

Report on the Housing and Mortgage Market in Canada

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1.0 Introduction and Summary

This report has been prepared by Mortgage Professionals Canada (continuing a tradition of publishing semi-annual reports on the housing and mortgage market in Canada, which began in 2005). The objective for the reports is to create and share data that would not otherwise be available, on mortgage activity and consumers' attitudes, and to offer thought-provoking interpretations of trends in the housing and mortgage market, and in the realm of government policies related to mortgages and housing. The reports are based largely on consumer surveys.

This edition of the report is focused primarily on housing markets in Canada, which are currently seeing very rapid transitions. Sales trends have weakened in many communities.

The over-riding message in this report is that federal government policies with regard to mortgage lending are unduly suppressing housing activity. Our consumer survey has found that sentiment regarding the housing market has shifted decisively downwards during the past year and a half, reflecting the impacts of increased interest rates and government policies that are making it more difficult for potential homebuyers to obtain the mortgage financing they need. The weakening of housing markets will increasingly impair the broader economy. In this report, it is estimated that during the coming three years, job creation will be 200,000 less than it would otherwise be, as a result of these policies: they are unnecessarily adding to economic risks within Canada.

Consumer Sentiment

Since 2010, the consumer surveys have researched some "topical questions" (chiefly related to housing and mortgages). As is shown in Table 2-1, the spring 2018 survey finds that Canadians have become more comfortable with choices they have made:

- They are less likely to feel that "I regret taking on the size of mortgage I did".
- They are more likely to agree that "I/My family would be well-positioned to weather a potential downturn in home prices".
- They are less skeptical about choices that have been made by other people: they are less likely to agree that "Low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners".

But, there has been some slippage in attitudes about broader conditions:

- There is still broad agreement that "Real estate in Canada is a good long-term investment", but the strength of that agreement has weakened slightly.
- Optimism about the economic outlook has weakened.
- There is still agreement with the statement "I would classify mortgages as good debt", but the strength of that agreement has weakened.

Similarly, since 2010, three questions have been asked about expectations:

- Previously there have been positive responses to a statement "Now is a good or bad time to buy a home/condominium in my community". As of this spring (and fall last year), responses have slipped to neutral.
- Expectations about house price growth are not materially different compared to prior years, but there are sharp differences across the country. The highest response for this year are in Quebec (6.81 out of 10), followed by Ontario (6.53), British Columbia (6.49), Atlantic Canada (6.00), Alberta, (5.98), and Saskatchewan (5.47).
- Expectations are increasingly for interest rates to rise. But, as observed in the past, these responses reflect what has happened recently, and they have not predicted what will happen.

For people who do not currently own homes, the survey asked the reasons for not owning. The responses of young Canadians (here defined as less than 35 years old) show:

- Reasons related to lack of financial preparedness are mentioned most frequently (especially needing time to save for a down payment).
- On the other hand, negative attitudes towards homeownership (stressfulness, lack of interest, and not a good investment) are mentioned by only very small minorities.

There is a still a very high level of interest in homebuying by young people: among non-owners aged 25 to 34, three-quarters expect to buy a home within the next five years. But, whether they will be able to buy may be an entirely different matter.

- Their personal circumstances (employment situations, incomes, confidence about their economic prospects, and access to down payments) will matter, of course.
- But, so will market conditions (will they be able to find options that meet their reasonable needs and wishes at costs that they can afford).
- And, even if their personal circumstances and market conditions are favourable, it will also be essential that they can obtain mortgage financing. At this time, federal government policies (stress tests) are making it difficult for potential buyers to obtain mortgage financing.

For potential buyers who are adversely affected by the stress tests, the solutions will usually involve a combination of reducing their expectations (and therefore buying less expensive properties) and secondly, making larger down payments. Update analysis indicates that 18% of prospective homebuyers who could currently afford their preferred purchase would fail a stress test. For those affected, the required adjustments average \$28,750. Among these people (about 120,000 potential buyers each year), the required adjustments would be relatively small for most. However, about 30,000 to 40,000 per year would face larger effects and would need to make considerably larger down payments, which may result in prolonged delays.

The single largest source of funds for down payments is personal savings (just over one-half of total funds) augmented by funds taken from the buyers' RRSPs (about one-tenth of total funds). The "bank of mom and dad" is growing in importance, but still accounts for less than one-fifth of total down payments. Loans from financial institutions are actually a larger source of funds. Revised mortgage lending regulations are now making it more difficult for buyers to borrow down payments. Without getting into an argument about whether this change is good or bad, it does mean that potential buyers are now even less able to put together a down payment, at a time when they need to increase the amount they put down.

This set of circumstances means that many potential first-time home buyers will have to delay buying, and often by very long periods.

Some first-time buyers will be able to get more help from parents. This means that there will be "rationing" in the housing market. The ability to purchase will be increasingly determined by the buyers' opportunities to get help from parents. The actual circumstances of prospective buyers (their incomes and their personal prospects) will become less important than the circumstances of their parents (their ability and willingness to give or lend funds to their children).

The homeownership rate has fallen in Canada, from 69.0% in 2011 to 67.8% in 2016, in large part due to the increasing difficulty of saving for down payments. The additional challenges posed by the stress tests will add to the downward pressure on the ownership rate. Historically in Canada, over the course of a lifetime it has been advantageous to own rather than rent. There is no reason to believe that has changed. Therefore, the mortgage stress tests, by suppressing home ownership, are adding to the financial stresses that are and will be experienced by Canada's younger generations.

Attitudes Towards the Mortgage Stress Tests

We estimate that to this point, about 100,000 Canadians have actually been prevented from buying a home as a result of stress testing now required by the federal government (even though they could have afforded to buy based on their actual circumstances). In consequence, few Canadians have direct personal experience that will have made them highly knowledgeable about the effects of the stress tests. People who are thinking about buying a home can also be expected to have some knowledge about the potential effects.

This edition of our consumer survey investigated expectations about effects of the stress tests. We found that about one-third (32%) of consumers would expect significant negative impacts on their ability to buy a home in their preferred neighbourhood (8 to 10 on a 10-point scale). A similar proportion (29%) would expect negligible impacts (1 to 3 out of 10), and 39% expect moderate impacts (4 to 7 out of 10).

But, looking more narrowly, at people who are not currently homeowners but expect to buy in the next five years, more than one-half (54%) expect significant negative impacts, and 35% expect moderate impacts. Just 11% expect negligible impacts.

These survey findings are consistent with what has actually happened in housing markets: so far this year, resale market activity for all of Canada has fallen by 12.5% compared to last year, and by 16.5% compared to 2016. This sharp slowdown is partly due to modest rises in mortgage interest rates and to provincial government policies (in British Columbia and Ontario) that are aimed at discouraging homebuying by non-residents. But, the increased difficulty in obtaining mortgage financing is the primary cause for the slowdown.

Housing Market Trends

In a few places, housing activity had been excessively robust, and a slowdown is a welcome change. Toronto and Vancouver (and their surrounding areas) are obvious cases where there had been excessive strength. Very strong sales combined with very limited supply had resulted in rapid price growth, sharp deteriorations of affordability, and intensifying frustrations for potential buyers. The weakened market conditions in Toronto and Vancouver have been seen as a favourable change, although it remains to be seen whether those slowdowns have been too sharp.

There has been considerably less discussion about changing housing market conditions for other areas of Canada, where market conditions had been roughly in balance, with moderate price growth and where potential homebuyers felt much less stress. Now, with softening housing market trends in many of these communities, the housing market transitions are creating increased stress for potential sellers, who are finding it more difficult to sell their properties. We are not yet seeing notable price reductions in these housing markets, but there are many instances where weak demand is leading to prices that are flat or eroding gradually.

Housing market analysis is a highly satisfying field of study for an economist. In large part, this is because housing is fundamental to our quality of life. Housing markets behave in the way that economic theory says they should (most of the time). Price growth is determined by the balance between demand and supply. In the housing market we are fortunate to have actual data on both demand (sales) and supply (listings). These data can be combined into a set of statistics (the sales-to-new-listings ratio, ("SNLR")). Analysis repeatedly confirms that there are strong relationships between SNLR and price growth, most of the time and in most places. Occasionally, housing markets do not behave the way they should. Watching for, and then interpreting those occasional instances adds to the challenges and the satisfaction.

This report is largely occupied with exploring the evolving housing markets and the relationships between supply and demand (and the implications for prices) in Canada and the provinces.

This analysis does indeed find that housing markets continue, in very large measure, to behave the way they should. It also shows that market trends have been sharply disrupted by the mortgage stress tests that are now required for most new mortgages. Due to the stress tests, homebuying activity has slowed sharply compared to what should be happening. In consequence, the balance between supply and demand has been altered and price pressures

have been reduced substantially almost everywhere in Canada. In some places, this change in the state-of-balance has resulted in deceleration from very rapid growth to more moderate rates of increase; in others, price growth had been moderate and is now even slower; and in some places, price stability has been replaced by price erosion.

In a modern economy, one of the most dangerous incidents that can happen is falling house prices.

- The loss of home equity can be corrosive to consumer confidence, resulting in reduced spending in other economic sectors and causing slower economic growth and job creation.
- For homeowners who see a total loss of their equity (that is, the value of their home falls to less than the amount of their outstanding mortgage), the psychological consequences can be crushing.
- There is an important way in which housing markets appear to behave contrary to theory: while we normally expect falling prices will cause demand to increase, a drop for house prices is more likely to cause reduced demand, because potential buyers will hesitate to buy if they fear prices will fall further.
- This set of factors can result in a downward spiral, in which soft conditions in the housing market can turn into an economic crisis.

In Canada and six of the provinces, the housing market state-of-balance is still favourable for prices to increase to varying degrees (the SNLRs are at or above the balanced market levels and we should expect continued price growth). However, in Alberta, Saskatchewan, and Newfoundland and Labrador, the demand-supply balances are very weak (the SNLRs are far below the balanced market levels) and there are risks of price reductions. In Manitoba, the SNLR is just slightly below the balanced market level and there is less risk of price reductions.

The soft housing markets in the three weakest provinces are related to the plunge in the price of oil, which has caused economic weakness. That economic softness has been aggravated by the stress tests, which have caused housing activity to be even weaker than it should be.

When the SNLR is at or above the balanced market level, price growth is fairly predictable. But, when the SNLR is below the balanced level, there is much less predictability; house prices tend to be "sticky downwards" and a low SNLR often does not cause prices to fall. Sellers are highly resistant to reducing their price expectations. Rather than accept a lower price than they expected, they will wait, or even withdraw their property from the market. However, if the imbalance is severe enough or lasts long enough, some sellers will capitulate. Price stickiness can dissolve spontaneously, with severe economic consequences.

This is one of the greatest economic risks facing Canada - that local economic weakness combined with the deliberate suppression of housing demand via the mortgage stress tests could result – unnecessarily - in falling house prices in some areas of the country. Prices are already showing some erosion in a few areas of Canada, notably by 1% per year over the past

two years in Alberta, by 2% per year during the past two and a half years in Saskatchewan, and by 3% to 4% per year during the past four years in Newfoundland and Labrador. The longer housing market weakness lasts, the greater the risk will be, to house prices and to the broader economy.

Moreover, in the areas of Canada where demand and supply are currently in reasonable balance, the reductions in housing demand are resulting in erosion of the SNLRs. In those areas, if the policy-induced suppression of housing demand lasts much longer, supplies of homes for sale will expand and the states-of-balance will continue to weaken. The risks of price reductions and the adverse economic consequences will become more widespread.

The Stress Tests Use the Wrong Interest Rate

Previous editions of this report, and other communications by Mortgage Professionals Canada and by this author, have made arguments that the stress tests as currently devised, are unduly onerous. Rather than repeat those arguments in detail once again, the argumentation can be summarized as follows:

- It is indeed prudent to do testing of mortgage borrowers' ability to afford their future payment obligations.
- None of us knows what interest rates will be in future. It is reasonable to make a worst-case assumption that in five years, interest rates could be two percentage points higher.
- As currently designed, the stress tests assume that the only thing that will change is the interest rate.
- We can be confident that borrowers will experience some income growth. During the past five years, the average weekly wage in Canada has increased by 11.9%, or an average of 2.3% per year. The stress tests ignore this, as they use the same income as at the mortgage initiation. It would be reasonable to assume income growth of 2% per year, or 10% over a period of five years.
- It is a certainty that by the time the mortgage is renewed, a substantial amount of the mortgage principal will have been repaid and the higher interest rate should be applied to a smaller mortgage principal (based on a 25-year amortization period, with a 3.3% interest rate, 14% of the principal will be repaid during the initial 5-year term). The stress tests do not take this into account.
- The stress tests as currently designed, overstate how much the payments would rise as a result of a 2-point rise in the interest rates, and they understate the borrowers' ability to pay.
- In order to simulate the effect of a 2-point rise in five years, the stress tests should also incorporate income growth and principal repayment.
- Failure to do this means the stress tests are overly onerous and in consequence housing demand is being suppressed by an unnecessary amount, with undue economic consequences.

About Mortgage Professionals Canada

Mortgage Professionals Canada is the national mortgage industry association representing 11,500 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 the country whose interests we represent to government, regulators, media and consumers. Together with our members, we are dedicated to maintaining a high standard of industry ethics, consumer protection and best practices.

The mortgage broker channel we represent originates more than 35% of all mortgages in Canada and 55% of mortgages for first-time homebuyers, representing approximately \$80 billion dollars in annual economic activity. With this diverse and strong membership, we are uniquely positioned to speak to issues impacting all aspects of the mortgage origination process.

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 wholly owned subsidiary of Maritz Inc., the largest performance improvement company in the world, headquartered in St. Louis, Missouri. For more than 20 years, Maritz Inc. has been one of the largest providers of customer satisfaction research in North America, and a major supplier of research, helping clients understand Choice, Experience, and Loyalty to their brand. In Canada, Bond Brand Loyalty has been developing marketing research solutions for Canadian clients under the Thompson Lightstone and Maritz brands since 1977, and has grown to become one of Canada's largest full-service marketing research consultancies.

