what interest rates might be when mortgages are renewed in future:

- No serious analyst predicts that mortgage interest rates (within traditional lending channels) will be anywhere near the posted rate (4.79%) in the foreseeable future.
- The Bank of Canada anticipates that rates will remain low for a prolonged period.
- Moreover, the Bank of Canada data on actual contracted rates (which commences in 2013) shows a maximum rate of 3.69% for five-year fixed insured mortgages and 3.76% for uninsured mortgages.

All of this considered, the maximum rate seen since 2013 (3.76%) seems a reasonable hurdle rate to use in the risk-management process.

The two additional issues with the stress tests have to do with the effects of time (repayment of principal and income growth). The stress tests are concerned with what might happen when mortgages are renewed in future (which will usually be in five years). But, the calculations are made based on conditions that exist today, even though it is foreseeable that there will be major events that will affect, firstly, the amounts of the future payments (they are over-estimated) and, secondly, the incomes that will be available to make the payments. A table below provides calculations that illustrate the consequences of these two issues.

*Repayment of principle*

The stress tests implicitly contain an assumption about how much mortgage principal will remain when the mortgage is renewed. The table below provides calculations for a typical case (using the average interest rate for 2020, of 2.25%, as well as a mortgage amount that is equal to the 4.25

[18] The data can be found here: https://www.bankofcanada.ca/rates/banking-and-financial-statistics/interest-rates-for-new-and-existing-household-lending/#download

times the borrower's income, and assuming a 25-year amortization period. Assuming an income of $100,000, these calculations are based on an initial mortgage amount of $425,000).

In the first block of the table, the borrower's actual Gross Debt Service (GDS) ratio is calculated as 28.2%. The stress test calculates the GDS as 35.1%.

The second block within the table shows that in five years, 15.8% of the mortgage will be repaid (based on making only the required payments and ignoring the effects of any additional efforts). But, the 4.79% interest rate used in the stress test implicitly assumes that a smaller amount of principal will be repaid (11.8%). The consequence of this is that the stress test over-estimates what the future payment would be if the mortgage is renewed at a 4.79% rate in five years. As is shown in the second row of the table, in this example the stress test estimates a payment of $2,421 per month, but in the last row in the table, the first column shows that the actual payment would be $2,311, which is 4.5% less than the assumed amount.

*Income growth*

Statistics Canada's Labour Force Survey has collected data on wages in Canada since 1997. For full-time employees, the average weekly wage in Canada has increased every year, by amounts ranging from 1.1% to 5.7%, and an average of 2.7%. For a five-year period, that 2.7% yearly growth would translate to a 14.4% rise.

The table below incorporates income growth into the calculation of GDS ratios when mortgages are renewed in five years, on a conservative assumption that there will be 10% growth over the period (versus the 14.4% increase that is implied by 23 years of history). Similarly, it is assumed that property taxes and utility costs will rise by 10%.

The lower half of the table shows calculations of future payments and GDS ratios for five different interest rates. The last row in the table shows that if the renewal occurs at the stress test hurdle rate of 4.79%, and with 10% growth of income, the GDS ratio in five years would be 31.2%. This is considerably lower than the 35.1% calculated by the stress test when the mortgage was initiated (shown in the second row of the table). GDS ratios are calculated for other interest rates, starting with the typical rate (1.7%) that was available at the end of 2020.[19] While this calculation isn't shown in the table, the GDS ratio in five years would be the same as the initial (28.2%) if the renewal was at a rate of 3.3%.

These calculations indicate that the stress tests over-estimate future GDS ratios by considerable amounts. Conclusions from this analysis are:

[19] There is a pair of numbers in this table that reminds me of something that 35 years ago we called "the tilt effect": when mortgage payments are flat but incomes are rising, the payments gradually become a lower percentage of income. Or, more generally, when payments are flat but there is inflation of overall prices, the mortgage payment falls in inflation-adjusted ("real") terms. In this example, with a 2.25% interest rate and a moderate assumption about income growth, "tilt" causes the GDS ratio to fall from an initial 28.2% to 26.2% five years later.

- The use of the banks' posted rates in the stress tests is inappropriate and is highly punitive to Canadians who are good candidates for homeownership, forcing many of them to make housing choices that are inferior to what they believe are in their best interests, or even preventing them from buying at all. There are three recommendations.
    - Firstly, the maximum actual interest rate reported by the Bank of Canada for 2013 to the present (3.76%) should be used as the hurdle rate, rather than the banks' posted rate.
    - Secondly, the stress tests' calculations of GDS (and TDS) ratios should be based on the anticipated actual remaining mortgage principals at the time of renewal (of course, at the anticipated remaining amortization period).
    - These two policy improvements can reasonably be implemented in the near future.
- In addition, while the issue of non-consideration of income growth has been repeatedly raised, the government has not publicly engaged in a discussion of the policy implications. And so,
    - Thirdly, such a discussion should be started.

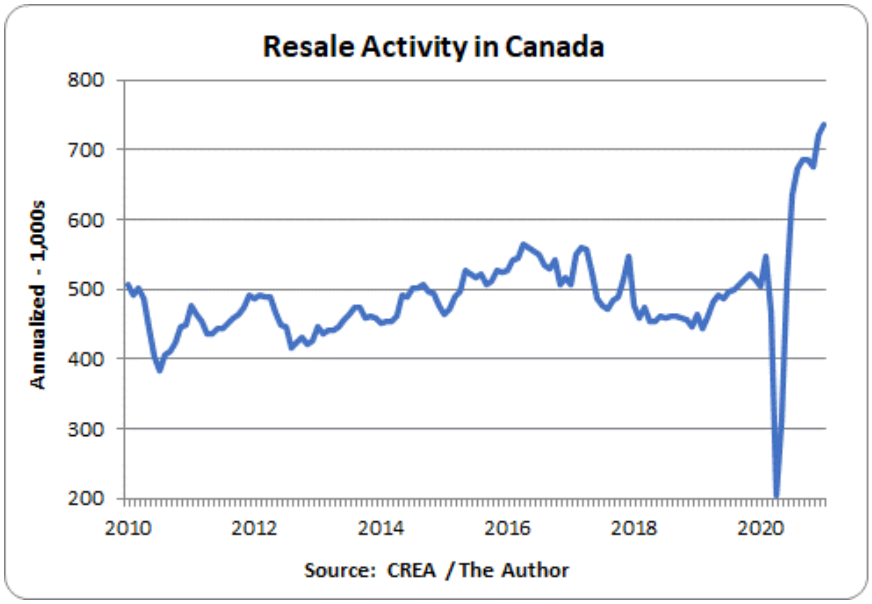
***Table 5-1***
***Scenarios for Mortgage Renewal in 5 Years***

