Good afternoon. It's great to be in Banff – today especially. On this day in 1887, Parliament enacted the Rocky Mountains Park Act, which established Banff as Canada's first National Park. Happy birthday, Banff National Park!

I am delighted to be at this IIAC conference. Just as parks and conservation are vital for our, and our children's environmental and spiritual well-being, sound investment is vital for our long-term economic and financial well-being. For many Canadians, one of the most important investments they'll make is the purchase of a house. And for you as financial market professionals, the links between the housing market and financial markets have important consequences. Today, I'd like to speak about housing and how it interacts with the economy, financial markets, and monetary policy.

Over the past 10 years, the Canadian housing market has exhibited a good deal of strength. Demand, supply, and prices have increased. But while the Canadian real estate market does not currently exhibit the generalized signs of excess we see in some other countries, we cannot afford to be complacent. After a fairly substantial run-up, real house prices have declined in the United States, the United Kingdom, and Spain, and Canadians would be wise to remember that house prices can fall as well as rise. It wasn't that long ago – in the late 1980s and early 1990s, to be exact – that Canada experienced its own real estate boom and bust. It took a decade after that before we saw activity pick up and real prices increase. More recently, of course, we have seen in this part of the country a strong housing market cycle.

The current state and likely future evolution of the housing market in Canada have implications for the economy, financial markets, and policy-makers. I will describe these implications later, but first I'd like to set the stage by discussing the role of housing in the Canadian economy and some of the factors that drive housing activity and prices.

Housing, the economy, and financial markets

Housing plays an important role in the economy, with direct and indirect effects on household wealth and consumption. In Canada, residential investment has, for the past decade, averaged about 6 per cent of GDP – somewhat higher than in the United Kingdom and the United States. About a third of residential investment is spent on renovations. Canada's home ownership rate of over 68 per cent is similar to that in the United States, a little lower than it is in the United Kingdom and Australia, but higher than in European countries such as France and Germany. Real estate assets also represent a large stock of wealth – more than $2.2 trillion, or about 37 per cent of total household assets in Canada.

Changes in the level of housing activity and in the price of houses have many implications for the economy, not only directly, because housing is an important source of economic activity, but also indirectly, because home equity is an important source of household wealth and finance. So, what are the main drivers of these changes? Although they overlap and interact

with one another, I like to think of them in three groups: the fundamentals of supply and
demand, financial innovation, and policy. Let me say a word about each.

First, as in most markets, the price of housing is driven largely by the *fundamentals of supply
and demand*. Over the long term, of course, supply and demand inevitably balance, with
neither upward nor downward pressure on prices. But in the shorter term, supply (that is,
new houses and resale listings) can be slow to adjust, and therefore significant price
changes can occur when there are significant shocks to demand. Such shocks can come
about with changes in demographics (which include the working-age population, immigration,
and migration) [chart: Household Formation and Housing Starts]; changes in the labour
market, disposable income, wealth, and financing costs [chart: Disposable Income,
Unemployment, and Mortgage Interest Rates]; and changes in the price and availability of
alternatives in the rental market [chart: Rental Vacancy Rate and House Price Growth:
Calgary].

Second, *financial innovation* also plays a role in driving housing demand and prices. Most
home buyers require financing, and therefore the mortgage market and its increasingly
innovative products can affect when people purchase a house and the type of house they
buy. In recent years, several new mortgage and mortgage-insurance products have been
introduced in Canada. These include the low (or even zero) down payment mortgage; the
longer-amortization mortgage (that is, for an amortization period of longer than 25 years and
up to 40 years); and, to a small extent in Canada, mortgages for non-prime borrowers.

Of course, innovations can increase a household’s financial flexibility by allowing for reduced
down payments and mortgage payments. And, because financial innovation often results in
new means by which savings can be allocated to desired investments, it can also increase
the efficiency of financial markets.

But financial innovations can carry risks as well. For example, if financial innovations are
introduced when demand is already strong, they can amplify a rising price trend, which, in
turn, could result in higher mortgage rates overall. For the home buyer, of course, some
innovations can increase the total cost of ownership – significantly in some cases – and can
thus reduce lifetime savings or spending and investments in other areas of the economy. For
example, a $200,000 mortgage, serviced with monthly payments on a 40-year mortgage at 5
per cent, will cost the homeowner about $110,000 more in total than if the mortgage were for
a 25-year period [chart: Impact of Amortization Period on Mortgage Payments]. Although
there are no publicly available statistics for amortization periods in Canada, anecdotal
evidence suggests that more than half of new, insured mortgages issued in Canada over the
past year were for extended amortization periods. While many people with longer
amortization mortgages may choose to make accelerated payments, the potential effect of
this shift in financing behaviour, when combined with low or zero down payment mortgages,
can raise concerns, especially if there were also to be an easing of lending standards.