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 Consumer Sentiment

Attitudes to Topical Questions

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

The statements revolve around current issues, some of which have been widely discussed in the media. The first table summarizes responses, showing the average scores. Here is a recap:

- It remains true that there is 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 have". For this spring 2018 survey, the score of 6.84 is below the average seen during the prior eight surveys (7.00 out of 10), and is the second lowest (just slightly above the 6.80 recorded in the fall of 2015).
- On the other hand, consumers have increasingly become satisfied with the choices they have made. Few "regret taking on the size of mortgage I did" (this question is asked only of mortgage holders). The average score of 3.54 in the spring of 2018 is below the prior average of 3.80, and in fact is the lowest score seen to date for this question.
- As noted in previous years, on a collective basis, consumers believe their choices have been responsible, but collectively they 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.
- Canadians' confidence about their ability to weather a downturn in the housing market has strengthened, as the average rating for the spring of 2018 (7.14) is the highest seen in the history of the survey and is well above the prior average of 6.86.
- Canadians have strongly agreed with the proposition that real estate is a good long-term investment. However, the average score this year (7.16) is below the prior average of 7.27.
- The level of confidence about the economy is slightly below average, at 6.12 this year versus the prior average of 6.18. Looking across the country, confidence is strongest in Quebec (6.39), Manitoba (6.15), Saskatchewan (6.09), and British Columbia and Ontario (both at 6.08). Confidence is weakest in Alberta (5.72) and Atlantic Canada (5.93). The survey was completed on June 6, and therefore these results do not reflect any negative effects from the escalating rhetoric that has followed the G7 meeting (which occurred on June 8 and 9).
- There is strong agreement that mortgages are "good debt", although the average scores have gradually declined during the past five years. The figure for this year (6.83) is below the prior average of 7.07.

<i>Table 2-1</i>									
Summary of Consumer Responses to Topical Question, by Date of Survey									
<i>(A</i>)	(Average Scores on a Scale of 1 to 10)								
	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Spring
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Low interest rates have meant that									
a lot of Canadians became									
homeowners over the past few	6.88	7.11	7.01	7.04	6.98	6.80	7.03	7.15	6.84
years who should probably not be									
homeowners									
I regret taking on the size of	3.86	4.04	3.88	3.82	3.89	3.67	3.60	3.67	3.54
mortgage I did	3.00	4.04	3.00	3.02	3.09	3.07	3.00	3.07	3.3 4
I/My family would be well-									
positioned to weather a potential	6.54	6.72	6.67	6.93	6.95	6.92	7.02	7.09	7.14
downturn in home prices									
Real estate in Canada is a good	7.13	7.27	7.26	7.44	7.35	7.37	7.17	7.15	7.16
long-term investment	7.13	1.21	7.20	7.44	1.55	1.51	7.17	7.13	7.10
I am optimistic about the economy	N/A	6.02	6.13	6.36	6.25	6.23	5.99	6.26	6.12
in the coming 12 months	IN/A	0.02	0.13	0.50	0.23	0.23	3.33	0.20	0.12
I would classify mortgages as	N/A	7.07	7.05	7.20	7.15	7.06	7.02	6.94	6.83
"good debt"	IN/A	1.01	1.03	1.20	1.13	7.00	1.02	0.34	0.03
Source: Mortgage Professionals Cana	ada sur	vey, fall	2010 to	spring	2018;	estimat	es by th	ne autho	or.

The next table looks at the spring 2018 survey results in terms of the ages of consumers:

- 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 homeowers" is strongest for the older age groups. The youngest age group also agrees with the statement, as the average score of 5.90 is slightly above the neutral level of 5.50.
- Levels of regret about mortgages vary quite strongly by age group. Not surprisingly, the oldest age groups have the least regrets.¹
- For the four remaining propositions, opinions are most strongly positive for older age groups and are less positive for the younger population.

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¹ There are relatively few people in Canada under the age of 25 who have mortgages, and therefore no estimate is shown for that age group.

Table 2-2 Summary of Consumer Responses to Topical Question, by Age Group								
(Average Score		•		, ,	•			
	18-24	25-34	35-44	45-54	55-64	65 +	Total	
Low interest rates have meant that a lot of Canadians became homeowners over the past few years who should probably not be homeowners	5.90	6.52	6.75	7.03	6.96	7.20	6.84	
I regret taking on the size of mortgage I did	N/A	3.74	3.66	3.36	3.09	3.13	3.54	
I/My family would be well-positioned to weather a potential downturn in home prices	6.45	6.64	6.80	7.20	7.54	7.78	7.14	
Real estate in Canada is a good long-term investment	6.77	6.92	6.94	7.14	7.32	7.64	7.16	
I am optimistic about the economy in the coming 12 months	5.87	5.96	6.17	6.07	6.04	6.40	6.12	
I would classify mortgages as "good debt"	6.00	6.57	6.88	6.93	6.89	7.09	6.83	
Source: Mortgage Professionals Canada surve	v. sprinc	ı 2018: e	stimates	by the a	uthor.	•		

Expectations

For several years, 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 the next table.

- For the question of whether this is a good time to buy a home or condominium in their own community, the responses have become less positive during the past three surveys (covering a year and a half). The average score this spring (5.54), is very close to the neutral level of 5.5. Prior to 2016, the scores had been consistently above 6.0, indicating moderately positive attitudes. This recent deterioration has no doubt been influenced by multiple factors, including rapid house price growth (particularly in British Columbia and Ontario), increased interest rates since last summer, and the stress tests for mortgages which are making it more difficult for buyers to obtain the financing they need.
- Attitudes are considerably below the neutral level in British Columbia (4.94) and slightly below in Ontario (5.35). Elsewhere, the scores are slightly above neutral in Saskatchewan (5.57), Quebec (5.79), Alberta (5.83), Atlantic Canada (5.92). The highest score was seen in Manitoba (6.35).
- Concerning house price growth for the coming year, the responses indicate expectations for moderate growth in most regions. The highest response was in Quebec (6.81 out of 10), followed by Ontario (6.53), British Columbia (6.49), Atlantic Canada (6.00), Alberta, (5.98), and Saskatchewan (5.47). The national average for this year (6.46) is not materially different than the average for the prior eight years (6.35)

- Two-thirds (67%) of consumers expect interest rates to rise to some degree (giving responses of 7 to 10). Just under one-third (31%) gave neutral responses (5 or 6). A small minority (2%) expect interest rates to fall (responses of 1 to 4).
- Through the entire history of this question, Canadians have expected rises for mortgage interest rates. From 2010 to 2016, the average rating was 6.35, versus the neutral level of 5.5. Contrary to those expectations, interest rates fell more often than they increased. Interest rates finally began to rise during the summer of 2017, and expectations began to shift upwards, to an average score of 6.93 in the fall of 2017 and 7.02 this spring.
- From this data, it appears that consumers' expectations about interest rates may be "adaptive" (influenced by what has occurred recently). These expectations have not been good predictors of what will happen to interest rates.

Table 2-3 Summary of Consumer Responses on Expectations, by Date of Survey (Average Scores on a Scale of 1 to 10)										
									Spring 2018	
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	5.54	
Expectations for housing prices									6.46	
Expectations for mortgage interest rates (the coming year) Source: Mortgage Professionals C	Expectations for mortgage interest rates (the coming year) 6.54 6.56 6.51 6.21 6.21 6.24 6.93 7.02									

Reasons for Not Owning a Home

The survey asked consumers who are not homeowners for the reason (or reasons) they do not own a home. Ten possible answers (plus an "other" option) were available. More than one response could be given. Responses are summarized in the next table.

- Within the younger age groups, responses vary quite widely, covering a variety of conditions that relate to their personal financial circumstances. On the other hand, young people rarely select the negative reasons for not being homeowners. The patterns within these responses suggest that young people are highly interested in becoming homeowners, but they have concerns about their ability to achieve it.
- Concerning the negative effects of financial situations of young adults:
 - o Needing more time to save a down payment is mentioned by 39% among the youngest age group.
 - Lack of financial stability is also frequently mentioned by the youngest age group, at
 24%. As well, waiting for home prices to drop is another significant reason, at 21%

- (although it isn't clear whether these people believe prices will drop or need them to drop before they can afford to buy).
- The thought that living with family is all that can be afforded was mentioned by 18% of young adults.
- Negative attitudes towards homeownership were also available as response options ("The idea of owning a home is too stressful", "I am not interested in owning a home", and "I don't believe homeownership is a good investment"). These were selected by small percentages in the youngest age groups.
- Within the oldest age group, lifestyle and preference reasons are cited much more frequently than financial considerations. "I am comfortable in my current situation" (39%) is the most frequent, followed by "Renting is a better option for me" (38%).
- Concern about future interest rate rises is rare across all ages.

Table 2-4								
Reasons for Not Owning a Home, by Age Group								
	<i>18-34</i>	18-34 35-54		Grand				
	10-34	33-34	55 +	Total				
Nervous that rates will increase	5%	6%	2%	4%				
Lack of financial and/or employment stability	24%	24%	22%	24%				
Waiting for home prices to decrease	21%	20%	9%	18%				
Renting is a better option for me	26%	33%	38%	31%				
I need more time to save for a down payment	39%	31%	5%	28%				
Living with my parents/family is all I can afford	18%	5%	3%	11%				
The idea of owning a home is too stressful	7%	8%	9%	8%				
I am not interested in owning a home	5%	13%	18%	11%				
I don't believe homeownership is a good investment	3%	8%	3%	4%				
I am comfortable in my current situation	23%	31%	39%	29%				
Other	9%	9%	15%	10%				
Number of Reasons	1.75	1.82	1.61	1.74				
Source: Mortgage Professionals Canada survey, spring	2018; analy	sis by the au	ithor.	•				

Expectations About Homebuying

In the survey, non-homeowners were asked "Do you expect to purchase a primary residence"? The youngest age groups showed the greatest levels of interest in homebuying. In the prime first-time buying group (25 to 34), one-third expect to purchase during the coming year or two, and three-quarters expect to buy during the coming five years. In the younger age groups, there are very few people who expect to never buy a home.

This data does not predict how many people will actually buy homes in the coming years. Actual homebuying will depend on many factors, including the economic situations (employment circumstances, incomes, and confidence about their economic futures), as well as interest rates, and the availability of suitable and affordable housing options. That said, this data does indicate

that there is still a very strong interest in homeownership among young Canadians. And, as we can see now, the policy environment will be critically important in determining whether they can achieve their housing goals. At present, the policy environment has become quite unfavourable.

<i>Table 2-5</i>										
Expectations about Home Buying, by Age Group (Non-Owners Only)										
18-24 25-34 35-44 45-54 55-64 65 + All Ages										
In the next year	7%	13%	10%	5%	9%	3%	9%			
In the next 2 years	19%	21%	15%	10%	15%	5%	16%			
In the next 5 years	29%	42%	35%	26%	11%	1%	29%			
In the next 10 years	36%	16%	21%	11%	9%	3%	15%			
Sometime after the next 10 years	9%	7%	8%	7%	8%	1%	7%			
Never	0%	2%	12%	41%	47%	87%	25%			
Total	100%	100%	100%	100%	100%	100%	100%			
Source: Mortgage Pro	fessionals C	anada surve	y, spring 20	18; analysis k	by the autho	or.				

Expectations about Selling Homes

People who already own homes were asked "Do you expect to sell your primary residence"? These responses indicate that younger homeowners have slightly greater expectations about selling compared to older age groups². For those aged 25 to 34, just over one-half expect to sell during the next five years; expectations about selling are lowest for the 55 to 64 age group (26% expect to sell during the next five years).

Table 2-6 Expectations about Home Selling, by Age Group (Owners Only)										
25-34 35-44 45-54 55-64 65 + All Ages										
In the next year	9%	9%	6%	6%	4%	7%				
In the next 2 years	14%	13%	9%	6%	6%	9%				
In the next 5 years	29%	19%	20%	14%	20%	20%				
In the next 10 years	16%	15%	19%	25%	21%	19%				
Sometime after the next 10 years	23%	29%	30%	32%	32%	29%				
Never	10%	15%	16%	17%	17%	15%				
Total	100%	100%	100%	100%	100%	100%				
Subtotal – next 5 years	52%	41%	35%	26%	30%	36%				
Source: Mortgage Profes	sionals Cana	Source: Mortgage Professionals Canada survey, spring 2018; analysis by the author.								

² In this analysis, no results are shown for the 18-24 age group, due to small sample sizes.

Further questioning asked those who expect to sell during the next five years "What will you do upon selling your primary residence"? Responses are summarized in the next table. The responses, by age group show some results that should be expected:

- Among the youngest age groups, there are strong expectations about moving up (to a larger or more expensive dwelling), but this is increasingly rare for older age groups.
- Conversely, expectations about moving down (to a smaller or less expensive home, or to a rental) are rare for the younger ages and increasingly common for older age groups.
- About one-fifth of these prospective sellers expect to move to a different city. For this
 option, it might be expected that there will be differences across the country, since
 people in high-priced communities might be more motivated to move to different cities.
 Further examination of the responses found that there are not material difference across
 the provinces.)

		Table 2	?-7							
Expectations about Next Housing Situation, by Age Group										
(Owners Only, Expecting to Sell in the Next 5 Years)										
25-34 35-44 45-54 55-64 65 + All Ages										
Purchase a larger dwelling	47%	41%	13%	4%	1%	23%				
Purchase a more expensive dwelling	30%	21%	10%	1%	2%	14%				
Purchase a smaller dwelling	5%	6%	27%	26%	29%	17%				
Purchase a less expensive dwelling	9%	5%	11%	16%	3%	9%				
Move to a rental dwelling	2%	4%	3%	16%	30%	10%				
Move to a care facility	0%	1%	0%	0%	3%	1%				
Purchase a home in a different city	17%	20%	21%	26%	7%	18%				
Move in with family members / a significant other	6%	3%	4%	1%	4%	4%				
Other	2%	3%	6%	5%	11%	5%				
Don't know	4%	9%	11%	14%	15%	10%				
Source: Mortgage Professio	nals Canada	survey, spri	ng 2018; and	alysis by the	author.					