| *Assume $425,000 mortgage; $100,000 income* | *Monthly Payment* | *Annual Income* | *Mortgage Payment as % of Income* | *Tax and Heat* | *Monthly Cost* | *GDS Ratio* |
|---|---|---|---|---|---|---|
| ***Starting Position*** | | | | | | |
| Actual at 2.25% | $1,851 | $100,000 | 22.2% | $500 | $2,351 | 28.2% |
| Stress test at 4.79% | $2,421 | $100,000 | 29.1% | $500 | $2,921 | 35.1% |
| ***Mortgage Principal in 5 Years*** | ***Principal Remaining*** | | | ***% Repaid in 5 years*** | | |
| Based on actual interest rate | $357,884 | | | 15.8% | | |
| Implicit assumption by stress test | $374,904 | | | 11.8% | | |
| ***Payments in 5 Years Calculated at interest rate of...*** | | | | | | |
| 1.70% | $1,759 | $110,000 | 19.2% | $550 | $2,309 | 25.2% |
| 2.25% | $1,851 | $110,000 | 20.2% | $550 | $2,401 | 26.2% |
| 2.79% | $1,945 | $110,000 | 21.2% | $550 | $2,495 | 27.2% |
| 3.79% | $2,124 | $110,000 | 23.2% | $550 | $2,674 | 29.2% |
| 4.79% | $2,311 | $110,000 | 25.2% | $550 | $2,861 | 31.2% |
| Source: Analysis by the author. | | | | | | |

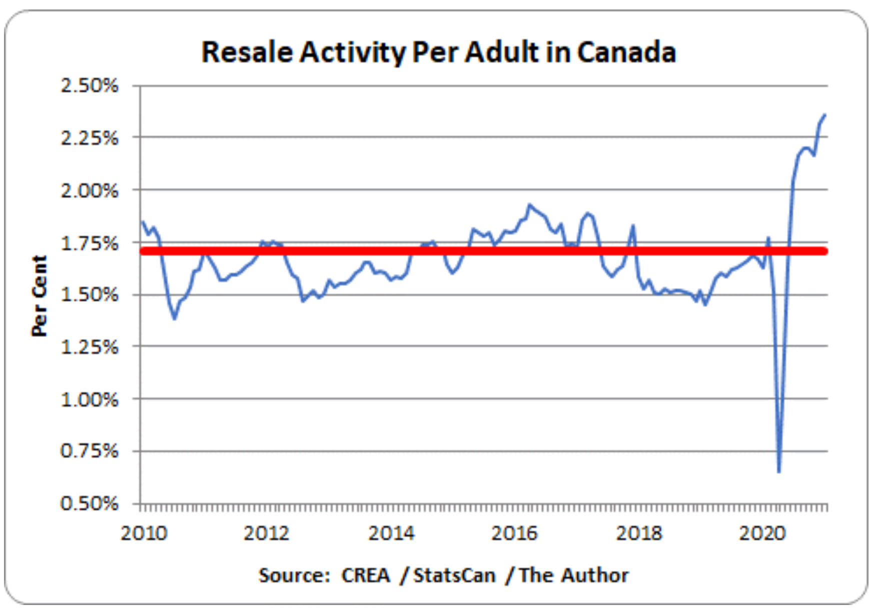
# 6.0 Housing Market Trends

*Trends in the Resale Market*

Resale housing activity was remarkably strong during the second half of 2020. In consequence, a new annual record was set: Total sales for the year (551,382 dwelling units, as reported by the Canadian Real Estate Association (CREA)) were 12.6% higher than in 2019, and slightly (2.3%) higher than the record that had been set during an exuberant 2016.[20] Homebuying demand is extremely strong in Canada because of a potent combination of motivation and opportunity.

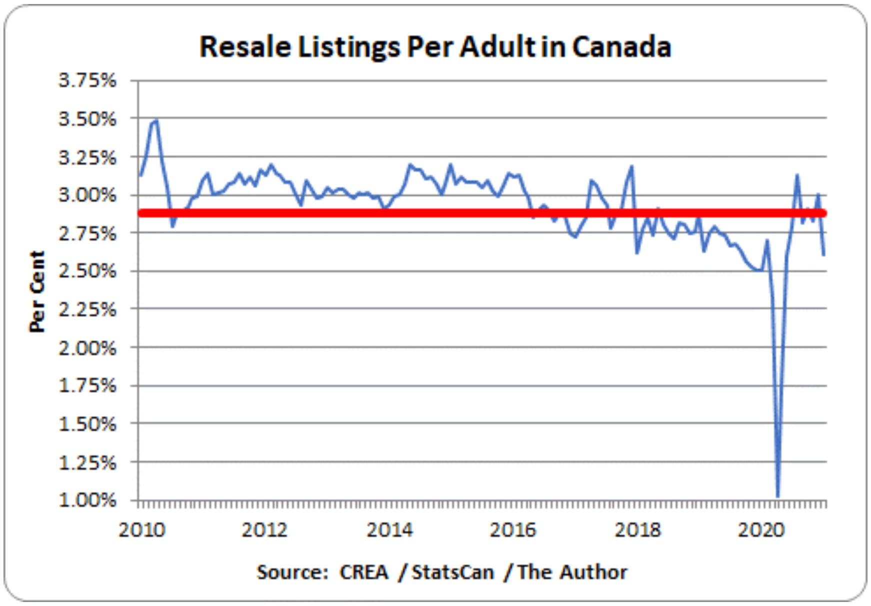



Resale activity should trend upward over time: As the population grows there are more potential buyers. Also, construction of new homes means that there are more properties that could possibly be sold. Therefore, it is useful to look at resale market activity relative to the size of the population. The chart to the right makes that comparison (using the number of adults in Canada, as estimated by Statistics Canada's Labour Force Survey). The average is