Furthermore, if financial innovations allow people to buy houses with very little "skin in the
game," they can, in a rising-price environment, encourage speculation in "quick flip" financial
investment. This additional stimulus to demand can, in a market already characterized by
tight supply and rising prices, boost house prices further, and increase the risk of a
correction.

For investors in innovative mortgage products, there can also be risks – as recent events in
the United States have so clearly shown. Take securitization, for example. The movement
from an originate-and-hold model to an originate-and-distribute model by means of
securitization, and the creation of complex, synthetic instruments, together diminished the
incentive for sound credit evaluation in the United States and some other countries. Also,
because they were believed to be off balance sheet, these securitized products were not
always properly considered in the liquidity plans and capital structure of sponsoring financial
institutions. Because these products were complex and not fully transparent, the risks
associated with them were difficult to understand and consequently mispriced.
Fortunately in Canada, we were not as aggressive in breaking the links between originator and distribution, nor, for the most part, did we develop complex, synthetic securitized instruments involving Canadian mortgage assets. Furthermore, mortgages with less than a 20 per cent down payment must be insured in Canada, and most of the securitized mortgage market consists of Canada Mortgage Bonds, which carry a government guarantee.

Overall, then, financial innovation can be helpful when all parties – borrowers, lenders, and investors – understand the risks and are properly positioned to bear them. It can be detrimental if it exacerbates cyclical pressures, leads people to buy homes they cannot sustainably afford, encourages speculation, or if the inherent risks are not well understood.

Now, in turning to the third influence on housing activity and prices, I should note that fundamentals and financial innovation don't exist in a vacuum. They are affected – for better or worse – by the policy environment. One important element here is monetary policy, but other domains of public policy can also have an impact.

Some policies – whatever the intention – can restrict supply and affect cost directly or indirectly. These would include land use and zoning, development charges, and building codes. Other policies can affect demand. They include immigration, housing, and mortgage policies, for example.

**The housing market and monetary policy**

Let me turn to the policy area I know best. Monetary policy has an important role in the housing market from several perspectives. It has effects on more than just the cost of a mortgage. I'll elaborate briefly.

The aim of monetary policy in Canada is to keep inflation low, stable, and predictable, close to our 2 per cent target for total CPI inflation. This inflation-control policy has at least two key implications for housing activity and prices.

First, low, stable, and predictable inflation acts as a macroeconomic stabilizer – it tends to enhance the growth of output and reduce its variability, while keeping interest rates lower and less volatile. These outcomes, in turn, tend to support the housing market in a very general sense, and help to stabilize housing demand. Second, against a backdrop of low and stable inflation, both house builders and house buyers can make better-informed decisions. Overall, then, monetary policy in Canada is an important element in supporting a sound and stable housing market.

That being said, for a number of years, there has been debate over whether central banks can or should take asset prices into account in their decision making. Recently, of course, the asset class of primary interest has been housing.

As I just mentioned, we believe that the best framework to achieve this end is one that focuses on keeping inflation low, stable, and predictable. In this context, changes in housing activity and prices are important to the conduct of monetary policy for a number of reasons. I will mention three.

First is the direct effect on inflation, which is captured in the "owned accommodation" component of the consumer price index. Second is the indirect impact on household spending. And third is the impact that a rapid change in prices – the inflating or deflating of a bubble – can have on the real economy. Let me discuss each of these in turn.

In Canada, unlike some countries, the CPI fully captures the direct effect on inflation of changes in house prices in the "owned accommodation" component of the CPI, which includes mortgage interest cost, replacement cost, property taxes, house insurance, maintenance and repairs, and "other owned accommodation expenses." This component represents 16.5 per cent of the CPI basket. [chart: Total CPI and Owned Accommodation]
Changes in the price level of this component, therefore, have a significant direct effect on total inflation.

Changes in house prices can also have an important effect on household spending. Housing wealth is widely distributed – much more so than stock market wealth, for example – and thus has an important influence on aggregate demand which, in turn, has an effect on inflation. Furthermore, there can be a "financial-accelerator effect" associated with rising house prices. When the value of a house rises, the owner can typically borrow against this increased equity to fund home renovations, a second house, or other goods and services. These expenditures can "accelerate" a rise in house prices, reinforcing the rise in collateral values, access to additional borrowing, and thus a rise in household spending. Of course, this accelerator effect can also work in reverse: a decrease in house prices tends to reduce household borrowing capacity, and amplify the decline in spending.