Down Payments by First-time Buyers

Homeowners were asked about their down payment sources when they bought their first home. The next table summarizes the responses, by periods of purchase. More than one source of down payment could be reported. Therefore, the shares shown in the table below total to more than 100%. In this survey, there was just one source of down payment for about one-third of first-time purchases.

Personal savings have been used by large majorities of first-time buyers, and that share has been consistent over time at close to 85%.

Withdrawals from Registered Retirement Savings Plans have also been used by a substantial share of first-time buyers during the past two decades, at close to 40%. Loans from financial institutions have also been utilized as a source of funds by a substantial share of first-time buyers, although that share has fallen over time.

The most significant change in this data on sources of down payments has been a sharp rise in the shares of first-time buyers who have been assisted by family members, in the form of loans and/or gifts. Some first-timer buyers received both loans and gifts. Therefore, as is shown in the fourth line of data, one-third of all first-time purchases were assisted by family members. That share has shifted over time, from less than 30% prior to 2005 to a share of almost one-half (48%) for the most recent first-time buyers.

To be clear, this data indicates how many first-time buyers have received assistance from family members, but it does not tell us how much assistance they received. In the fall 2017 report, we estimated that for all first-time purchases, 15% of down payments came from family members. For the most recent first-time buyers (2014 to 2017) the share was slightly higher, at 18%³.

	7.	able 2-8						
First-time Buyers Utilization of Down Payment Sources, by Period of Purchase								
	Pre-	1990s	2000-	2005-	2010-	2015-	All	
	1990	19903	2004	2009	2014	2018	Periods	
My personal savings or my co-buyer's personal savings	87%	83%	81%	84%	86%	85%	85%	
Gift from parents or other family	16%	22%	25%	31%	33%	39%	25%	
members	1076	2270	2370	3170	3370	3970	2370	
Loan from parents or other family	14%	11%	12%	15%	15%	25%	15%	
members	1470	1170	1270	1370	1370	2370	1370	
Subtotal - Loan and/or gift	26%	30%	29%	39%	39%	48%	33%	
Loan from a financial institution	53%	51%	45%	44%	41%	43%	48%	
Loan from my employer	1%	2%	3%	5%	5%	8%	3%	
Withdrawal from an RRSP (including	8%	26%	/10/	420/	39%	200/	269/	
via the Home Buyers' Plan)	070	20%	41%	42%	39%	38%	26%	
Other	6%	5%	5%	5%	2%	6%	5%	
Source: Mortgage Professionals Canada	survey, sp	oring 201	8; analysis	s by the a	uthor.	•		

³ The spring 2018 survey did not permit a calculation of the share of the total down payments that come from the various sources. We have found in the past that personal savings account for just over one-half of total down payments by first-time buyers, and that share has been relatively stable over time. One notable change over time has been a falling share that comes from RRSPs, via the Home Buyers' Plan. That share peaked at 18% for purchases during 2000 to 2004, but had fallen to just 7% for the most recent purchases (2014 to 2017). This is because the amounts allowed under the HBP have not kept pace with rising house prices.

During the past two decades, the average price for resale homes in Canada has more than tripled, from about \$155,000 in 1997 to about \$510,000 in 2017, which is an average increase of 6.2% per year. This has been more than twice as fast as the rate at which wages have increased (2.6% per year)⁴. The ratio of average house prices to average annual wages doubled during the period, from 5.17 in 1997 to 10.24 in 2017.

Yet, there has been a remarkable amount of stability in percentage down payments by first-time buyers in Canada. The fall 2017 report on the mortgage market looked at down payments by first-time homebuyers, by period of purchase, and found that the down payment percentage has been consistently just over 20%⁵. For first-time purchases made during the 1990s, the average down payment was 22%; for purchases during 2014 to 2017 the average was 26%.

With the very rapid price growth during that period, in comparison to incomes, it has become increasingly difficult for first-time buyers to save those 20% down payments: since the ratio of prices to incomes roughly doubled during the period, we would expect that it would take about twice as long for first-time buyers to save those 20% down payments.

In the circumstances, we would expect that first-time buyers must have increasingly relied on sources other than their own savings. Yet, the data⁶ shows that personal savings were a stable source of funds for down payments, at just over 50%. For first-time purchases that occurred during 2014 to 2017, 54% of the funds came from personal savings, versus an estimate of 52% for first-time purchases made during the 1990s.

Looking at other sources of down payments, there have been only minor changes:

- The share of down payments that came from family members (loans and gifts) was 18% during 2014 to 2017, which is just slightly higher than the 16% share for purchases made during the 1990s.
- The share that was borrowed from a financial institution was 19% for the most recent first-time purchases, versus 20% for the 1990s.
- The share borrowed from employers was negligible, at 1% in both periods.
- The share withdrawn from RRSPs was 7% for the most recent purchases versus 9% during the 1990s.
- The share from other sources was very small for recent purchases (1%) and for the 1990s (2%).

This stability in the percentage amounts and the sources of down payments has come at a cost. It now takes much longer for first-time buyers to put together the savings they need.

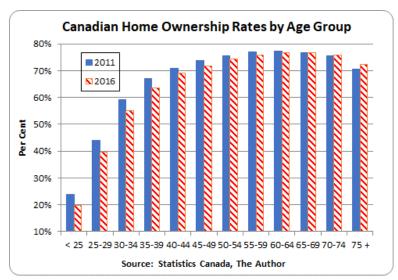
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⁴ As measured by Statistics Canada's Labour Force Survey.

⁵ The data is shown in Table 4-11 (on page 43 of the fall 2017 report).

⁶ Shown in Table 4-13 on page 45 of the fall 2017 report.

Because it takes longer for firsttimers to prepare to buy, the homeownership rate in Canada is now falling: the 2016 Census of Canada found that the homeownership rate for Canada was 67.8%, which was a drop of 1.2 points from the 69.0% rate for 2011. This might seem like a small reduction, but in fact it resulted from very substantial drops in the youngest age groups. Repeating a chart that was shown in the fall 2017 report, for the three



youngest age groups, homeownership rates fell by 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. With the additional challenge of the stress tests, we should expect that the homeownership rate will fall further during the 2016 to 2021 Census period, with the burden being borne, once again, disproportionately by young adults.

The mortgage stress tests mean that many potential homebuyers have to make adjustments to their plans so that they can reduce their mortgage requirements - they have to either reduce their expected purchase price and/or increase their down payment.

To the extent that homebuyers choose to increase their down payment, we are likely to see a disruption of the stability that has been seen with respect to the sources of down payments.

- If personal savings remains the primary source of funds, it will take longer to save the larger required amounts, and therefore homebuying activity will be reduced.
- It is theoretically possible that buyers will be able to obtain more funds from other sources and therefore not have to delay their purchases.
- They might borrow more of their down payments from financial institutions. The data from our fall 2017 survey shows that historically this has accounted for about 20% of the funds. Can this share be raised? The new regulations for non-insured mortgages actually make it more difficult to use borrowed funds for down payments. Therefore, the share of down payments that comes from this source could actually fall, resulting in an even greater need to rely on personal savings and other sources of funds.
- Buyers could hope to receive more help from "the bank of mom and dad" (via loans and gifts). But, the survey data shows us that this source provides only a small part of overall down payment funding (currently less than 20%), and that the share from this source has expanded by much less than is commonly believed. This evidence suggests that the bank of mom and dad is unlikely to expand enough to materially overcome the depressive effects of the stress tests.

- Funds from RRSPs are unlikely to expand by much (if at all) because:
 - o The amounts that can be withdrawn via the Home Buyers' Plan are limited (\$25,000 for a single person and \$50,000 for a couple).
 - And, potential buyers would somehow have to find additional funds to put into their RRSP, either by reducing their non-RRSP savings or by borrowing (at a time when this type of borrowing is not getting any easier).

At this time, it is too early to create a statistically reliable dataset, to determine whether the stress tests have resulted in changed behaviour with respect to down payment amounts (have they increased?) and sources of funds for down payments.

But, we can see (as is discussed in Sections 4 and 5 of this report) that there has been a sharp reduction in sales activity. The early implication is that many thousands of potential buyers are unable to access the larger down payments that are required and have been forced to delay their purchases.

We are hoping that by this fall sufficient data can be obtained to draw conclusions on how down payment behavior has been affected by the stress tests. At that time, we might find that:

- In 2018, down payment amounts have increased from the traditional average of 20% for first-time buyers.
- A larger share of down payments might be coming from the bank of mom and dad. If this happens it will not be an entirely good news story. It will mean that there is a very artificial rationing process happening in the housing market: a key determinant of whether young people can buy a first home will be the extent to which their parents are willing and able to help them with their down payment. It will also mean that many potential buyers, who have strong personal prospects but do not have wealthy and generous parents, are being locked out of homeownership.

3.0 Consumer Expectations About the Mortgage Stress Tests

Under two sets of federal government policies, most new residential mortgages in Canada are now subject to "stress tests". This edition of the survey investigated consumers' knowledge and expectations about the stress tests. In designing this part of the survey, the concern was to describe the policies as simply as possible while still capturing the important points. Before being asked for their responses, consumers were provided the following description:

Over the last two years, the federal government has introduced a series of changes to Canada's mortgage rules. Some of the policy changes will require the following:

- Borrowers with an insured mortgage (i.e. less than a 20% down payment) must be able to afford the payments at the Bank of Canada's 5-year benchmark rate, currently at 5.34%, which is higher than interest rates for mortgages in the market today.
- Those with an uninsured mortgage (i.e. a down payment of 20% or more) now must be able to afford the payments at the 5-year benchmark rate or two percentage points above their contractual mortgage rate, whichever is higher.

The intent of these "stress tests" is to reduce the risk of borrowers not being able to afford their payments if interest rates increase in the future. Critics argue that these rules are one dimensional and fail to account for other factors which can affect mortgage affordability, such as income growth and increasing equity in your home.

We expect that consumers will have varying degrees of awareness about these policies, and that few of them will hold strong opinions. About 700,000 Canadian households (about 5% of all households) buy homes (resale or newly-built) in the course of a normal year. To this point, few Canadians have actually been subjected to a stress test (and therefore most of us have not had any particular need or incentive to become knowledgeable about the policies):

- Not all homebuyers would be subject to either stress test, because they either do not need a mortgage at all or because they use a lender that is not required to do the testing.
- The first stress test (for insured mortgages) came into effect late in 2016. Since then, there should have been about 1.0 to 1.1 million homes purchased in Canada. About 40% of these (about 400,000 to 440,000 prospective buyers) would in theory require mortgage insurance and therefore would have been subject to the first stress test.
- In our fall 2017 report (page 22), we estimated that 15% of all prospective buyers (that is, those who could qualify based on their actual interest rates) would be disqualified by the stress test. With higher interest rates, the share that would fail the stress test is increasing (estimated at 18% under current conditions). Therefore, about 60,000 to 70,000 prospective buyers would have been disqualified by the first stress test (for insured mortgages) since late 2016.
- The second stress test (for non-insured mortgages) took effect at the start of this year. The number of prospective purchases for the first half of this year is about 350,000. 40% to 50% of these (140,000 to 175,000) would be subject to the second (non-insured)

- stress test. If 15% to 18% of them fail the stress test, that would amount to about 20,000 to 30.000.
- In total, just less than 100,000 prospective Canadian homebuyers have been prevented from making their preferred purchase by one of the stress tests (many of them will have managed to make a different purchase, just not their preferred one).
- Over time, the number of Canadians who have been directly exposed to the stress tests will expand to more significant magnitudes.

According to the survey responses, more than one-half (59%) of consumers were "aware of the changes before today". Awareness varies across groups within the population:

- Homeowners are more aware (65%) than tenants (47%) and people who live with their parents or others (36%).
- People who plan to buy within the next year have above average awareness (at 66%).
- People who have made a first-time home purchase during 2017 or 2018 have above-average awareness (68%).

People who were aware of the policies "before today" were also asked how well they understand the changes. The responses were given on a 10-point scale, where a score of 1 indicates "do not understand at all" and a score of 10 indicates "understand completely". Responses indicate that most of these people feel they have a quite good understanding of the policies: the average score given was 7.50. More than one-half (55%) indicated that their degree of understanding was high (in the range of 8 to 10) and a further 31% gave scores of 6 or 7. Just 14% gave scores below the mid-point.

Next, six statements were offered about impacts. For each question, responses were given on a 10-point scale, where a score of 1 indicates a "complete disagreement" with the statement and a score of 10 indicates "complete agreement". The next table summarizes responses for each of the statements by firstly compressing the 10-point scale into three ranges, and then showing the average ratings.

In addition to summarizing the responses for all households, the last column focuses on the sub-group that we expect would be most motivated to understand and to think about the impacts of the policies: people who do not currently own their home, but expect to buy within the next five years.

The first two statements focus on personal impact: on the ability to buy a home (firstly, as a general statement and secondly, being more specific about impacting on their preferred choices). The responses indicate that on average the impacts are expected to be moderate, but that substantial minorities expect that it will become quite a lot more difficult to buy a home (29% gave ratings of 8 to 10 in general, and 32% with respect to their preferred choices). The last column shows that for the sub-group of non-owners who expect to buy, the expected impacts are considerably more negative, with the average ratings at 6.92 and 7.11, respectively. Within this sub-group, 46% expect a significant impact in general (responses of 8 to 10) and

54% expect an impact on their preferred choice. The remaining questions are less specific to individuals and more about broader impacts:

- The policies are expected to be neutral with regard to house prices.
- The policies are expected to be strongly positive in ensuring that buyers can afford higher interest rates in future.
- There is also a strong agreement that the policies will cause more borrowers to go to non-federally regulated lenders.
- There is agreement that the policy unfairly neglects to consider other important factors that will affect the ability to afford higher interest rates in future.