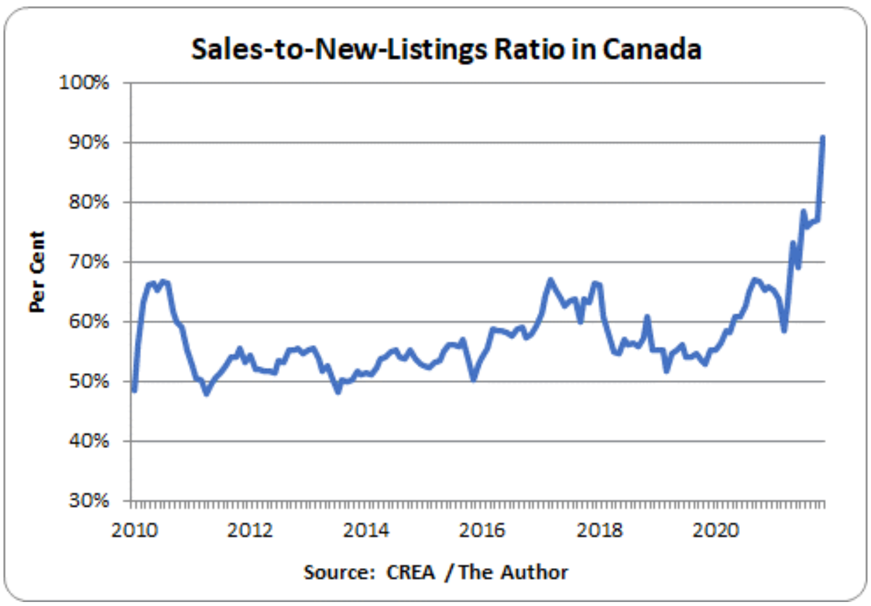



[20] The charts shown in this review include data for January 2021.

calculated for the period 2001 to the present, which is illustrated by the flat red line. At the start of 2020, the population-adjusted sales rate was close to the long-term average. During the early stages of the pandemic, the rate fell to far below average. During the second half of the year, the sales rate was far above average. For the entire year, the sales rate was 3.9% above the long-term average. But, 2020 did not set a new record by this measure. The population-adjusted sales rates were actually stronger for each year from 2004 to 2007 and in 2016. The later discussion of housing market conditions across the provinces and major cities shows a wide range of performances on this metric of per-adult sales rates.



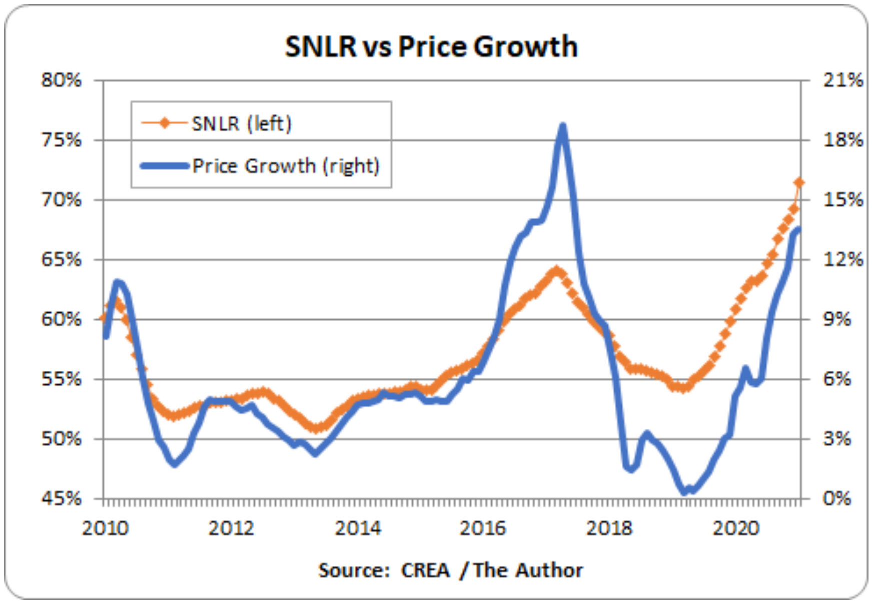

Flows of new listings into the resale housing market were improved during the second half of 2020, compared to the prior three years. Combining low listings numbers for the first half plus an improved second half, for all of 2020 the population-adjusted listings rate was 12.5% below the long-term average.




The flow of new listings into housing markets improved during the second half of the year, but did not keep up with sales. In consequence, the sales-to-new-listings-ratio ("SNLR") rose sharply during the year, reaching 77% by December (and rising even more, to an all-time record of 91%, this January). For all of 2020, the national SNLR averaged 70%. By contrast, I estimate the threshold for a "balanced market" at about 52%—this is the SNLR at which we should expect that prices will rise by 2% per year. Supply shortages have resulted in extremely rapid price growth. By the end of the year, the composite house price index for Canada, as estimated by CREA, was 13.2% higher than a year earlier.