Finally, a significant increase or decrease in house prices from historic norms – that is to say, the inflating or deflating of a "bubble" – can have an impact on the real economy. In a nutshell, bubbles are costly (in both directions) because they distort decision making and impede the optimal allocation of resources. As a bubble develops, people tend to build and purchase more housing than would be the case when prices reflect fundamentals, and lenders may divert investment to housing from alternative, more productive opportunities. When the bubble bursts, decision making is again distorted, and both households and lenders suffer the consequences. This boom-and-bust cycle can prove very costly to the economy. The appropriate monetary policy response to these bubbles is the focus of considerable debate. The Bank of Canada considered this issue in the period preceding the renewal of the inflation targeting agreement with the government, and we continue to examine it.

These three effects – the direct effect on inflation, the effect on consumption, and the effects of an inflating or deflating bubble – carry important implications for monetary policy, implications we consider when we set policy to achieve our 2 per cent inflation target over the medium term. Let me now turn to some challenges for the Bank, other policy-makers, lenders and investors, with regard to the promotion of a sound housing market in Canada.

Challenges for policy-makers and financial markets

The first challenge is to continue to ensure that policies encourage the right kind of practices and innovation in mortgages and home equity lending. In this regard, it is extremely important that sound lending standards be consistently applied – even in "good times." We should be wary of innovations that encourage price run-ups beyond what fundamentals would justify; many such innovations will fail the test of time. New products should not be dependent upon an assumption of appreciating house prices, and incentives must be aligned to promote prudence in borrowing and lending. Finally, the financial-accelerator dynamics


that I mentioned, and how innovation affects them, need to be adequately recognized and better understood.4

A second, and related, challenge is to ensure that innovations in the funding of mortgage finance do indeed make the financial system more efficient and do not threaten financial stability. It is important that investors and financial market participants understand the risks they take on so that they can manage these risks effectively. It is also important that there be sufficient transparency so that financial markets can price the risks efficiently and allocate risk to those who are best positioned to bear it. Risk is more likely to be priced efficiently when pertinent information is readily available and incentives are aligned. Adequate transparency and disclosure help investors to understand the characteristics of the securities they are holding, and make it easier for market participants to value assets, which, in turn, helps to maintain liquid markets. Finally, incentives must be properly aligned to prevent conflicts of interest that can confound and distort the pricing of risk.

A final challenge I’d like to mention is that of enhancing the financial literacy of potential and current mortgage holders, and of investors. One of the best ways to avoid painful outcomes in the housing market is to have individuals making well-informed financing decisions. The need for financial acumen has increased in recent years, and may continue to increase.5 The good news about innovation in the mortgage, mortgage insurance, and home equity markets is that people have greater choice in financing. But individuals need the financial literacy and all the relevant information from those selling mortgage products to make the choices best suited to their circumstances.

The housing market in Canada

As I said at the outset, unlike the situation in many countries, conditions in the Canadian housing market remain relatively favourable. Housing activity remains at a high level, and house prices continue to rise overall. The moderation in activity and price increases that we have seen in recent months is both expected and welcome. Still, we cannot afford to be complacent. That is the lesson from previous boom-and-bust cycles – a lesson underscored by the current problems in the U.S. housing market.

In the first half of this decade, the U.S. housing market underwent a boom as various financial innovations were introduced, some of which encouraged the buying of houses by those who clearly could not afford them. The emergence of subprime mortgages as a means of financing the purchase of a house played a significant role in this boom. At the end of 2007, about 14 per cent of total residential mortgage loans outstanding in the United States were subprime. From 1998 to the peak of the boom in 2007, real house prices appreciated by, depending on the measure used, about 45 per cent (OFHEO) or even 105 per cent (Case-Shiller). However, since the peak, real house prices have fallen by between 7.4 per cent and 22.3 per cent (OFHEO and Case-Shiller, respectively). This decline has had

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4 The Bank of Canada puts a good deal of effort into monitoring and assessing the state of the Canadian housing market, as well as analyzing the impact of changes in activity and pricing on credit markets, the real economy, and the financial system. Some of this analysis is reported in the Bank’s Monetary Policy Report and Financial System Review. In the past few years, we have tried to improve our understanding of the links between house prices, credit growth, and spending, and we will publish research in this area as it bears fruit.