	Table 3-1
Consumers'	Responses to Six Statements About the
Impact	ts of Mortgage Insurance Changes
	Responses on a 10 Poir

		Res	oonses on	a 10 Poin	t Scale	
	1-3 (Disagree)	4-7 (Neutral)	8-10 (Agree)	Total	Average Score	Non-Owners, Expect to Buy Next 5 Years
With these changes in the mortgage rules, it will be harder for me to buy a home or condominium	32%	39%	29%	100%	5.30	6.92
The new mortgage rules will make it harder for me to buy a home in my preferred neighbourhood	29%	39%	32%	100%	5.56	7.11
The new mortgage rules will keep housing prices relatively stable in my neighbourhood	14%	67%	18%	100%	5.66	5.40
The new mortgage rules will ensure that home buyers will still be able to afford their homes if interest rates rise by a large amount in future	8%	46%	46%	100%	6.96	6.86
These new mortgage rules will result in more people turning to mortgage lenders that are not regulated by the federal government	7%	54%	39%	100%	6.76	6.82
The new stress tests unfairly use interest rates as the only criteria for assessment, ignoring other important factors (e.g. the potential for your financial situation to improve in the future, offsetting potential interest rate increases)	15%	55%	30%	100%	6.20	6.44

4.0 Rapid Change in Canada's Housing Markets

There's never a dull moment in the housing market. The past two years have seen wild swings in sales activity. So far, 2018 has seen a very rapid deceleration, for Canada as a whole, for most of the provinces, and for most of the local market areas. This section provides a review of market trends for all of Canada. Section 5 looks at the provinces.

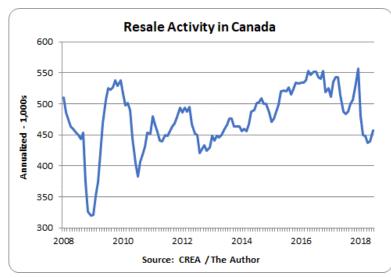
The over-riding messages are:

- Some slowing was to be expected, because home-buying activity was unusually strong during 2016, and just slightly slower in 2017. We can't expect to see new records every year.
- Increases for mortgage interest rates have certainly contributed to the slowing.
- The housing market slowdown has been more severe than we should have expected. The primary cause is government policies that are making it much more difficult for Canadians to achieve their reasonable housing goals.
- The broader economy now appears to be decelerating in many areas of Canada.
 Economic risks are increasing, due to the development of a possible multi-country trade war. On top of this, for the remainder of this year and beyond, the policy-induced suppression of housing activity will increasingly impair the Canadian economy.

Resale Housing Market for All of Canada

During the first six months of 2018, resales in Canada have been at an average (seasonally-adjusted and annualized) rate of 452,000, which is 12.5% lower than the rate for all of 2017 and 16.4% lower than the all-time record that was set in 2016.

Activity improved in June, to an annualized rate of 457,500. While this was a rise of 4.1% compared to May, it was 6.2% lower than a year ago. This small improvement



in June is a positive sign, but as can be seen in this chart, activity is still far below prior levels. Based on the population of Canada, the sales rate should now be 500,000 or more (this point is discussed next).

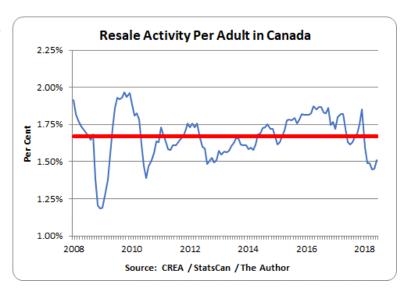
It can also be seen in the chart above that resale activity can be quite variable from month-tomonth without actually interrupting the trend. It is far too soon to say that June represents a turning point for a housing market that has been mostly disappointing during the past year (and especially during the past six months). And, even if this is a turning point, there is a long way to go before sales activity will have returned to a healthy level.

Sales activity had also veered sharply in 2017, due largely to events in British Columbia and Ontario (these events are discussed in the provincial sections).

On the other hand, the change seen this year has been much more widespread. For seven of the 10 provinces, sales to date are lower than in 2017; only Quebec and Nova Scotia have seen sales increase materially this year, and New Brunswick has seen a fractional rise. The largest reductions have occurred in the two provinces (British Columbia and Ontario) that have the highest prices and had also been experiencing strong demand as the result of rapid job creation and population growth. The reductions seen this year have been less substantial in areas that have lower prices and where the economies and housing markets have been less robust. Some provinces that had seen improving conditions during 2017 have suffered a loss of momentum this year. More discussion of trends for the provinces is provided in the next major section.

Table 4-1									
Resale Activity in Canada and the Provinces (Units Sold)									
	2016	2017	2018	2018 YTD sales vs					
			(Jan-June)	2016	2017				
British Columbia	112,211	103,764	82,018	-26.9%	-21.0%				
Alberta	54,800	57,161	53,490	-2.4%	-6.4%				
Saskatchewan	11,344	11,059	10,388	-8.4%	-6.1%				
Manitoba	14,550	14,428	13,612	-6.4%	-5.7%				
Ontario	245,870	222,231	182,360	-25.8%	-17.9%				
Quebec	78,142	82,563	84,498	8.1%	2.3%				
New Brunswick	7,425	7,939	7,970	7.3%	0.4%				
Nova Scotia	10,127	10,608	11,154	10.1%	5.1%				
Prince Edward Island	2,061	2,146	2,020	-2.0%	-5.9%				
Newfoundland & Labrador	4,080	3,925	3,788	-7.2%	-3.5%				
Canada	541,220	516,500	451,890	-16.5%	-12.5%				
Source: Canadian Real Estate Association									

We should expect that resale activity will trend upwards over time, because the population is growing and therefore there are more potential buyers. In addition, construction of new homes means that there are more existing homes, which could potentially be sold. The chart to the right shows a sales rate (sales per adult). During the period covered in the chart, the sales rate has averaged 1.67%. The average for the first six months of this year is 1.50%, which is far (10%) below the average



level. The adult population for Canada is currently estimated at 30.27 million⁷. If housing resales were to occur at the long-term average rate of 1.67%, the annualized sales rate in Canada would be just over 500,000 (about 42,000 per month), and it would be rising gradually⁸.

The rate at which new supply flows into the resale market has varied. In the chart to the right, the (red) trend line suggests that the flow of new listings is now about 5% lower than previously. This relatively small reduction for listings reflects that some people who would like to move up in the housing market have been discouraged by the stress tests. They now find that they have less opportunity to move to a different home, because they will be unable to obtain the financing they need.

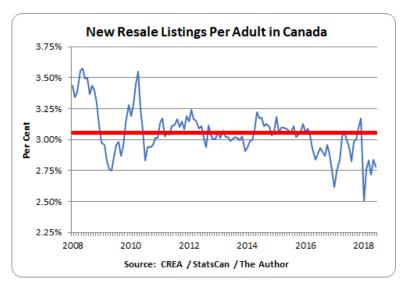


Mortgage Professionals Canada

⁷ According to Statistics Canada's Labour Force Survey.

⁸ The estimates depend on what period is used to calculate the historic average sales rate. The calculation shown here uses the period 2008 to the present. If the period started in 2000, the average sales rate would be slightly higher (1.70%) and the normal annualized sales rate would currently be 515,000.

Similar to sales, we should expect that the rate at which new listings flow into the housing market will rise over time. Therefore, this chart looks at new listings on a per adult basis. The data shows that during this decade, the rate has been close to the average most of the time. However, the listings rate fell to below average during the second half of 2016, due largely to a sharp drop in listings in British Columbia, with smaller drops in Ontario and Quebec. For one



month (January 2017) the rate was much farther below average. This year has seen a sharp drop in the listings rate, and that drop has been sustained. For the first half of this year, the listings rate has averaged 2.74%, which is 10% lower compared to the long-term average of 3.06%

The charts above show that demand (resale activity) has fallen more than supply (the flow of new listings into the market). The result is that the relationship between demand and supply has changed. Thus, the chart to the right shows that the ratio of sales to new listings has fallen. This chart also shows the author's estimates of the "balanced market" level of the sales-to-new-listings. This is the level of the SNLR at which we would expect housing prices to rise

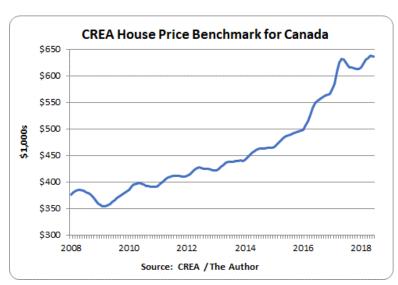


by 2% per year (in other words, in line with growth of income and the overall inflation rate). The flat, red line in the chart shows the estimated balanced market threshold of 51% (the author's estimates of the thresholds vary from location-to-location, as will be seen in Section 5). When the SNLR is above the threshold, we expect prices to rise more rapidly; when the SNLR is below the threshold, we expect price growth to be weak, and at low levels of SNLR, we might see prices fall. This chart indicates that during the past decade, the actual SNLR has rarely been below the threshold, and it has been above the threshold most of the time, sometimes by quite substantial amounts. For the first six months of this year, the average SNLR for Canada (54.8%) is above the threshold. But, the SNLR for Canada has deteriorated during the year (during 2017, the SNLR averaged 58.7%, and for 2016 it was even higher, at 62.5%). Based on recent levels for the SNLR, we should expect moderate rates of house price growth for the remainder of the year.

Moreover, the current above-average figure for all of Canada disguises that there are significant and important variations across the country. The next table summarizes the sales-to-new-listings ratios by province. The ratios for 2018 (January to June) have fallen compared to 2017 in six of the 10 provinces (rising in Quebec, New Brunswick, Nova Scotia, and Prince Edward Island). The current SNLRs are above the "balanced market" thresholds in six provinces, and below the thresholds in four provinces (the three prairie provinces plus Newfoundland and Labrador).

Table 4-2									
Sales-to-New-Listings Ratios in Canada and the Provinces									
	2016	2017	2018 (Jan-June)	Balanced	Current				
				Market	SNLR vs				
				Threshold	Threshold				
British Columbia	71.7%	69.3%	58.0%	47%	Above				
Alberta	49.6%	49.5%	44.7%	56%	Below				
Saskatchewan	40.8%	39.3%	38.5%	51%	Below				
Manitoba	58.8%	59.3%	55.2%	59%	Below				
Ontario	71.4%	60.6%	57.2%	53%	Above				
Quebec	51.6%	56.5%	58.9%	45%	Above				
New Brunswick	50.2%	56.3%	57.6%	44%	Above				
Nova Scotia	50.1%	54.6%	60.4%	48%	Above				
Prince Edward Island	57.9%	69.6%	73.3%	37%	Above				
Newfoundland & Labrador	38.0%	36.3%	33.1%	44%	Below				
Canada	62.5%	58.7%	54.8%	51%	Above				
Source: Canadian Real Estate Association; balanced market thresholds estimated by the author.									

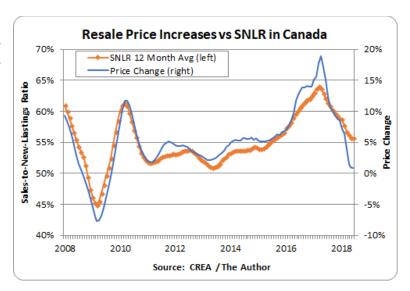
The result of those previously high SNLRs has been that house prices have increased quite sharply in Canada during the past decade. Data on average prices is often distorted by shifts in "composition" (the types of homes that are sold, and their locations). Therefore, growth of the average price can be misleading. For that reason, the Canadian Real Estate Association ("CREA") publishes price indexes and "benchmark" prices that attempt to avoid those distortions.



The above chart shows CREA's benchmark price for Canada. This data does indeed show very rapid growth: as of this May, the benchmark price is 66% higher than the same period 10 years

ago (an average growth rate of 5.2% per year). During the past five years, the rate of increase has averaged 7.8% per year. However, for the past year, the figure has slowed to just 0.9%.

Price growth over the course of a year is influenced by the SNLR over that same period. Therefore, for consistency, this chart shows the averages of the SNLRs for rolling 12-month periods, in contrast with rates of year-over-year price growth. This chart shows that there is usually a very close relationship between the SNLR and price growth. That relationship appears to have weakened towards the end of the period.



- During the second half of 2016 and into early 2017, a high SNLR should have resulted in price acceleration, but the actual amount of acceleration appears to have been greater than was warranted.
- On the other hand, during the past year, the deceleration of price growth has been more severe than seems to have been warranted.
- The author's interpretation is that during late 2016, there was a short period of "excess exuberance" in the Greater Toronto Area (which spilled into some neighbouring areas). The excess price growth for Toronto and surrounding areas was so severe that it strongly distorted the national figures. However, the period of excess exuberance was short lived because most potential buyers recognized what was happening and pulled back from the housing market. In consequence, the excess price growth that had occurred in the Toronto area has been reversed, and this resulted in the rapid drop seen in the national price data.
- At this point, the author expects that before long, a normal relationship will be reestablished between SNLR and house-price growth.

In the chart above, the 12-month average for SNLR is still adjusting to the evolving conditions, and within the next few months, that average will fall further, moving to below 55% (and closer to the balanced market threshold of 51%). The implication is that during the second half of this year, we might see house prices (on a national basis) increase at a moderate rate. There will, of course, be substantial variations across the country, depending on local conditions.

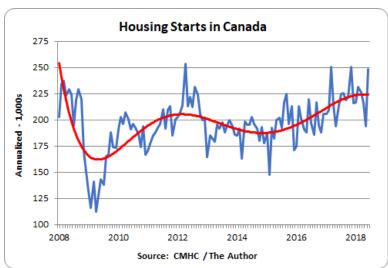
As an aside:

• During the past decade there have been frequent references to "housing bubbles" in Canada.