During the past five years, housing markets in Canada have been in shortage conditions most of the time (the SNLR has averaged 61% during that period). Consequently, price growth has been rapid most of the time. During the past five years, composite price index has increased at an average rate of 8.1% per year.

Historically, there has been a strong relationship between the SNLR and rates of house price growth in Canada. The chart to the right illustrates the relationship.[21]




The chart also hints that the relationship can change over time. For example, during 2018 and 2019 pricing was responsive to changes in the SNLR, but the responses were weaker than previously. During 2016 and 2017, the responses had been more robust. In the last few months of the data, the mathematical relationship between SNLR and price growth has strengthened, and is more like what was seen during 2010 to 2015. The point of this discussion is that uncertainty about the relationship makes it difficult to predict what might happen to pricing. But, there certainly is a message that until there is some improvement in the supply-demand balance, we are likely to see pressure on pricing.

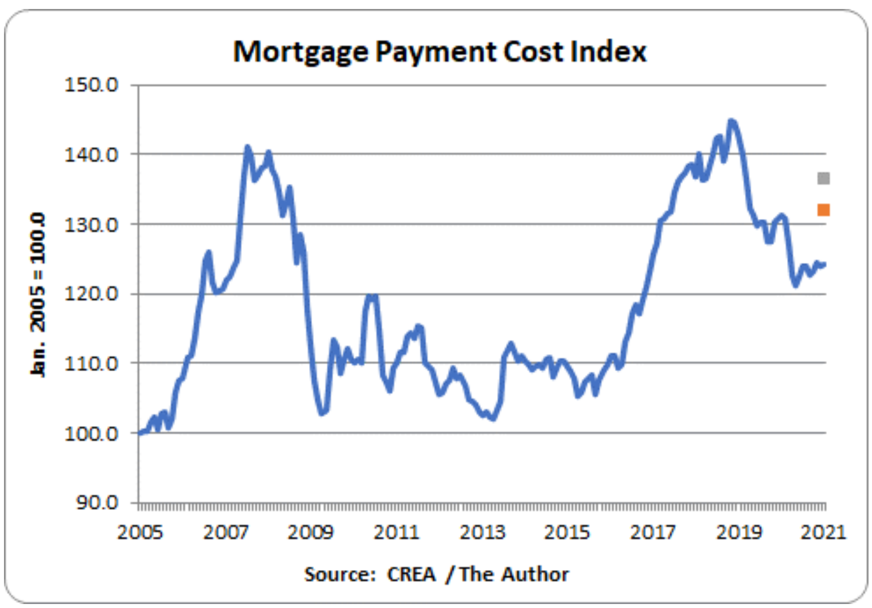
From last July until this January, Mortgage Professionals Canada conducted a set of five consumer surveys that investigated the effects of COVID-19 on attitudes and expectations.[22] One of the most remarkable findings was that among non-homeowners (people who rent or live with parents) the share who expect to buy a home in the coming year rose sharply. This does not mean that all of them will be able to buy. The survey also found that there was a smaller rise in expectations about buying among people who already own a home and want to buy a different one. The consequence of this is that there has been a small rise in the number of people who want to sell homes (raising numbers of new listings), but that supply has fallen far short of the required numbers, resulting in intense price growth.

[21] In this chart, the SNLR is shown as 12-month moving averages to reflect that price growth during each year-over-year period should be the result of the SNLRs that existed during that same period.
[22] The reports can be found here: https://mortgageproscan.ca/membership/resources/covid-19-consumer-reports

A further discussion within the fifth edition (on pages 23 and 24 of that report) makes calculations of mortgage carrying costs for typical homes in Canada. That analysis finds that reductions in interest rates have more than offset the effect of higher prices, with the result that housing affordability in Canada was better at the end of 2020 than it had been during 2017 to 2019. In fact, if affordability is calculated on the basis of interest costs only (that is, giving consideration to the fact that part of a mortgage payment—repayment of principal—is actually a form of saving, and the cost of finance is the interest part of the payment), then at the end of 2020, affordability was the best seen in the 15 years for which the calculations were made.

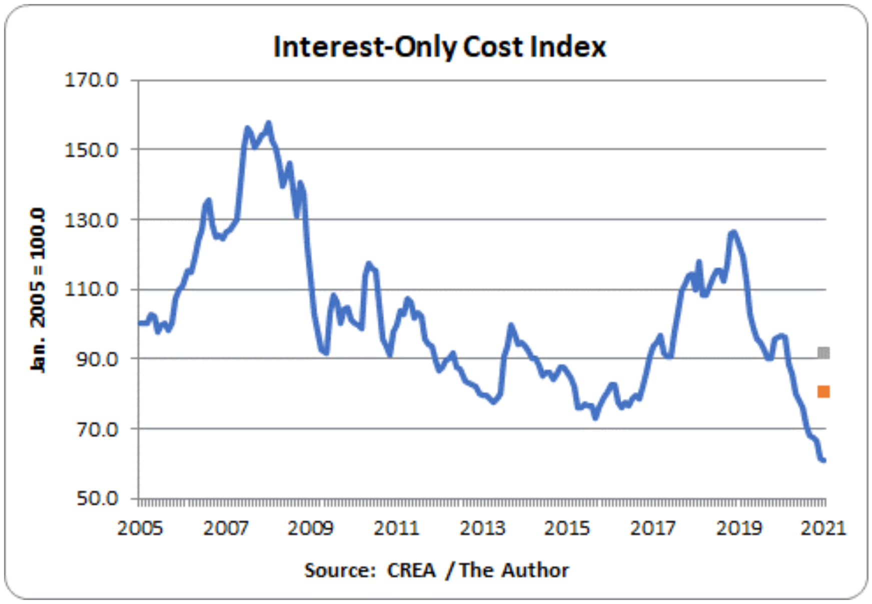
Another way to express this is that lower interest rates create "space" in which house prices can rise and still be affordable. This doesn't mean that prices should rise. They have risen because there isn't enough housing supply in many communities across the country. The fact that the affordability indicators are still quite positive indicates that price increases have not fully filled the "space" created by low interest rates, and therefore consumer interest remains very strong.

