

Affordability: Have Québec Properties Really Become Unaffordable?

Many people believe that the dramatic increase in property prices in Québec in recent years has made residential real estate unaffordable for first-time buyers (the average price of single-family homes increased from \$110,849 in 2000 to \$247,054 in 2011, a 123 per cent increase). However, household incomes have also increased over the years¹ and historically-low borrowing costs have helped to significantly reduce the financial outlay required to purchase a property. Ultimately, how affordable are properties today compared to previous decades? Calculating the mortgage carrying cost, meaning the proportion of income that must be allocated to the monthly mortgage payment in order to buy a property, will help us accurately answer this question.

Our examination begins in the year 1980, as our data on Québec property prices begin that year. To calculate the mortgage carrying cost, we must make certain assumptions that must remain constant throughout the period under review. The assumptions that we used are outlined in the box below. The resulting calculations are purely financial mathematics.

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Assumptions for calculating the mortgage carrying cost

We assumed that buyers purchased a property at the provincial average price and provided an initial down payment of 10%² (for the calculation of mortgage payments). The remainder of the purchase price was financed by a conventional mortgage amortized over 25 years³ at market interest rates⁴ for a five-year term. Other costs associated with buying a home, such as property and school taxes, insurance, utilities, etc., were not taken into account. Finally, as for household income, we used an economic family that earns the average income⁵.

Columns A, B and C of the table in Appendix 1 show data on property prices, mortgage rates and income. Columns D and E of this table contain the results obtained in terms of monthly mortgage payments and mortgage carrying cost. Graph 1, below, illustrates the changes in mortgage carrying costs for the period of 1980 to 2011. The average mortgage carrying cost during this period was 21 per cent of household income.

¹ The increase in household revenue reflects improvements in salaries and employment quality, as well as an increase in the number of women in the workforce.

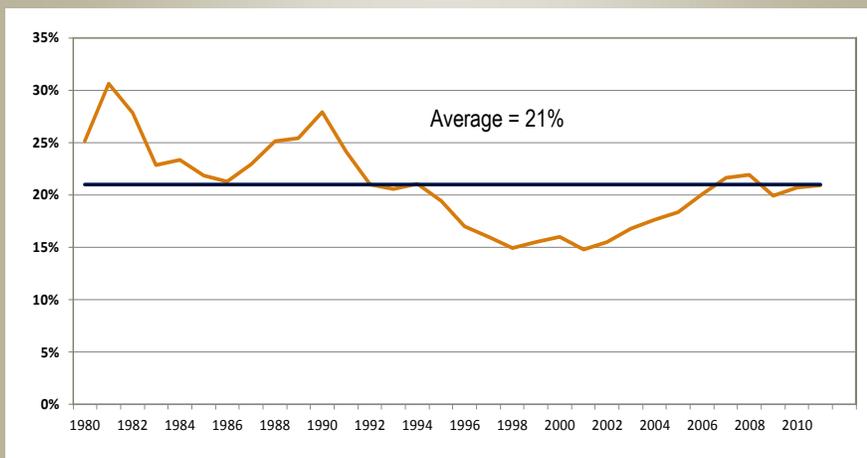
² This was the minimum down payment in the 1980s. It decreased from 10 to 5 per cent in 1992, but only for first-time buyers (Source: Government of Canada). In 1998, the minimum down payment fell to 5 per cent for all buyers.

³ Until 2006, the maximum amortization period for mortgages in Canada was 25 years (Source: Department of Finance Canada).

⁴ We used mortgage rates administered by Canada's major chartered banks. The effective rates that are charged are normally lower.

⁵ Average income of economic families, other than the elderly. A person living alone is not an economic family.

Change in Mortgage Carrying Costs From 1980 to 2011, Province of Québec



Sources: CREA, QFREB, Statistics Canada, Bank of Canada, QFREB calculations

From 1980 to 1991

Acquiring a home was most difficult in Québec between 1980 and 1991, due primarily to the fact that mortgage rates averaged 13.4 per cent during this period. There were two significant peaks in the mortgage carrying cost during this time. In 1981, five-year mortgage rates increased to a record-breaking 18.4 per cent⁶ and, as a result, the mortgage carrying cost increased to 31 per cent of household income. The second peak was in 1990. Mortgage rates at that time stood at 13.4 per cent, an increase compared to the late 1980s. The mortgage carrying cost at that time reached 28 per cent.