- Those who have been proclaiming the existence of bubbles during the past decade have
 often predicted that house prices will fall by substantial amounts (a 30% fall is not an
 unusual expectation). To this point, those predictions have not borne fruit. This author's
 view has been that the b-word is being used too freely, without being adequately
 defined.
- A proper definition of "bubble" should include two essential components:
 - o Price growth must be substantially stronger than is dictated by economic fundamentals.
 - The excessive price growth must be driven in part by "speculation" significant numbers of purchases are motivated by expectations of strong price growth rather than by real needs.
- Rapid price growth is not sufficient to prove that a bubble exists, because there might be very good economic reasons for the price growth.
- The chart on page 29, which contrasts price growth with the SNLR, indicates very strongly that for most of the past decade, price growth has indeed been driven by the economic fundamental of the demand-supply balance, and as a result, there has not been a bubble during most of this period.
- The data indicates that for a short period (about a year), there was a breakdown in the relationship: price growth exceeded what should have been expected, producing a short-lived bubble during late 2016 and early 2017. However, the duration of the bubble was too short to do substantive damage (some individuals made mistakes during this period and have experienced personal financial damage, but the numbers involved are very small relative to the entire housing market and the broader economy).
- At this time, it appears that this short-lived bubble has been largely reversed.
- A normal economic relationship between demand-supply and price growth is in the process of being re-established.

New Housing Construction

While resale activity has slowed sharply, new housing construction (as measured by Canada Mortgage and Housing Corporation, ("CMHC") remains quite strong. During the first five months of this year, housing starts have been at an average rate of 222,000, which is slightly greater than the total for 2017 (219,763), and far ahead of the 2016 figure (197,715).



Housing construction should be

expected to follow the same trends as the resale market. In particular, there should be a relationship between the SNLR and housing starts.

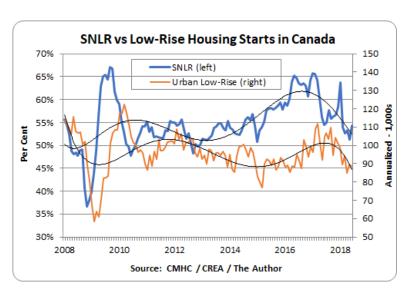
The theory is that as conditions become tighter (or looser) in the resale market (as indicated by the SNLR), builders of new homes should find it easier (or harder) to sell their homes. At the same time, a higher SNLR that leads to price increases for new homes should make it more profitable to build new homes. This will encourage builders to offer more supply. (Conversely, a lower SNLR that results in softer prices reduces profitability and discourages supply.)

But, new home construction should not be expected to respond instantaneously to changes in the SNLR, because there are several processes involved before construction starts and CMHC counts a housing start (while the activities are listed as a sequence here, some of them can occur simultaneously):

- The homebuilder has to organize the marketing and sales process.
- The buyer and seller must sign a purchase agreement.
- The builder has to obtain the required land and get it ready for construction (infrastructure has to be installed, and the site cleared).
- The builder's required inputs (materials, labour, and finance) have to be acquired.
- The site has to be excavated and the foundation installed (CMHC does not count a start until the foundation has been completed).
- These pre-construction processes take longer for apartment buildings than for low-rise homes (single-detached, semi-detached, and town homes).

Three charts attempt to illustrate the lags between changes in the SNLR and housing starts. In each case, since the data are volatile, trend lines have been added.

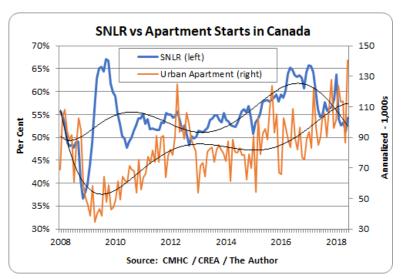
For low-rises (in urban areas), the chart indicates that changes in the SNLR are followed by changes for starts about six months to a year In consequence, the trend for low-rise starts is now starting to reflect the drop in the trend of the SNLR that began in the first half of 2017. The data implies that the downward adjustment for lowrise starts will continue for at least another six to 12 months. Based on the current SNLR, the trend for low-rise starts could fall to as low as 80,000 units by mid-2019, from the recent trend high of 100,000.



A further point, which is less obvious in this chart, but which is an important part of the evolving housing market story in Canada, is that in recent times, starts of new, low-rise dwellings have

responded weakly to the changing SNLR. While the trend for SNLR was recently at a level that is very high historically, the increase for low-rise starts was muted, and activity reached a level that is only mid-range in historic terms. The muted production of new low-rise homes will limit the volume of new housing that will be available for future resale activity. In consequence, the tight supply conditions that have been seen during the past decade will recur in the future.

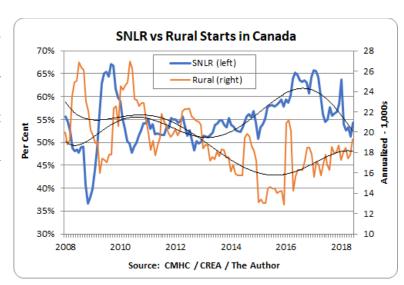
For apartments, changes in starts occur about 1.5 to two years after the changes in the SNLR. Even though the trend SNLR peaked about a year and a half ago and is now falling, the trend apartment starts continues to rise. However, the trend line is now rising less rapidly than it was during 2016 and 2017. (Due to the exceptionally high number apartment starts seen this June there is some uncertainty about the trend). Based on the historic



relationships, it appears likely that the trend line for apartment starts will trend downward during the second half of this year then turn down. It is possible that by the end of next year, the trend for apartment starts will be in the range of 80,000, versus the current trend level that is above 110,000.

In the above chart for apartments, it can be seen that starts have responded to a very high SNLR by rising to a trend level that is very high in historic terms.

A third component of housing starts in Canada is rural activity ("rural" is defined by CMHC as areas with populations below 10,000). The chart for rural starts does not show a consistent relationship with SNLR. This makes sense, because the national SNLR is determined mainly by conditions in the large cities, and the situations in small towns could be quite different. That said, the trend for rural starts has fallen: starts averaged 21,300 per year during



2008 to 2012 but just 16,800 from 2013 to the present. Looking forward, during the remainder of the year and into 2019, starts in rural areas will be affected by the two major depressive

factors that are affecting urban areas (higher interest rates and the mortgage stress tests). In consequence, the trend for rural starts might fall to 15,000 (or less) during the coming year.

Combining these three components (urban low-rises, apartments, and rural starts), the trend of starts may fall to about 175,000 by early 2020. This will be a substantial reduction (20%) from total starts of almost 220,000 in 2017.

Economic Impacts of Reduced Housing Activity

Housing construction is a major generator of new jobs in Canada, not just in construction, but also in the industries that provide goods and services to the construction process. Each dwelling unit started in Canada is estimated to result in 2.45 jobs⁹ ("person years of full-time employment"). A reduction of as much as 45,000 housing starts for 2019 versus 2017 would cost about 100,000 to 110,000 jobs.

Resale market activity is also an important generator of jobs. Research conducted for the Canadian Real Estate Association¹⁰ suggests that each sale transaction results in 0.43 jobs. Total sales are certain to drop this year, from 517,000 in 2017. There is of course uncertainty about the total for this year.

- Based on CREA's most recent forecast of 469,900¹¹, a drop of about 47,000 sales would result in a 20,000 drop for employment.
- Based on the year-to-date average sales rate of 452,000, a drop of about 65,000 sales would result in a loss of almost 30,000 jobs.

Combining these estimates, reduced housing activity can be expected to reduce employment in Canada by about 120,000 to 140,000, once the adjustment processes are completed. This is the impact attributable just to reduced sales and construction activity.

The timing of the impacts will be quite prolonged. The effects of reduced resale activity will occur mainly during 2018, but this will be only a small part of the total. The effects of reduced housing starts will occur gradually as there are drops in the amount of housing that is underconstruction. In the low-rise sector, starts are slowing now, and the drop-off in under construction volumes will have largely occurred by the middle of next year. However, for apartments, the decline in starts hasn't even begun yet. It will be late next year before the reduction of apartment starts has largely taken effect, and then it will take longer still for an adjustment to the numbers under construction. Therefore, the reduction of employment in the

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⁹ Based on research conducted by the author for the Canadian Home Builders Association. A summary of the estimates can be found here: http://www.chba.ca/CHBADocs/CHBA/HousingCanada/Information-Statistics/Impacts/1%20Canada%20Economic%20Impacts%20of%20New%20Home%20Construction%202017.pdf
¹⁰ The CREA research report can be found here: http://www.crea.ca/wp-content/uploads/2017/10/Altus-Report-2017_E_Final4.pdf

¹¹ Found here: https://www.crea.ca/housing-market-stats/quarterly-forecasts/

apartment sector will only begin during 2019 and it won't have fully occurred until sometime in 2021.

There may also be less-direct effects. For example, slower house price growth can be expected to weaken consumer confidence, which would reduce other categories of consumer spending and thereby further impair employment in Canada. And, to the extent that there are price reductions in some communities, the negative effects on consumer confidence could be even greater, with deeper consequences for the employment situation.

The economic impact of impaired house price growth is likely to be about one-half as strong as the direct effects (that is, in a range of 60,000 to 70,000 jobs once the effects are fully in place). The erosion of confidence will be gradual, and the effects on spending and jobs will take even longer.

In total, by about the end of 2021, employment in Canada will be about 200,000 lower than it would otherwise have been, as the result of the mortgage stress tests. The economic impacts will differ across the country.

- The greatest impacts will be in British Columbia and Ontario, where the housing markets had been strongest and the impacts of the stress tests will be most severe (they will have the greatest reductions in resale activity and housing starts). Out of the total national impact of 200,000 jobs, close to 50% (100,000) will be in Ontario and 25% (50,000) in British Columbia.
- Next will be the three provinces where the economies have been hurt by the plunge in oil prices, and the stress tests are an additional heavy weight. Alberta is likely to experience 10% of the national impact (20,000 fewer jobs than would occur otherwise). The impact in Saskatchewan is likely to be in the area of 2,000 jobs, and 1,000 in Newfoundland and Labrador.
- In Quebec, the effect of the stress tests has been a loss of momentum (which had been very strong) rather than an outright downturn in the housing market. Looking at the impact in terms of the loss of economic momentum, the estimate for Quebec is that job creation will be about 20,000 less than would have occurred otherwise.
- In the remaining provinces, the effects are expected to be about 3,000 jobs in Manitoba, 2,000 in Nova Scotia, less than 2,000 in New Brunswick, and a negligible amount in Prince Edward Island.

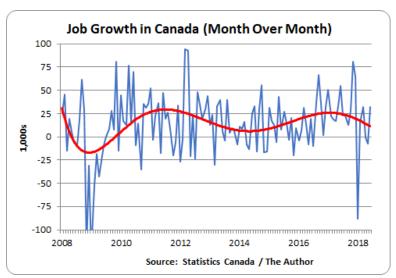
The Economic Background

The two main drivers of housing activity are job creation and affordability.

 Having a job, and feeling confident and secure in it, permits and encourages people to make major economic choices, like buying a home. Changes in the rate of job creation do not immediately lead to changes in home-buying activity, because it takes time for the newly-employed to feel sufficiently comfortable and confident, to make other major

- life decisions, and to put together the required financial resources. Thus, history shows that changes in the employment situation gradually affect housing activity over several subsequent years.
- Changes in affordability tend to affect home-buying activity quite rapidly (within a period of a half year). The impacts of changing affordability are experienced mainly by people who are in stable situations, who find that suddenly their ability to buy has changed (to buy a first home, or to move-up from their current home). Therefore, changes in affordability usually result in rapid changes in resale activity (and also changes in new housing construction with longer delays).

The economy moves in cycles. Canada has been in a positive cycle of recovery and expansion since the end of the recession of 2008/09. In addition, within the cycles there are waves (shorter periods of greater economic strength). This chart looks at monthly changes in employment (as reported Statistics Canada) and then adds a trend line, to identify waves of job creation. It shows that Canada experienced a strong wave of job

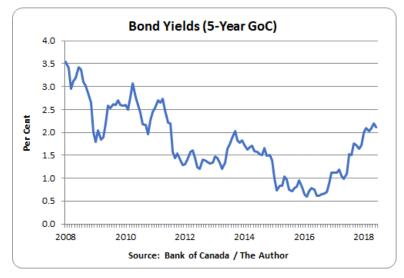


creation that started at mid-2016 and lasted for a year and a half (until late 2017). Recent data hints that this wave has been attenuated. Based on the earlier discussion about the lagged effects of job creation, these changes in the employment situation are currently a positive factor for homebuying.

Low interest rates have resulted in excellent affordability of homeownership in Canada, which has contributed to strong home-buying activity. That said, the strength of housing demand has contributed to price growth, to varying degrees across Canada. The areas with the most rapid price growth have seen dilution of the benefits of low interest rates, and so affordability has been a persistent challenge in some large, rapid growth cities. In many other communities, particularly slow-growth areas, affordability has been excellent.

As can be seen in this chart, interest rates have reversed direction during the past year and a half. Bond yields (for 5-year Government of Canada bonds) averaged just 0.79% during 2015 and 2016. Currently (mid-July) they are slightly above 2%, a rise of about 1.2 point from the prior very low levels.

Mortgage interest rates have also increased, but not quite as much. During 2015 and 2016, rates for 5-



year fixed rate mortgages averaged about 2.75% (these are the "special offer" rates offered by major lenders, which are substantially lower than the "posted rates" reported by the Bank of Canada). At present, a representative special offer rate is 3.3%, or just 0.55 points above the prior low. The rates for variable rate mortgages have increased by even less, to a current 2.5% to 2.75% from an average of 2.35% during 2015 and 2016.

Thus, increased interest rates have reduced affordability somewhat, but not by enough to explain the very sharp drop that has occurred for resale market activity (down by 12.5% compared to 2017 and by 16.5% compared to 2016). This sharp downturn is especially notable since the employment situation is supportive of continued strength for homebuying. Combining the positive effect of recent strong job creation and the negative effect of higher mortgage interest rates, we should have expected only a small reduction for sales, not the large drop that actually occurred.