The two charts are updated here, including data for this January. At the time, typical "special offer" rates advertised by major lenders (for five-year fixed-rate mortgages) were at the lowest ever level (an average of 1.66% for the month). Since then, bond yields have increased sharply and it is likely that mortgage rates will follow to some degree. Therefore, in these charts, two alternative calculations are shown for the final data points, based on interest rates of 2.2% and 2.5%.



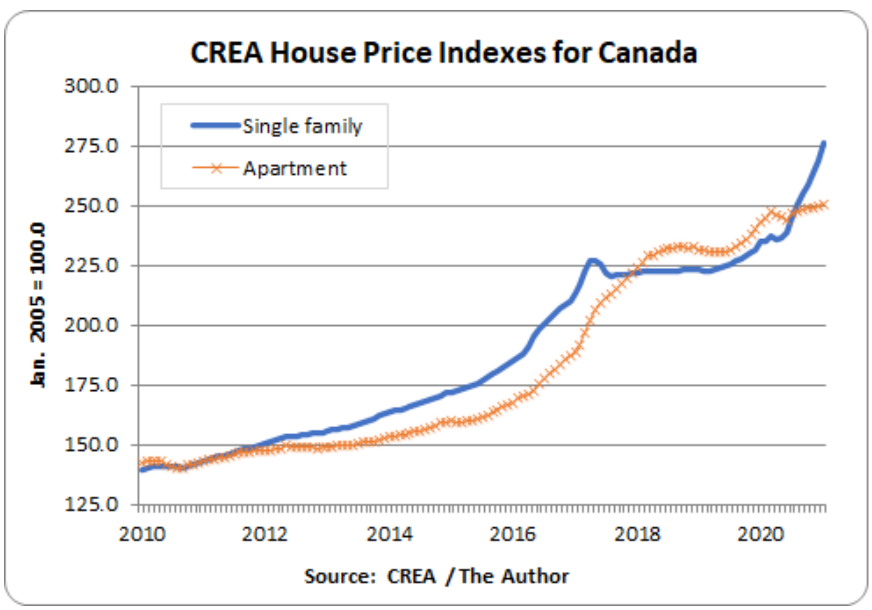

The first chart shows that in terms of total mortgage payments (assuming 25-year amortization periods) the cost burden, using the actual 1.66% affordability, was considerably improved compared to 2017 to 2019, but it was slightly worse than the long-term average. For the entire period shown in this chart, the index averaged 118.4. The actual figure for this January (124.2) was worse than average. Higher interest rates would substantially reverse the improvement seen recently and affordability would be quite poor. At an interest rate of 2.2%, the index for January would be 12% above the long-term average and at a 2.5% rate it would be 15% above average (in these charts, the estimated effects of higher interest rates are shown by the small coloured squares).

Looking at affordability in terms of the cost of finance (the interest part of the payment), affordability was extremely good during late 2020 and into early 2021. The average index for the entire period was 101.7. The actual index for January was much lower, at 60.9. Even with higher interest rates, interest-only affordability would still be much better than average. At a 2.2% interest rate, the index for January would be 21% below average and at a 2.5% rate it would be 10% below average.

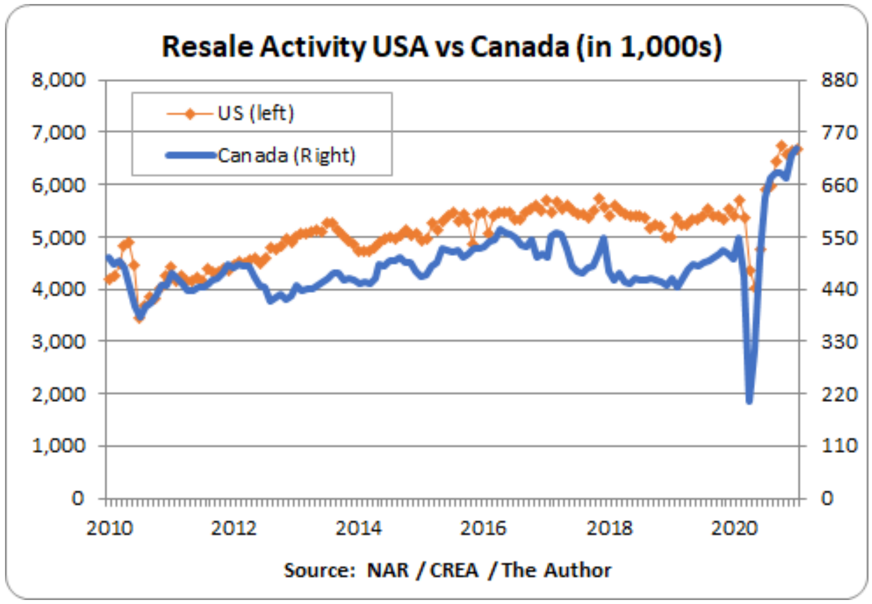



Consumers' buying and mortgaging decisions give consideration to both the total mortgage payment and the interest part of the payment. Based on the very mixed results for the two sets of calculations, it is quite uncertain how potential homebuyers would react to higher interest rates and what the consequences might be for home prices across Canada.

The COVID-19 consumer surveys found that many Canadians want to make changes in their housing situations, to make it easier to maintain social distancing, and/or because their housing needs have changed. Housing market data shows that consumer interest is shifting away from apartments toward ground-oriented housing, in both the ownership and rental sectors. As can be seen in this chart, CREA's house price indexes show that price growth is now much more rapid for low-rise housing (up by 16.5% during December 2019 to December 2020) than for apartments (up by 4.1%).