5 The Bank of Canada informs the public about financial system issues in reports, in speeches and on its website. For practical information on mortgages and mortgage default insurance, individuals can refer to the Financial Consumer Agency of Canada’s website http://www.fcac-acfc.gc.ca/eng/default.asp. The FCAC’s goal is to provide consumers with “objective information about financial products and services,” and to inform Canadians of their “rights and responsibilities when dealing with financial institutions.” Of course lenders not only have a responsibility, but they also have a stake in helping borrowers to make informed decisions. Defaults are not generally in their interest.
deleterious effects on the real economy and the financial system, and has caused real hardship for many individuals.

Largely because of Canada’s more conservative mortgage culture – with fairly prudent lending standards, and with most mortgage lending to be found on commercial banks’ balance sheets or financed by sound securitized vehicles – the housing market in this country has not demonstrated the same excesses seen in the United States. The strength of the Canadian housing market over the past decade can be seen in home sales and housing starts, which have increased by about 55 per cent. Real prices for existing houses increased by 52 per cent over this period, while real prices for new houses increased by about 27 per cent. Of course, these averages mask regional variations. In Western Canada, strong labour markets, sustained income growth, and demand resulting from the migration of Canadians from other provinces have resulted in house price increases that are higher than the national average.

Much of the growth over this period was the result of pent-up demand following the housing downturn of the late 1980s and early 1990s.\(^6\)

In examining the current situation, our most recent Financial System Review notes that income growth, low unemployment rates, and relatively good financing conditions have supported rising house prices, although the pace of increase has slowed somewhat. This deceleration has been most noticeable in markets (such as Alberta) that have posted very steep price increases over the past two years. The slower price growth is the result of increased supply combined with some softening in demand, which can be attributed to the previous run-up in the hottest markets, and some slowing in economic growth. This moderation in housing activity has been expected and is welcome.

The Canadian housing market does not appear to be characterized by excess supply at this time. The proportion of unoccupied, newly built dwellings in most cities remains below historical averages, suggesting that a major widespread reversal in house prices is unlikely in the near term. The recent downward trend in building permits suggests that supply is adjusting to softening demand. And importantly, the Canadian mortgage market is in reasonably good shape. The Canadian "subprime" mortgage market accounts for less than 5 per cent of the residential mortgage market, and might be better characterized as a "near-prime" market, with quite different lending standards than appear to have been applied in the United States [chart: Percentage of Subprime Mortgages in Arrears for More Than 90 Days or in Foreclosure].

**Conclusion**

Allow me to conclude.

The housing market plays an important role in the national economy. And changes in housing activity and prices can have far-reaching effects. The turbulence of the past 12 months emanating from the U.S. housing market has posed risks and challenges for many people – and for the conduct of monetary policy. Although the Canadian economy has not escaped the effects of financial market dislocations or the weakening U.S. economy, the Canadian financial system and the housing market have shown considerable resilience, in part reflecting prudent practices.

Canada’s monetary policy framework continues to play an important role in anchoring inflation expectations, and thus in supporting sustainable economic growth and a sound

\(^6\) Growth in housing activity and prices over the past decade was underpinned by a number of factors including regional migration; income growth from strong employment, rising wealth from financial assets, and relatively low interest rates; as well as, in recent years, innovations in the mortgage market.
housing market. Macroeconomic stability cannot eliminate asset-price run-ups, but it does help a good deal when financial decisions are made, and it helps to mitigate the impact when run-ups and reversals do occur.

A foundation of low, stable and predictable inflation will continue to prove valuable in helping Canadians to make informed decisions about housing – and indeed about many forms of spending and investment.

Housing Activity in Canada: 1998 to 2008

Sources: CMHC and MLS
Changes in Real House Prices in the United States, the United Kingdom, and Spain

Sources: OFHEO, BIS, and Datastream

Changes in Real House Prices in Canada

Sources: Statistics Canada, Royal LePage, and Bank of Canada calculations
Household Formation and Housing Starts
(Yearly averages)

* Household formation based on census estimates
   Source: Statistics Canada

Disposable Income, Unemployment, and Mortgage Interest Rates

Sources: Bank of Canada and Statistics Canada
Rental Vacancy Rate and House Price Growth: Calgary

Sources: Statistics Canada, Royal LePage, and Bank of Canada calculations

Impact of Amortization Period on Mortgage Payments

Assumptions:
- Mortgage amount: $200,000
- 5-year fixed-rate mortgage: 5 per cent
- Monthly payments
Inflation: Total CPI and Owned Accommodation

Source: Statistics Canada

Home Equity Withdrawal* and Home Renovations

* Home equity withdrawal estimates are preliminary and subject to revision.
Percentage of Subprime Mortgages
in Arrears for More Than 90 days or in Foreclosure

* Average of major lenders
Sources: Mortgage Bankers Association and Bank of Canada