The Worsening Impacts of Government Policies

In our spring and fall 2017 reports on the residential mortgage market¹², we extensively discussed the likely impacts of the mortgage stress tests. We have used a database that was developed via a consumer survey in the spring of 2017, to simulate the impacts of the stress tests on potential buyers. The stress tests are described as follows:

- Insured mortgages must be tested at the posted rate for 5-year mortgages (the test rate is currently 5.34%, which is far above the rates that can be negotiated).
- For uninsured mortgages issued by federally-regulated financial institutions, the qualification must be done at 2-points above the actual contracted rate, or the 5-year posted rate, whichever is greater.
- Not all mortgage lenders are federally-regulated, so some borrowers can avoid the qualification test. But, the vast majority of new mortgages are subject to this testing.

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¹² Both reports are available here: https://mortgageproscan.ca/membership/resources/consumer-reports

• Also, if a borrower wants to transfer an existing mortgage to a different (federally-regulated) lender, they must be re-qualified at the posted rate.

For this report, we have updated the simulations, assuming an actual interest rate of 3.3% (which is a current typical "special offer" rate from major lenders, for 5-year fixed rate mortgages) and a stress test rate of 5.34%. This updated analysis finds that among prospective homebuyers (who could afford to buy their preferred home, based on their actual circumstances and the 3.3% interest rate), 18% would be unable to pass the stress test and therefore would be prevented from making that preferred purchase.

As we have discussed previously, some of those affected would be able to make compromises and purchase a different property. Therefore, sales should not fall by that full 18%. On that basis, in the fall 2017 report, we suggested that a combination of (slightly) higher mortgage interest rates and the stress tests would cause resale activity to fall to about 470,000 in 2018. Actual activity has fallen by more than we had expected; for the first six months of this year, sales have been at an annualized rate of 452,000. This larger-than-expected decline has occurred because the interest rate used in the stress tests has increased this year;: during the first half of this year, the "posted rate" for 5-year fixed rate mortgages averaged 5.19%, versus the 4.99% rate that was in effect when we did the analysis last fall. Since early May, the stress test rate has been 5.34%.

The spring 2017 survey results have been updated further:

- Looking at potential buyers who could at present afford to buy their preferred home, based on their actual circumstances and current interest rates (assumed to be 3.3%)
- But, who would be disqualified by a stress test using the current posted rate (5.34%)
- How much of an adjustment would be needed in order to qualify to make a purchase?
 The adjustments would involve some combination of reduced purchase prices and increased down payments
- On average, the required adjustment is \$28,750

The results of this updated analysis are summarized in the next table. The estimates show that for many of those affected by the stress tests, the required adjustments are relatively small. Among those who could not make their preferred purchases, most should be able to adjust quickly. They could buy something else that is less expensive and still meets their needs, or find additional funds for a larger down payment. However, there is also a significant minority for whom much larger adjustments would be required and the result would be prolonged delays.

It should be expected that each year in Canada there would normally be about 650,000 to 700,000 home purchases in Canada (resale or new dwellings). If 18% of these buyers would fail the stress test based on their preferred purchase, about 120,000 per year would be required to make some adjustment. The estimates shown in the table indicate that for many of those who would be unable to make their preferred purchase, relatively small adjustments will be required and those adjustments could be made quickly, with very little impact on actual activity.

However, there will be a substantial minority for whom longer delays are required - among those who would fail to qualify for their preferred transaction, perhaps one-quarter to one-third (say, 30,000 to 40,000 out of 120,000) will face prolonged delays. If a normal, expected volume of resale activity is now 500,000 sales per year, then the stress tests would reduce sales to about 460,000 to 470,000 per year. Higher interest would have a further depressing effect. The combination of the stress tests and higher interest rates is producing the reduction that we are currently seeing (an average sales rate of about 452,000 during the first half of this year).

Table 4-3 Adjustments Required (Reduced Price and/or Increased Down Payment) to Pass a Mortgage Stress Test as of Spring 2018	
Amount of Required	Stress rest as or spring 2010
Adjustment	Out of % of Prospective Buyers Who Would Fail Initial Stress Test
<\$5,000	12%
\$5,000-\$9,999	15%
\$10,000-\$14,999	13%
\$15,000-\$19,999	8%
\$20,000-\$29,999	19%
\$30,000-\$39,999	9%
\$40,000-\$49,999	10%
\$50,000 and over	13%
Total	100%
Source: Mortgage Professionals Canada survey, spring 2017; updated analysis by the author.	

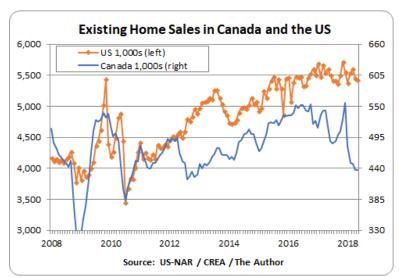
Many analysts expect that the sales rate will recover to some degree during the remainder of this year, on the grounds that policy changes tend to have short-lived effects, but then buyers make adjustments and activity returns to normal. This analyst is not persuaded.

Firstly, based on the analysis shown above, a substantial minority of prospective buyers will face long delays. Among families and individuals who might have bought in 2018, perhaps 30,000 to 40,000 will now be unable to buy until 2019 or even later. Meanwhile, among people who, under normal conditions, would be ready to buy in 2019, a significant minority will be forced to delay by a year or more. And so on. The negative effects of the stress tests could be long-lasting.

In addition, prior experience shows us that some policies have greater impacts than others. Compared to other mortgage policy changes that have been made over the past decade, the stress tests are one of the most impactful.

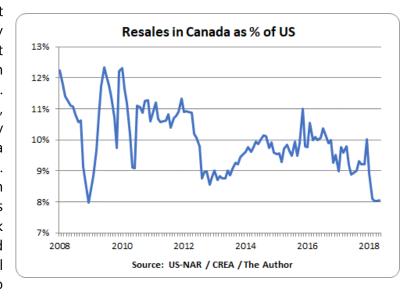
The fall 2018 report discussed the prior policy changes at some length (on pages 15 to 20 of the fall 2017 report). That review concluded that only one of the prior changes was substantive (the elimination of 30-year amortization periods for insured mortgages, which took effect in July 2012) and its effects were long-lasting.

The durability of the July 2012 policy change has been illustrated several times in these reports, using charts that compare resale activity in Canada and the US. Updated charts are shown here (since data for the US currently ends in May, data for June is not During shown). the postperiod, recession the resale markets in Canada and the US have been subject to very similar economic influences, in terms of evolving employment situations



and changes of mortgage interest rates. Until the mortgage insurance policy change in July 2012, the resale markets had moved roughly in parallel, but since then there has been a sharp divergence.

Canadian activity was at about 11% of the US figures until July 2012. This 11% factor is not coincidental, as the Canadian population is 11% of the US figure. After the July 2012 policy change, the two resale markets suddenly diverged, with sales in Canada falling to just 9% of the US figures. If the policy effects had been short-lived, then Canadian sales should have quickly moved back to the 11% figure, but they did not; there was a slow, partial recovery, back to a 10% share two years later.



With recent policy changes (including the stress test for insured mortgages that took effect in late 2016, plus provincial government policies in BC (first announced in July 2016 and expanded in February 2018) and Ontario (April 2017) that are intended to discourage buying by non-residents, the share has fallen again. And, with the addition of the stress test for non-insured federally-regulated mortgages as of this January, the share has fallen even farther. This year, the sales rates in Canada are just 8% of the US rates.

In this view, resale activity in Canada is now more than one-quarter lower than it ought to be. The shortfall is due to the vestigial effects of the July 2012 policy change, with the added weight of the mortgage stress tests. The provincial government policies in BC and Ontario are also responsible for a small part of the national shortfall.

This comparison of resale market trends in Canada and the US is highly suggestive that in Canada, homebuying is now much weaker than it should be, as the consequence of government policies are making it much more difficult for Canadians to achieve their housing goals.

Are House Prices At Risk?

Research increasingly indicates that in a modern economy, one of the most dangerous risks is that falling house prices, coupled with high housing-related indebtedness, could lead to a collapse of consumer confidence, with dire consequences for the broader economy.

With the sales-to-new-listings ratios in retreat in many cases, and in some instances already below the balanced market thresholds, it is possible that prices could fall, triggering recessions in some communities.

It has also been seen repeatedly that house prices are "sticky-downwards" - low SNLRs do not automatically lead to price reductions. In a weak market, sellers might agree to prices slightly below their expectations, but they will often take their properties out of the market rather than accept a substantial price reduction. But, if weak conditions persist for long enough, then that stickiness can spontaneously dissolve, when potential sellers conclude that they can't wait any longer. Therefore, to this point, we have some communities (especially in Alberta and Saskatchewan) where SNLRs have been below the local balanced market thresholds for a while, but price movements have been negligible. So far, so good, but the longer those conditions persist, the risk of greater price declines will worsen.

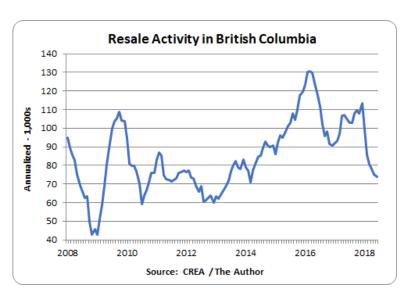
There is a message here for the federal government:

- The mortgage stress tests have added to the risks of house price declines in some areas.
- Those risks tend to be greatest in areas of the country that have recently seen weakening in economic conditions.
- The stress tests are adding to the economic risks in those areas of the country.
- Government policy that results in house price declines would be a tragic blunder.

5.0 Resale Market Trends Across the Provinces

British Columbia

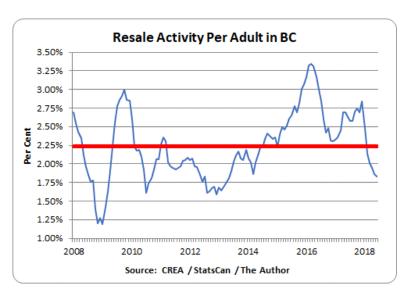
Market activity has been quite BC. Activity volatile in exceptionally strong during 2015 and into early 2016, but the initial imposition of the 15% foreign buvers' tax for the Greater Vancouver Regional District (GVRD) caused a sudden turn; sales dropped by about one-third within just a few months. A partial recovery followed, but that has been suddenly truncated this year, by the combination of stress mortgage tests. the amended foreign buyers' tax (with



the rate increased to 20% and the coverage expanded), and the non-residents' speculation tax.

For the first six months of this year, the average pace of sales was 21% below the total for 2017. Within the province, all of CREA's real estate board areas show sales reductions this year (in comparison to all of 2017). The greatest drops have occurred in Vancouver, Fraser Valley, and Victoria (each with sales falling by more than 20%). The smallest reductions (less than 5%) are in the Kootenay and northern areas.

Looking at sales on the per adult basis tells a broadly similar story. The market has very rapidly transitioned from great strength (with the sales rate about 50% above the long-term average) to a current state of weakness. As of June, the sales rate has fallen to 1.83%, which is 18% below the long-term average of 2.23%.



The sales-to-new-listings indicates that the BC housing market has been in an over-heated state for most of the past decade, as the ratio has usually been above the balanced market threshold (47%), and often by considerable amounts. However, the SNLR for BC has fallen sharply this year and as of June, the 50% ratio is slightly above the balanced market threshold of 47%. This can expect to cause a deceleration of price growth, which is indeed occurring.



There are, of course, sharp variations around the province. The SNLRs exceed 60% in BC North, Kamloops, Kootenay, and Vancouver Island, which is likely to support continued strong price growth in those areas. But, SNLRs are below 50% in Chilliwack, Fraser Valley, Northern Lights, Okanagan, South Okanagan, and Vancouver, which should lead to moderate price growth (with a small risk of some price reductions).

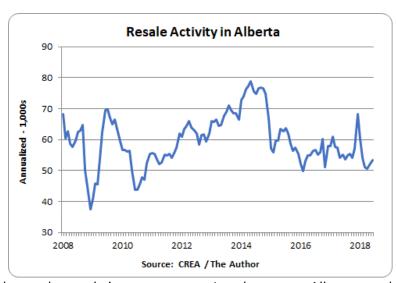
The average house price for British Columbia has been distorted by rapid changes in composition (the locations and types of properties sold). As an alternative, this chart shows the composite price for Vancouver, as estimated by CREA. This data shows a period of very rapid price growth, which corresponds with the period of a very high SNLR. With the recent rapid drop in the SNLR, it appears that prices are now in a similarly transition. While rapid the



calculated year-over-year price change is 9.5%, the past few months of data are pointing to a sharp slowdown (just four months ago the year-over-year change was 16.9%).

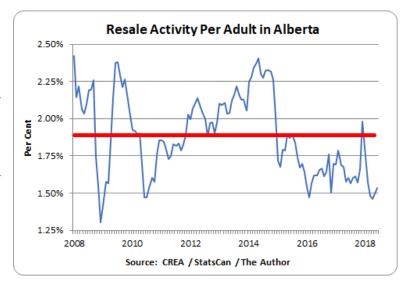
Alberta

Resale market activity fell sharply following the plunge of oil prices in 2014. Subsequently, there have been variations, but without any discernible upward or downward trend. Now, with the imposition of the mortgage stress tests, activity has fallen further. For the first six months of this year, the average pace of sales was 6.4% below the total for 2017. Sales have fallen in seven of the 12 board areas in the province (the largest drops are in southern the parts of



province). Sales activity is roughly unchanged in two areas (northeastern Alberta and Lloydminster), and increases have been seen in three (Central Alberta, Grande Prairie, and Fort McMurray).

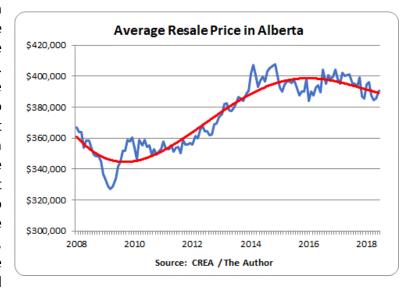
Since Alberta usually experiences population rapid growth, would hope to see corresponding growth of sales. The weak performances of the past four years have resulted in a large drop in the per adult sales rate. With the further drop in sales this year, the sales rate (currently 1.54%) is far below (by 19%) the long-term average of 1.89%.