Canada is not alone in seeing a surge of home buying. Data for the United States also shows extremely high sales numbers for the second half of 2020. The population of Canada is roughly 11% of the U.S. figure. Therefore, in this chart, Canada is scaled (on the right side) at 11% of the U.S. figures. In this chart, since mid-2012, sales in Canada have been relatively weak compared to the U.S. Prior editions of this report have commented that this provides some evidence that tightened mortgage lending regulations have suppressed home buying in Canada. For example, for 2019 sales in Canada were just 9.2% of the U.S. figure. The gap has closed recently, and in the second half of 2020 sales in Canada were 10.6% of the U.S. figure. As in Canada, the U.S. is also experiencing rapid price growth. The U.S. S&P/Case-Shiller 20-City Composite Home Price Index has increased by 8.2% in the last six months (up to December), for an annualized rate of 17%. On the same basis, CREA's price index for Canada increased by 9.6% during the six months (20% annualized rate).



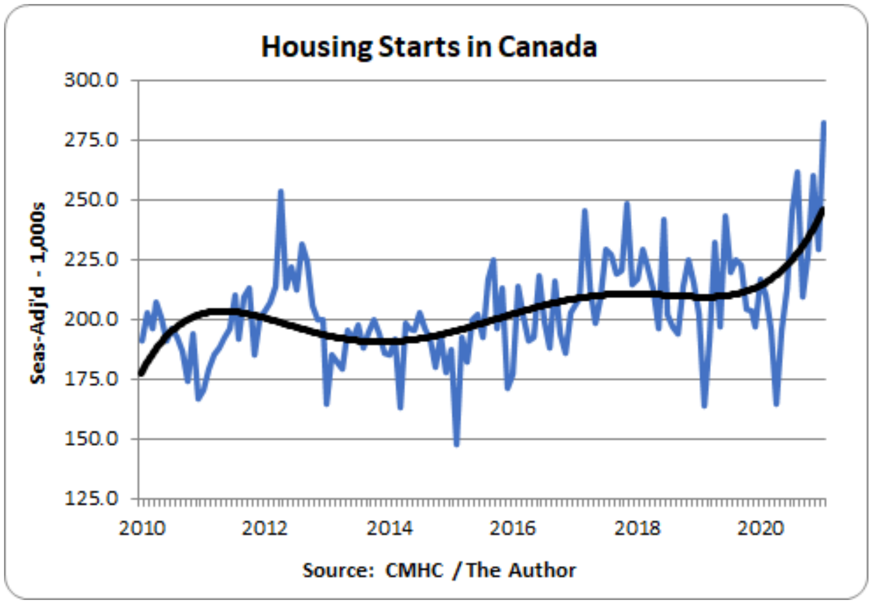

Whether the normalization of the sales ratio in Canada versus the U.S. is a permanent change and what the future holds remain to be seen. It might mean that the impact of Canadian mortgage policies has finally waned. But, there are at least three other significant factors that help explain the recent recovery of sales in Canada versus the U.S.: the COVID-19 pandemic has been much worse in the U.S. than in Canada, which might be limiting sales in the U.S. (the total number of confirmed cases in the U.S., on a per-million basis during 2020 was four times the Canadian rate). Secondly, job losses have been worse in the U.S. than in Canada. As of January, employment in the U.S. was 6.5% lower than in February, while in Canada the reduction is 4.5%. Thirdly, interest rates fell by more in Canada than in the U.S. In the U.S., the average mortgage rate at year end was 0.78 percentage points lower than a year earlier. In Canada, the reduction was 1.15 points. Improved affordability is providing more support in Canada than in the U.S.

## *Rental Markets*

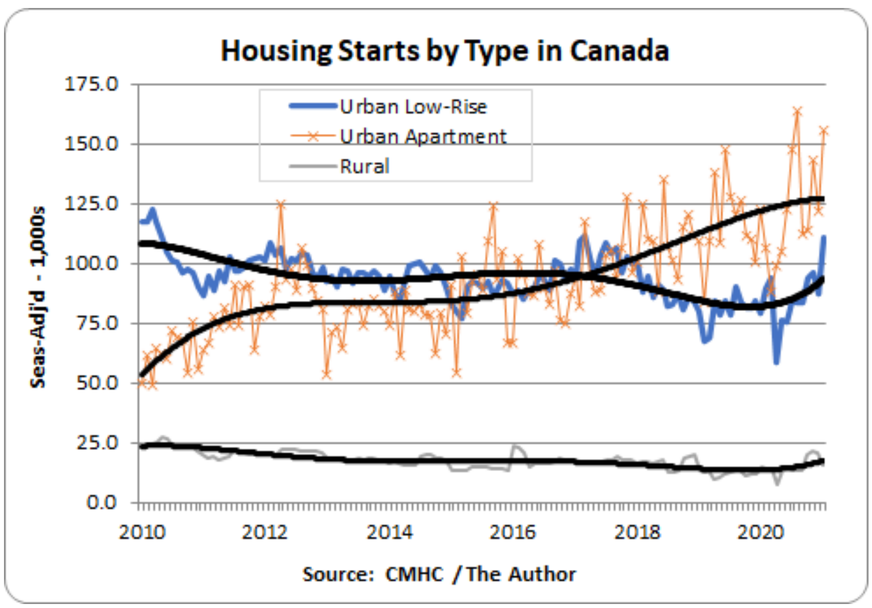
In the rental sector, the annual survey conducted by Canada Mortgage and Housing Corporation (done in October of each year) found that the vacancy rate for apartments rose by one percentage point (from 2.2% in 2019 to 3.2% in 2020). But, for row housing, the vacancy rate fell (from 3% in 2019 to 2.7% in 2020). Detailed data also shows that for apartments, vacancy rates rose the most in the largest cities, where average building sizes are larger and therefore social distancing is more difficult (shown in the last column in the table on the last page).