It should be noted that these peaks also coincided with periods of recession and they preceded the only two instances of property price decreases in Québec. In 1982, the average price of single-family homes fell by 2.7 per cent. Then, in the period of 1991 to 1996, property prices decreased by 4.2 per cent. Job recovery following the 1990-1991 recession was particularly slow. It was only in 1997 that employment returned to its pre-recession level. During this period, from 1991 to 1997, the provincial unemployment rate remained at over 12 per cent on average.

From 1992 to 1997

Affordability increased considerably from 1992 to 1997. Although income growth was very low during this period, the average price of single-family homes in Québec decreased slightly. However, it was primarily the gradual decrease in mortgage rates (from 9.5% in 1992 to 7.1% in 1997) that allowed the mortgage carrying cost to improve.

From 1998 to 2002

From 1998 to 2002, low mortgage rates, strong household income growth and moderate property price increases resulted in record low mortgage carrying costs and, conversely, a peak in property affordability.

From 2003 to 2011

The rapid increase in property prices that began in 2003 was not fully offset by the increase in household income and the decrease in mortgage rates and, as a result, affordability deteriorated. However, in 2011, the mortgage carrying cost was 21 per cent, which corresponds exactly to its historical average. In sum, properties

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⁶ Sur une base mensuelle, le sommet a été atteint en août et en septembre 1981, avec des taux hypothécaires affichés à 21,75 %.

were neither more nor less affordable than they were in the past three decades. While it's true that properties are less affordable today than they were in the 1990s, they are much more affordable than they were in the 1980s.

This last finding is particularly true considering that some of the current policies that facilitate home ownership did not exist in the 1980s (see Appendix 2 for a chronology of these policies). For example, the minimum down payment required to purchase a property has been 5 per cent, rather than 10 per cent, since 1992. Also in 1992, the federal government introduced the Home Buyers' Plan (HBP), which allowed buyers to withdraw money from their RRSP to make their initial down payment when buying a property. The HBP, initially a pilot project, became permanent in 1994. In addition, buyers now have the opportunity to amortize their mortgage over a period of 30 years, as opposed to 25 years⁷.

For all of these reasons, we can affirm beyond a doubt that properties are more affordable today than they were in the 1980s. It would therefore be erroneous to suggest that the generation of buyers who have recently purchased a property or who are about to do so (primarily the children of baby boomers), allocate a larger share of their household income to home ownership than did their parents.

The Situation in 2012

In 2012, we expect to see very slow growth in household income, combined with an increase in property prices of approximately 3 per cent and a slight increase in mortgage rates (see: [2012 Outlook for the Residential Real Estate Market in Québec: Momentum Will Continue](#)). Affordability should therefore deteriorate somewhat, causing the mortgage carrying cost to increase to 22 per cent of household income given the same assumptions we made earlier regarding the down payment and amortization period⁸.

Conclusion

Contrary to what one might think nowadays, residential properties have not become unaffordable for first-time buyers if we consider the mortgage carrying cost that Quebecers were willing to accept in the past to become homeowners. In 2011, the mortgage carrying cost was 21 per cent, which corresponds exactly to its historical average.

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⁷ With a down payment of only 5 per cent and a 30-year amortization period, at the market price and at the interest rate in effect in 2011, monthly payments would have totalled \$1,307, for a mortgage carrying cost of 20%. However, this obviously means incurring higher debt and mortgage payments that last an additional five years.

⁸ We also simulated the impact of a larger increase in mortgage rates if they increased by 1 per cent (100 basis points) on average for 2012. The mortgage carrying cost would then increase to 23 per cent.