The sales-to-new-listings ratio has also been highly variable in Alberta. During the past four years, the actual ratio has been close to the balanced market threshold of 56% about one-half of the time and noticeably below the threshold about one-half of the time. For the first half of this year, the SNLRs are in the low 40% area or below for the province as a whole and for seven of the 12 board areas. The ratios are in the mid-40s in Alberta West, Fort McMurray, and Grande Prairie, and, close to 50% in Lethbridge and Medicine Hat.



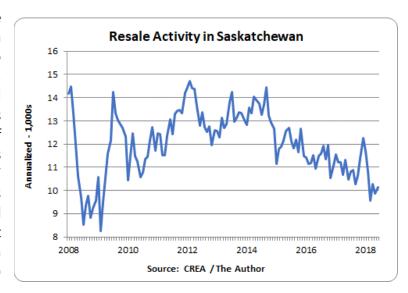
Many of the market areas in Alberta are at risk of price reductions. So far, prices have shown "sticky-downwardness". Month-to-month variations in the average price make it difficult to draw definitive conclusions about price change, but the trend line in this chart suggests that prices are being gradually eroded – by about 1% per year over the past two years. Reviewing the trends for the average prices for the board areas, more substantial reductions have occurred in Fort McMurray and northeastern Alberta.

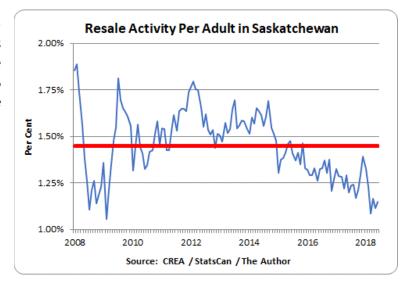


Saskatchewan

Resale activity within the province has shown continuing erosion during the past four years, due to reductions in prices for oil and gas, and now with the additional influence of the mortgage stress tests. For the first six months of this year, the average pace of sales was 6.1% below the total for 2017 and 8.4% lower than in 2016. Sales have fallen in all nine of the board areas in the province. The largest drops have occurred Lloydminster (16%, versus 2017) and Prince Albert (14% lower).

Similarly, the sales rate (per adult) has fallen sharply, and continues to fall. The average rate for the past three months (1.13%) is 22% lower than the long-term average of 1.45%.

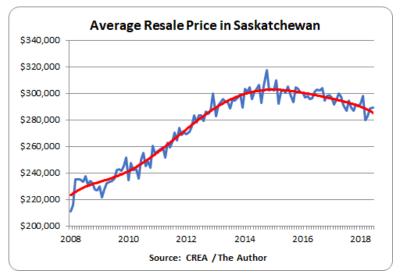




Meanwhile, there has not been a material change in the rate at which new listings flow into the market. Consequently, the salesto-new-listings ratio has fallen to far below the balanced market threshold of 51%. During the past four months, the SNLR has averaged 36.7%. The SNLRs are close to or below 40% in all of the nine board areas within the province.

Volatility of the average price makes it difficult to estimate price changes, but the trend line suggests that prices have fallen by about 2% per year during the past two and a half years. Considering the persistence of the low SNLR, this reduction is moderate and suggests that so far prices have been "sticky-downwards". Reviewing the trends for the average prices in the board areas, it appears that more substantial reductions might be occurring in southeast Saskatchewan and Prince Albert.



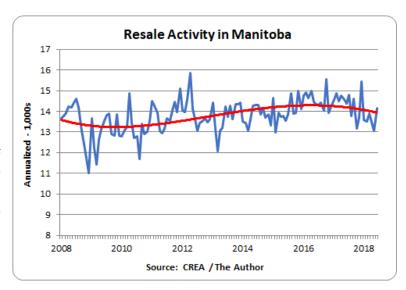


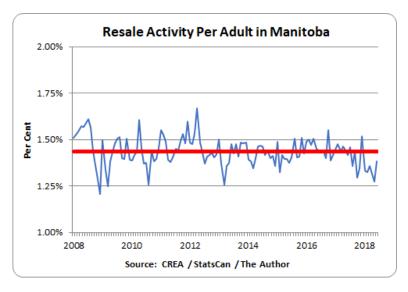
Manitoba

Resale activity in Manitoba tends to be quite stable over time, with only minor random variations from month to month, and small movements for the trend. That said, the recent data hints at a downshift. For the first six months of this year, the average pace of sales was 5.7% below the total for 2017 and 6.4% lower than in 2016. In Winnipeg, which accounts for almost 90% of provincial resale activity, sales have fallen by 5.8% this year.

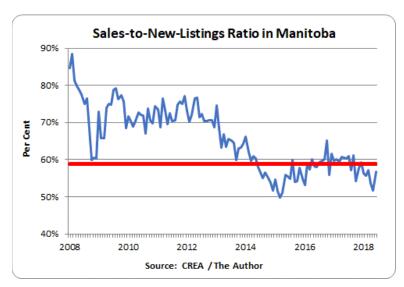
The sales rate (per adult) also tends to be quite stable in Manitoba, but there has been a deterioration this year. The average rate for the first half of this year (1.33%) is 7% lower than the long-term average of 1.43%.

The recent disruption of this longterm stability has resulted from the combination of higher interest rates and the mortgage stress tests.

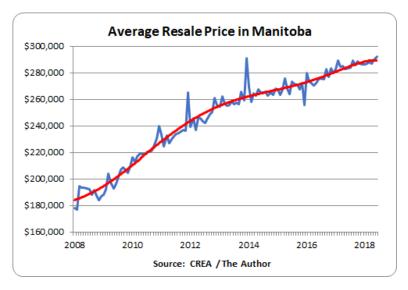




The data on the sales-to-new-listings ratio shows two distinct periods: a persistent "sellers' market" situation during the first half (with the SNLR very far above the balanced market threshold, which is estimated at 59%), followed by a more balanced situation. The SNLR has fallen sharply this year, and for the first half averaged just 55%.

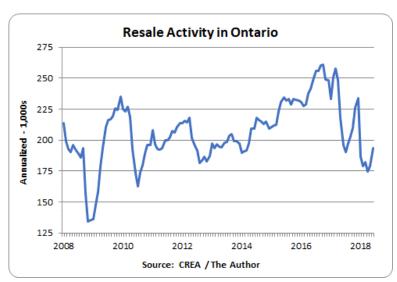


The price trend for Manitoba has behaved as we should expect, evolving state-ofgiven the balance: price growth was quite rapid during the first half of the period, but the trend slowed to about 2% during 2014 to 2017. During the past year, there has been very little price growth (which is what it should be, with the SNLR now below the balanced level). The current low level of the SNLR, if it persists, will lead to softer pricing (little or no further growth). There appears to be only minimal risk of price reductions.



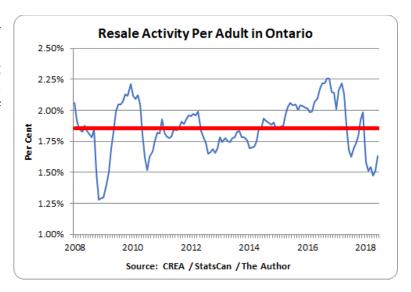
Ontario

Market activity has been volatile in Ontario. A period of excess exuberance during 2016 until early 2017 was followed by a strong sense of caution. A recovery began late in 2017, but that was abruptly ended by the new mortgage stress test. For the first six months of this year, the average pace of sales was 18% below the total for 2017, and 26% lower than in 2016. Within the province, 42 out of 44 CREA board areas show sales reductions this year (the exceptions being



Rideau-St. Lawrence and Sault Ste. Marie). The reductions have been greatest in areas that have been seeing immigration from the Toronto area (of special note is a 27% drop in York Region, which had also seen strong buying by non-residents, which has been curtailed). Areas more distant from Toronto (eastern, northern, and southwestern Ontario) have seen much less variation.

The data on the sales rate (per adult) shows the swings even more starkly. The average for the first half of this year (1.54%) is 17% below the long-term average of 1.86%.



The sales-to-new-listings ratio for Ontario has been at or above the estimated balanced market threshold (53%) almost all of the time during the past decade. The SNLR was especially elevated during the period of excess exuberance (2016 to early 2017). But, for the past year, the ratio has been just slightly above the threshold. The SNLRs for 2018 are below 50% in five of the 44 board areas, but these include some of the most active market areas (the



Greater Toronto Area, including York Region, Durham Region, and Oakville). Six more board areas have SNLRs in the range of 50% to 60%. The ratios are 60% or more in 33 of the 44 board areas.

The frequent "sellers" market" conditions in Ontario have resulted in rapid price growth during the past decade, and final unsustainable rise during 2016 into early 2017. That final surge has been reversed, and the provincial average price is now roughly flat or increasing slightly, which is consistent with the recent performance of the SNLR.

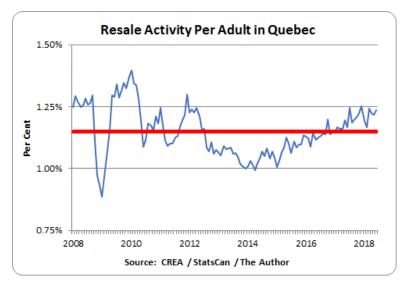


Quebec

Resale activity in Quebec has strengthened steadily during the past four years. For the first six months of this year, the average pace of sales is 2.3% above the total for 2017, and 8.1% higher than in 2016. That said, the recent data suggests that the growth phase has ended (or, at best, paused). In most other provinces, the stress tests and higher interest rates have caused reductions in activity. The effect within Quebec has been to disrupt a very positive trend.

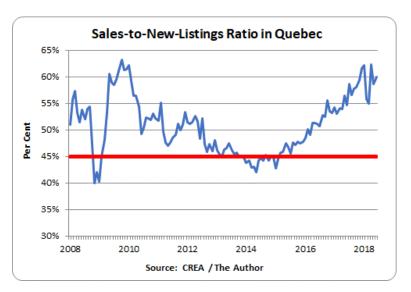
The data on the sales rate (per adult) indicates that the province's resale activity transitioned from a period of under-performance to a condition that is slightly better than usual; the sales rate is now healthy and encouraging, but not exceptional in an historic context. The average rate for the first half of this year (1.21%) is 5% above the long-term average of 1.15%.

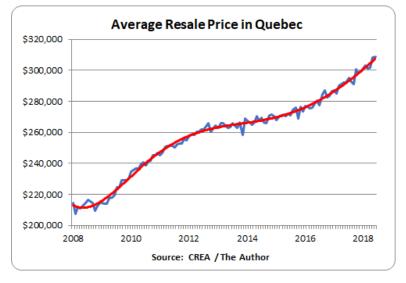




The sales-to-new-listings ratio for Quebec has been above the estimated balanced market threshold (45%) almost all of the time during the past decade, and often by considerable amounts. In recent times, the SNLR has been close to a peak level (at an average of 59% for the first half of this Recent data has been year). volatile, which makes the trend uncertain. It appears that the SNLR may be in the process of flattening, at an elevated level.

Rates of price increase have been consistent with movements in the SNLR. During the past decade, the price trend has increased by about 3.75% per year. With the recent tight market conditions, the trend is currently rising more rapidly, at a slightly faster rate, by about 5.5% during the past year.

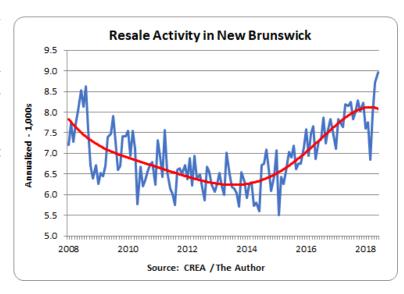




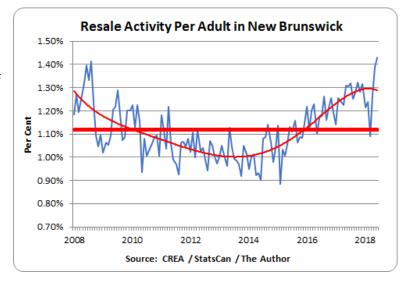
New Brunswick

In the charts for the four Atlantic provinces, the data are volatile, and therefore trend lines have been added.

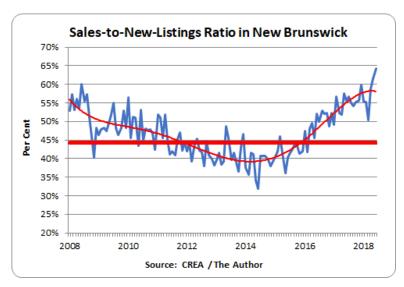
Resale activity in New Brunswick was weak at mid-decade but has recovered strongly. A deviation this spring has created uncertainty about the trend. It appears that the expansion was ended by the combination of the stress tests and higher interest rates. For the first six months of this year, sales are fractionally (0.4%) above the total for 2017, but 7.3% higher than in 2016. Out of four board areas in New Brunswick, sales in 2018 have Moncton increased in northern New Brunswick but fallen in Fredericton and Saint John.



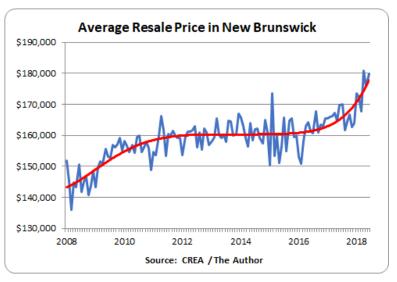
The sales rate (per adult) has likewise shown a recovery, which has now been interrupted. The average rate for the first half of this year (1.27%) was 14% above the long-term average of 1.12%.



The sales-to-new-listings ratio for New Brunswick has also shifted, from a previous "buyers' market" condition to a more recent "sellers' market". While it appears that the SNLR may now be flattening, it is comfortably above the balanced market threshold, which is estimated at 44%. The ratios are 50% or higher in all four of the board areas.