*Housing Starts*

Housing starts in Canada have seen very little impact from COVID-19. Total starts for the year were 6.5% above the 20-year average and were 4.4% higher than a year ago. In the data, there is just a small hint of disruption, in a dip that was seen in April (due to a complete shutdown of construction within Quebec). Housing starts were stronger in the second half of the year than the first half.




Looking in more detail, apartment activity remains very strong, despite the shift of consumer interest away from apartments toward low-rise dwellings. The pre-construction processes for apartments take some time to play out, and starts continue to reflect decisions that were made earlier by investors and consumers. New starts of apartments might begin to slow later this year, reflecting that there was a reduction in pre-construction sales of apartments during 2020. For low-rise dwellings, on the other hand, pre-construction processes occur more quickly. Rapid price growth for low-rises is now resulting in more sales of new homes, and there are good prospects for further sales growth during 2021 (provided that builders are able to offer enough inventory). The most recent data hints that starts of low-rise homes are now reacting to the increased sales.

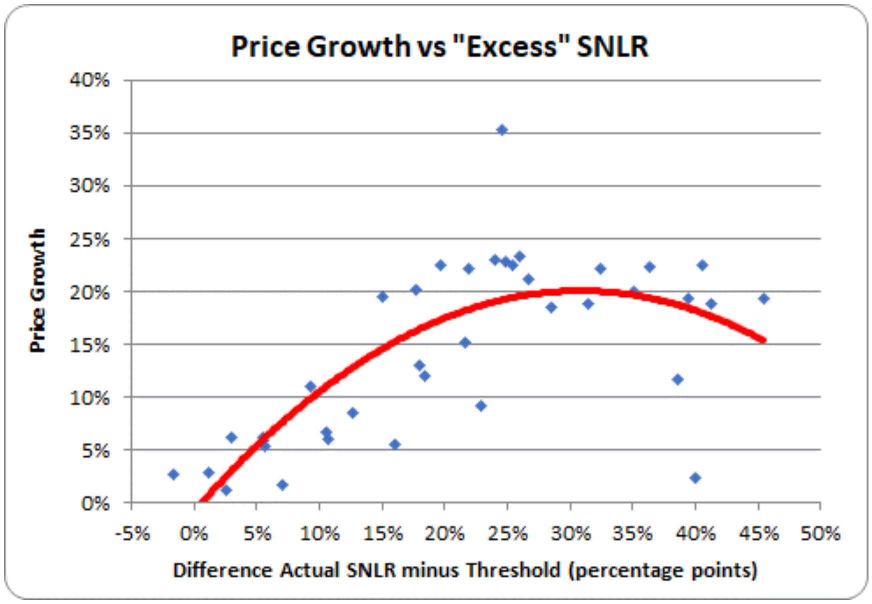


### *Variations Across Canada*

Across Canada, there are broad similarities for resale activity, but there are, of course, variations that depend on local circumstances. The table on the second page below looks at the provinces and major centres for several metrics. For Quebec, data is provided only for the province and not for individual centres, due to data availability.

- The employment data calculates the change for the fourth quarter of 2020 versus the same period for 2019. These estimates from Statistics Canada indicate that employment has been reduced for most of the locales, to varying degrees. Since this data is based on sample surveys, some of the estimates might not be reliable. The estimates indicate that the largest job losses were in Alberta, Saskatchewan and Ontario. The strongest employment situations were in the Atlantic provinces and Quebec.
- The second column of data looks at resale activity for 2020 compared to long-term averages (using population-adjusted sales rates). For all of Canada, the sales rate was 4% above the long-term average. The weakest performances were seen in Alberta, where the combination of prolonged economic weakness and COVID-19 limited sales. The strongest sales were seen in Quebec, where several years of strong job creation is very positive for homebuying. Looking within provinces, sales performances in 2020 were weaker for the larger cities compared to the respective provinces—notably for Vancouver, Calgary, Regina, Saskatoon, Winnipeg, Toronto (plus Guelph and Peterborough), Saint John and Halifax. Areas that we might consider "move to" or "move back to" saw the strongest sales (including Newfoundland and Labrador, Prince Edward Island and many of the mid-sized cities in Ontario). Furthermore, the data implies that for smaller cities not shown in this table, activity was very strong in 2020.
- The third column of the table looks at the state of balance in resale markets, using the sales-to-new-listings ratios. Then, the fourth column provides estimates of the "balanced market thresholds" (the SNLRs at which, on a statistical basis, prices would be expected to rise by 2% per year). Comparing the third and fourth columns of data, actual SNLRs exceeded the thresholds in almost all of these areas (the only exception is Edmonton) and in most cases, the excesses were very large. (For Canada, the actual SNLR for 2020, at 70%, was 18 percentage points above the balanced market threshold of 52%.)
- In consequence, most areas saw very rapid price growth during 2020. The fifth column of data shows the percentage change in prices during the year. (The price growth calculations use CREA's price indexes where available; otherwise, the calculations are based on average prices.) According to these datasets, prices rose in all of these areas during 2020. For Canada, the increase was 13%. The changes ranged from 1.2% (Calgary) to 35% (Windsor). Price growth exceeded 10% in more than half of these areas.

- This chart shows the relationships between price growth and the states of balance (the amount by which the actual SNLRs for 2020 exceeded the estimated balanced market thresholds, in percentage points). This data shows reasonably close relationships. In the data, there are some outriders. Notably, in the lower right of this chart, the data for Saint John shows a large excess SNLRs but only moderate growth of the average price. (The data for all of New Brunswick is also an outrider.) In addition, at the top of the chart, a 35% rise in the average price for Windsor, Ontario, is much larger than might be expected. These three datapoints cause the trend line—the solid line—to twist downward. Otherwise, for areas where the "excess" SNLR is 30 points or larger, the trend line would be flat with price growth at about 20%.