APPENDIX 1

Changes in Price, Income, Mortgage Rates and Mortgage Carrying Costs. Province of Québec, 1980 to 2011

	[A] Average price of a single-family home ⁽¹⁾	[B] Average income of an economic family ⁽²⁾	[C] Mortgage rate (5-year term) ⁽³⁾	[D] Monthly mortgage payment ⁽⁴⁾	[E] Mortgage carrying cost (in %) ⁽⁵⁾
1980	\$48,519	\$25,267	15%	\$529	25%
1981	\$53,372	\$28,154	18%	\$718	31%
1982	\$51,923	\$29,630	18%	\$687	28%
1983	\$58,123	\$30,697	13%	\$585	23%
1984	\$61,191	\$32,431	14%	\$630	23%
1985	\$66,988	\$34,478	12%	\$627	22%
1986	\$74,207	\$36,795	11%	\$652	21%
1987	\$85,658	\$39,371	11%	\$751	23%
1988	\$94,984	\$41,086	12%	\$861	25%
1989	\$100,113	\$44,108	12%	\$934	25%
1990	\$100,406	\$43,790	13%	\$1,019	28%
1991	\$102,382	\$44,524	11%	\$895	24%
1992	\$101,900	\$45,133	10%	\$790	21%
1993	\$102,036	\$43,618	9%	\$747	21%
1994	\$101,771	\$44,980	10%	\$791	21%
1995	\$98,289	\$45,759	9%	\$742	19%
1996	\$98,040	\$47,354	8%	\$669	17%
1997	\$101,307	\$48,202	7%	\$643	16%
1998	\$103,530	\$52,141	7%	\$649	15%
1999	\$107,069	\$54,748	8%	\$708	16%
2000	\$110,849	\$58,882	8%	\$784	16%
2001	\$114,643	\$60,667	7%	\$749	15%
2002	\$127,388	\$62,346	7%	\$804	15%
2003	\$147,066	\$62,910	6%	\$878	17%
2004	\$165,611	\$66,349	6%	\$974	18%
2005	\$178,253	\$67,119	6%	\$1,026	18%
2006	\$189,589	\$69,495	7%	\$1,160	20%
2007	\$202,429	\$71,166	7%	\$1,284	22%
2008	\$210,870	\$73,245	7%	\$1,336	22%
2009	\$221,073	\$74,000	6%	\$1,230	20%
2010	\$235,439	\$75,850	6%	\$1,307	21%
2011	\$247,054	\$76,988	5%	\$1,342	21%

Sources: CREA, QFREB, Statistics Canada, Bank of Canada, QFREB calculations

- ¹ Prices from 1980 to 1999 are estimates based on CREA data.
- ² Average market income, families other than elderly individuals. QFREB estimates for 2010 and 2011.
- ³ Rates posted by Canada's main chartered banks.
- ⁴ Based on an initial down payment of 10 per cent and an amortization period of 25 years.
- ⁵ Mortgage only

APPENDIX 2

Chronology of various policies to facilitate home ownership in Canada

1954	Introduction, by the Canada Mortgage and Housing Corporation, of mortgage loan insurance.
1971	The Income Tax Act was amended to exclude a principal residence from capital gains tax.
1992	In February, the federal government announced the creation of a special Home Buyers' Plan (HPB) allowing buyers to withdraw up to \$20,000, tax-free, from their Registered Retirement Savings Plan (RRSP) as a down payment to buy or build a home.
1992	Also in February, a pilot program called the First Home Loan Insurance Program (FHLIP) was launched by the federal government, which decreased the down payment needed to buy a first home from 10 to 5 per cent.
1994	In February, the federal government announced that the HPB would become a permanent program.
1998	In March, the FHLIP was replaced by a permanent program allowing a 5 per cent down payment for all buyers, as opposed to 10 per cent.
2006	In November, the CMHC launched CMHC Flex 100, a mortgage loan insurance product for owner-occupiers that allows them, under certain conditions, to buy a property by taking out a loan up to the total value of the property (no down payment required). It also extended the amortization period for owner-occupiers to up to 40 years, under certain conditions.
2008	On October 15, the maximum amortization period for new mortgages was reduced to 35 years and the minimum down payment increased from 0 to 5 per cent.
2009	On January 27, the maximum amount that can be withdrawn as part of the HBP increased to \$25,000.
2011	On March 18, the maximum amortization period for new mortgages was reduced to 30 years.

Sources: Government of Canada, CMHC, Industry Canada and the Department of Finance Canada.

¹ Mortgage loan insurance protects lenders against losses from mortgage loans granted to their clients.

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