Rates of price increase have been consistent with movements in the SNLR. Following a prolonged period of flat prices, the price trend has increased quite rapidly during the past year (about 7% during the past year and a half, or about 4.75% per year). This recent growth only partly makes up for a long period of flat prices.



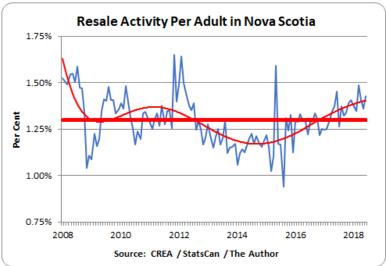
Nova Scotia

For each of these charts for Nova Scotia, the recent data are volatile enough that there is uncertainty about the "true" trends, and conditions might be approaching turning points. In each case, addition of the next few months' data could result in notable changes for the trends – for better or worse.

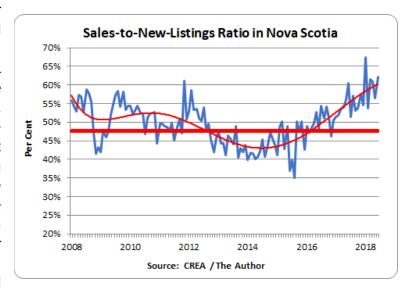
Resale activity in Nova Scotia improved during 2015 to 2017, but the recent data suggests that the trend has slowed. For the first six months of this year, the average pace of sales is 5.1% above the total for 2017, and 10.1% higher than in 2016. Out of seven board areas in Nova Scotia, sales in 2018 have increased in five, falling in only two (Highland and Cape Breton).

Resale Activity in Nova Scotia 14 13 12 Annualized - 1,000s 11 10 9 8 2008 2010 2012 2014 2016 2018 Source: CREA / The Author

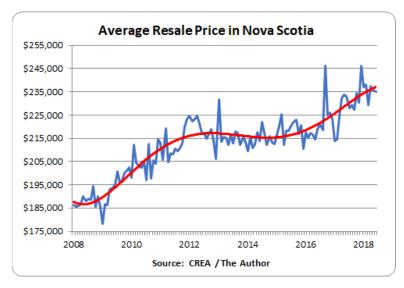
Similarly, the sales rate (per adult) has transitioned from slightly below average four years ago to slightly above average at present. The average rate for the first half of this year (1.40%) is 8% above the long-term average of 1.30%.



The sales-to-new-listings ratio for Nova Scotia has strengthened, and the current ratio is the highest in a decade. So far this year, the SNLR has averaged 60%, far above the balanced market threshold of 48%. Variations in the recent data are uncertainty about creating whether the trend is still increasing or in the process of flattening. The ratios are lowest in Highland, Cape Breton, and northern Nova Scotia but are 60% or higher in four board areas (South Shore, Halifax-Dartmouth, Annapolis Valley, and Yarmouth).



The recently elevated SNLR has resulted in an acceleration of prices. During the past two years, the trend of the average price has increased by about 3.5% per year. For the local board areas, the volatile data on average prices causes uncertainty, but it appears that the price acceleration has been widespread.

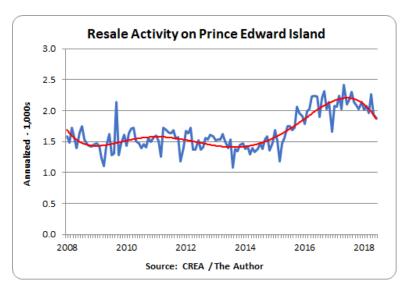


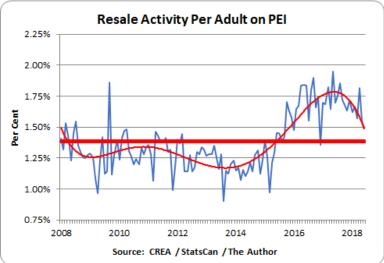
Prince Edward Island

For each of these charts for PEI, the volatile data at the end makes it difficult to create reliable trend lines. That said, in each case, it appears that turning points are now occurring. But, it is unclear how strong those turns are. Additions of a few more months' data might bring more clarity.

Resale activity had been increasingly strong during 2015 to 2017, but the recent data suggests that activity is now flat (at best) or turning down. For the first six months of this year, the average pace of sales was 5.9% below the total for 2017, and slightly (2.0%) lower than in 2016. Even with this turn, activity is still very strong. The current trend level is about onethird higher than during 2008 to 2014.

Likewise, the sales rate (per adult) has clearly turned down, but it remains above-average in historic terms. The average rate for the first half of this year (1.62%) is 17% above the long-term average of 1.38%.

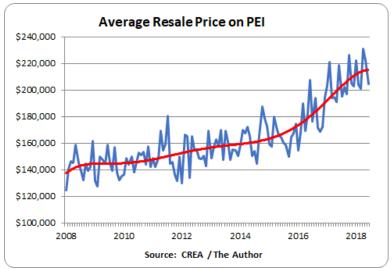




The sharp increase for sales has brought a correspondingly large increase for the sales-to-new-listings ratio for PEI. The current trend level for the SNLR (falling to less than 70%) is far above the balanced market threshold, which is estimated to be just 37%.

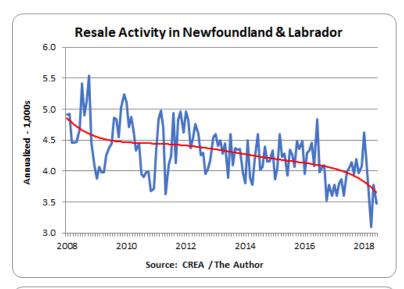


The heated market has brought a strong acceleration of prices. During the past two or three years, the trend of the average price has increased by 8% to 10% per year.

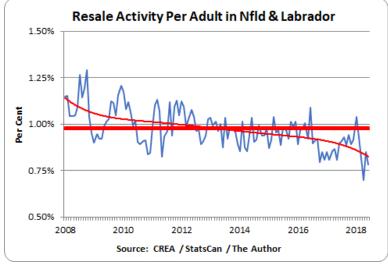


Newfoundland and Labrador

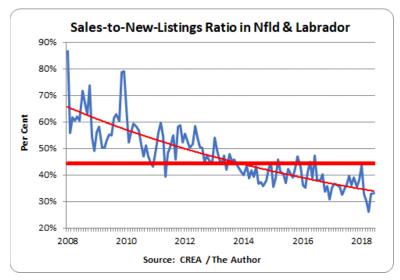
In Newfoundland and Labrador, resale activity reached an all-time record high in 2008. There has been a substantial erosion since then. By 2017, sales had fallen by 18%. There has been a further reduction this year, by 3.5% compared to 2017 (and 7.2% compared to 2016).



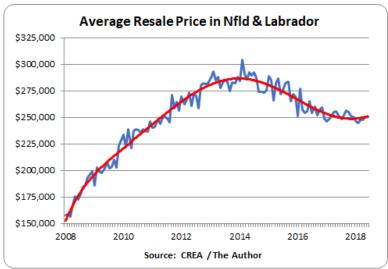
The sales rate (per adult) has also trended downwards. The average rate for the first half of this year (0.85%) is 13% below the long-term average of 0.98%.



Weakening demand has resulted in a falling sales-to-new-listings ratio for the province. The average SNLR for the first six months of this year (33%) was extremely low compared to the balanced market threshold, which is estimated to be 44%.

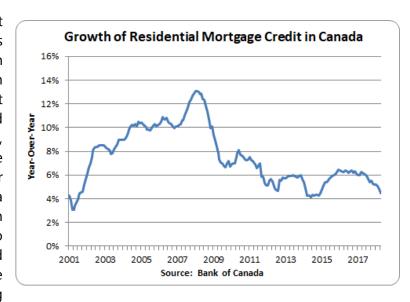


The low SNLR and a "buyers' market" condition has resulted in price reductions. The trend for the average price has fallen by about 13% to 14% during the past four years, or an average reduction of about 3% to 4% per year. There is a silver lining, that the average price appears to be roughly flat since the start of 2017. But, given the current state of the market, there is a possibility of further price reductions.



6.0 Outlook for the Mortgage Market

The expansion of mortgage credit in Canada has slowed sharply. As of April, the year-over-year growth rate was 4.5%, which is down from 6.2% a year earlier. Over the past 10 years, growth has averaged 6.0% per year. As of this April, outstanding residential mortgage credit in Canada stood at just over \$1.5 trillion. The deceleration has a lot to do with the sharp slowdown of resale market activity in Ontario that began during the spring and summer of 2017. Now, with the duo of stress tests bringing



reduced resale market activity to most areas of the country, there has been a further slowdown of mortgage activity. For the first four months of this year, the growth rate has been at an annualized rate of just 3.7%.

Many factors influence the growth of mortgage credit. One persistent long-term factor is that Canadians move away from slow growth communities (which have relatively low house prices) into communities with stronger job markets, which also have higher house prices and larger mortgage amounts. This factor alone may account for at least one percentage point of mortgage credit growth in Canada. So long as there are economic disparities across Canada,

which cause Canadians to move in search of economic opportunities, this factor will make a sustained contribution to growth of mortgage credit.

Growth of mortgage credit is related to completions of new homes, as can be seen in the chart to the right. As new homes and apartments are occupied, there are usually new mortgages attached.



The relationship between completions and mortgage growth was very close for much of the period shown in this chart. But, during the last decade, the relationship between housing completions and mortgage credit growth has become less close; credit growth has been considerably slower compared to what

we would expect based on housing market activity alone. Clearly, there are other factors involved.

Statistical analysis shows that levels of interest rates also affect the rate of credit growth. On a statistical basis, each one point change in mortgage interest rates affects the rate of credit growth by about one-half of a point per year. Very low mortgage interest rates are allowing Canadians to more quickly repay their mortgage principals.

This has two elements:

- o At low interest rates, regular mortgage payments result in very rapid repayment of principal
- As we have found repeatedly, Canadians are making significant efforts to repay their mortgages even more rapidly than is required, through lump sum payments and by setting their regular payments at higher levels than required

Trends in the resale housing market (including the rate of price growth and the total dollar value of sales) are also statistically related to mortgage credit growth, but the impacts are less strong. The reason is that when a resale property is purchased and a mortgage is obtained there is often an existing mortgage that will be discharged (or transferred). As such, on a "net" basis, resale activity is less important compared to construction of new dwellings. The statistical analysis indicates that each resale unit has about one-third as much impact as a new-construction dwelling.

From the statistical analysis, we would conclude that in normal times resale activity would be a minor factor in determining changes in the mortgage market. But, these are not normal times.

- Resale activity has changed very rapidly and very sharply. Total sales this year are likely to be in the area of 450,000, a drop of 65,000 (or more) from 2017 and 90,000 (or more) compared to 2016.
- Meanwhile, housing completions will show very little change this year and will likely fall only gradually during 2019. The slowdown in low-rise starts that has occurred this year will begin to affect completions late this year, and the effects on completions will be largely in place by the middle of next year. Apartment starts will begin a gradual slowdown late this year, and the effects on apartment completions will occur during 2020 and beyond.
- The increases of mortgage interest rates that have occurred during the past year will have negligible effects on the rate of credit growth. Most people renewing mortgages this year will be completing a 5-year term, and for most of them their new interest rate will be very close to the old rate. The author's estimate of a typical "special offer" rate for 5-year fixed rate mortgages was 3.31% for 2013; for the first half of this year, the average is 3.32%. For people renewing out of 5-year variable-rate mortgages, the average rate in 2013 was 2.73%; current typical rates are 2.5% to 2.75%. There will be a small minority of borrowers who renew out of a shorter-term fixed-rate mortgage and most of them will see an increase in their interest rate. All of this considered:

- Most mortgage borrowers will not be renewing this year and therefore there should be little interruption in the rate at which they repay principal.
- Among those who renew this year, the majority (those with 5-year fixed-rate) will see little change.
- A substantial minority of renewers (the one-quarter who have 5-year variable-rate) will see no change or small reductions in their required payments, and therefore they will see no change or else a small improvement in their ability to repay their mortgage principal.
- The smaller minority (less than 20%) of renewers who had short-term fixed-rate mortgages will see varying degrees of increase in their interest costs and therefore will be less able to repay principal. Outcomes will depend, of course, on the choices they make: someone coming out of a 2.25% or 2.5% rate into a 3.3% rate (5-year fixed rate) will see substantial impact; someone renewing into a variable rate at 2.5% to 2.75% would see a negligible change.

The conclusion from this discussion is that we should now be seeing a gradual deceleration in the growth rate for mortgage credit in Canada: statistical modeling suggests that during 2017, the growth rate should have dropped by one-half of a percentage point, and that in 2018 there should be only a slight reduction (because there will be only negligible changes for housing completions and the average interest rates paid by mortgage borrowers). The actual slowdown in mortgage growth has been considerably more rapid than expected; by 0.9 points in 2017 (from 6.1% in 2016 to 5.2% in 2017). It also looks like the reduction will be even larger this year, to perhaps 3.5% to 4.0% versus 5.2% last year. For 2019, the factors are very similar (housing completions will slow slightly; the average mortgage interest rate on all mortgages will change only slightly and the growth rate for 2019 is expected to be in the area of 3.5% to 4%.

The recent excessive deceleration of mortgage credit growth might be partly because more homebuyers are being forced to rely on non-traditional sources of finance, which means the borrowing is not being measured by the Bank of Canada data. These alternative sources of finance are usually more expensive than traditional sources (the higher interest costs will add to the economic drag caused by the stress tests). They are also more risky for the borrowers. The loans are often for terms of just one year, and borrowers might find it difficult to obtain replacement financing, on reasonable terms, when that year is finished. This adds to the economic costs of the mortgage stress tests:

- They are harming the broader economy by suppressing housing activity
- The resulting increase in interest costs, reduces the borrowers' abilities to spend on other goods and services
- They are increasing the risks within the financial system, by driving borrowers away from the well-regulated, highly prudent traditional sources of housing finance, towards non-traditional sources, which are much more vulnerable.

A further implication of the shift to alternative lenders is that the growth rate for mortgage indebtedness in Canada may be more rapid than is indicated by the Bank of Canada data.