- The last two columns in the table look at apartment vacancy rates for October 2020, and then show the changes versus a year earlier (as reported by Canada Mortgage and Housing Corporation). For all of Canada, the vacancy rate in October 2020 (3.2%) was 1 point higher than a year earlier). Vacancy rates rose in all of the provinces except Saskatchewan. Within each province, the largest rise in the vacancy rate was seen in the largest city. About one-third of the cities saw reductions in their vacancy rates. Most of the cities with reduced vacancies are mid-sized "move-to" locations, that might be experiencing in-migration from the larger cities.
- It should be noted that the vacancy rate data is for October, which was seven months into the pandemic period. It is quite possible that there have be further significant changes in rental market conditions since then. It would be useful for CMHC to conduct this survey more frequently (perhaps quarterly).

On-going discussions of market conditions is provided via Housing Market Digest. A national edition is published monthly and regional editions are quarterly. The Housing Market Digests can be found here:
https://mortgageproscan.ca/membership/resources/housing-market-digests

| *Table 6-1*<br>*Housing Market Indicators* | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Area* | *Emp. Change Q4-2020 vs Q4-2019* | *Sales/Adult 2020 vs 20-Year Average* | *Average SNLR 2020* | *Estimated Balanced Market SNLR* | *Price Change Dec 2020 vs 2019* | *Apartment Vacancy Rate 2020* | *Change in Vacancy Rate* |
| **Canada** | **-2.9%** | **4%** | **70%** | **52%** | **13.1%** | **3.2%** | **1.0** |
| **British Columbia** | **-2.2%** | **7%** | **65%** | **46%** | **12.0%** | **2.4%** | **0.9** |
| Fraser Valley | -3.1% | -3% | 65% | 52% | 8.5% | 0.6% | -0.5 |
| Okanagan | 2.9% | 5% | 68% | 45% | 9.2% | 2.1% | -0.6 |
| Vancouver | -3.5% | -21% | 57% | 51% | 5.4% | 2.6% | 1.5 |
| Victoria | -3.5% | 0% | 69% | 53% | 5.4% | 2.2% | 1.2 |
| **Alberta** | **-5.4%** | **-24%** | **56%** | **55%** | **2.9%** | **7.2%** | **1.9** |
| Calgary | -1.5% | -34% | 59% | 56% | 1.2% | 6.6% | 2.7 |
| Edmonton | -6.4% | -20% | 54% | 56% | 2.7% | 7.2% | 2.3 |
| **Saskatchewan** | **-3.8%** | **8%** | **55%** | **48%** | **1.7%** | **7.1%** | **-1.3** |
| Regina | -1.2% | -4% | 60% | 57% | 6.1% | 7.5% | -0.3 |
| Saskatoon | -2.8% | -2% | 56% | 50% | 5.8% | 5.9% | 0.2 |
| **Manitoba** | **-2.6%** | **13%** | **69%** | **58%** | **6.6%** | **3.8%** | **0.7** |
| Winnipeg | -3.6% | 6% | 69% | 59% | 6.0% | 3.8% | 0.7 |
| **Ontario** | **-3.2%** | **0%** | **71%** | **54%** | **20.1%** | **3.2%** | **1.2** |
| Barrie | -9.0% | 2% | 76% | 51% | 22.8% | 2.1% | -1.1 |
| Brantford | -3.4% | 9% | 86% | 61% | 22.6% | 2.2% | -0.1 |
| Guelph | 0.7% | -6% | 83% | 68% | 19.5% | 2.2% | 0.2 |
| Hamilton | -6.3% | 2% | 80% | 53% | 21.1% | 3.5% | -0.4 |
| Kingston | 0.1% | 2% | 73% | 42% | 18.8% | 3.2% | 1.3 |
| Kitchener | -6.6% | 1% | 79% | 60% | 22.5% | 2.1% | 0.0 |
| London | 0.0% | 5% | 82% | 56% | 23.4% | 3.4% | 1.6 |
| Niagara | -7.2% | 14% | 76% | 52% | 23.0% | 2.7% | 0.4 |
| Oshawa | 3.2% | 4% | 77% | 55% | 22.1% | 2.3% | -0.1 |
| Ottawa | -9.1% | 10% | 83% | 50% | 22.2% | 3.9% | 2.1 |
| Peterborough | -7.7% | -5% | 81% | 53% | 18.4% | 2.6% | 0.5 |
| Sudbury | -6.5% | 11% | 85% | 50% | 20.1% | 2.5% | 0.4 |
| Thunder Bay | -6.0% | 6% | 85% | 64% | 15.2% | 4.1% | 0.5 |
| Toronto | -2.2% | -10% | 61% | 52% | 11.1% | 3.4% | 1.9 |
| Windsor | -10.3% | 13% | 76% | 51% | 35.2% | 3.6% | 0.7 |
| **Quebec** | **-1.9%** | **34%** | **86%** | **45%** | **18.8%** | **2.5%** | **0.7** |
| **New Brunswick** | **0.0%** | **42%** | **84%** | **45%** | **11.6%** | **3.1%** | **0.5** |
| Moncton | 1.4% | 40% | 91% | 45% | 19.4% | 2.8% | 0.6 |
| Saint John | -5.0% | 33% | 82% | 42% | 2.3% | 3.1% | -0.2 |
| **Nova Scotia** | **-1.0%** | **24%** | **84%** | **48%** | **22.3%** | **2.1%** | **0.7** |
| Halifax | 1.6% | 7% | 89% | 49% | 19.4% | 1.9% | 0.9 |
| **PEI** | **-3.3%** | **13%** | **75%** | **35%** | **22.5%** | **2.6%** | **1.4** |
| **Newfoundland and Labrador** | **-0.7%** | **17%** | **49%** | **44%** | **6.2%** | **7.2%** | **0.2** |
| Source: Analysis by the author, using data from Statistics Canada, CREA and Canada Mortgage and Housing Corporation. | | | | | | | |