THE U.S. IS NOT YET GRAPPLING
WITH A GENERAL REAL ESTATE BUBBLE

Less pronounced increases in housing prices will slow the pace of economic growth in 2007

Summary

The global economic recovery was fuelled in large part by real estate growth in the past few years. While prices in the U.S. did not go up as much as elsewhere in the world, the wealth effect associated with higher housing prices has sustained and even swelled American household consumption since the end of 2001: low interest rates, new mortgage products and unprecedented net home equity extraction literally drove household spending.

While it is easy to believe that there is no general real estate bubble in the United States, the unsustainable price increases in many metropolitan areas raise fears of a slowdown. With rising short-term interest rates and a certain flattening of the real estate market, should household consumption be expected to slow in the near future? It bears mentioning that a drop in housing prices, in real terms, has always coincided with an economic recession in the U.S.

In this Economic Viewpoint, we will go over the factors that drove up housing prices south of the border in recent years. We will then discuss whether the real estate market is overvalued from various perspectives in order to determine the extent and imminence of the correction. Our employment, income and interest rate projections show that a soft landing is on the way, i.e., there will be a gradual deceleration in housing prices. Inflation stability suggests that the correction could be spread out over several years.
Real Estate: The real engine of growth these past few years

The unprecedented length and vigour of the current real estate cycle somewhat managed to lessen the impact of the stock market crash and allowed the global economy to recover quickly from the U.S. recession of 2001. But after more than 10 years of sustained growth, it appears that the winds are about to change. Last year, the U.S. real estate market saw median home prices rise nearly 13%, and a growing number of metropolitan areas are showing signs of overheating. For many, this is clear evidence that a real estate bubble is dangerously close to forming in the U.S.

However, a look at the change in housing prices elsewhere in the world shows that the U.S. market has not risen as much as other industrialized countries; namely, the United Kingdom, Ireland and Australia where prices almost doubled in just four years.

Still, the increase in the U.S. is a concern because the market has not risen so quickly since 1979, and if inflation is factored in, the pace is unprecedented. A recent study shows that the real value of houses jumped 86.3% between 1890 and 2005, with the last decade accounting for almost three quarters of the increase. Given that the real estate market has been a key driver of growth in the U.S., the spectre of a slowdown, or worse a bursting bubble, does not bode well for the nation’s economic outlook.

Low interest rates to the rescue

Before going further, let us first explain the main factors behind real estate growth. Historically, housing prices reflect the evolution of market “fundamentals” such as income, employment, demographic growth, real interest rates and the housing supply. In most cases, at constant interest rates, the growth in per capita disposable income and the evolution of unemployment rates alone explain most of the fluctuations in housing prices. However, this time around, the robust demand has been overwhelmingly fuelled by low and, more importantly, decreasing interest rates. For example, 30-year fixed mortgage rates fell from 8.4% in June 2000 to a low of 5.5% in June 2003, the lowest level in 45 years. Although they have gone up slightly since then, mortgage rates remain historically low.

Moreover, the introduction of new financial products and the easing of underwriting standards, primarily with res-
pect to borrower credit rating, the debt-to-income ratio and minimum down payments, have made access to home ownership easier for new buyers (see box 1 for more information). Zero-down or near zero-down mortgages, which accounted for 3% of all mortgages in 1990, represented more than 16% in 2004.

Also, given that short-term interest rates have fallen more quickly than long-term rates since 2000, the popularity of adjustable-rate mortgages (ARM) has increased considerably, from 12% of all mortgages granted in 2001 to 35% in 2004.

Subprime loans, aimed primarily at households with low credit ratings or high debt-to-income ratios, also grew substantially to almost 20% of total loans in 2004.

To a lesser extent, speculation may have also helped swell housing prices. Low interest rates and the proliferation of no-capital payment loans made real estate investments more appealing. According to the OECD, the portion of sales attributable to this type of investment has been rising rapidly in the U.S. since the end of the ’90s, reaching 15% of total purchases in 2004, or three times more than the typical 5%. This situation, however, is mostly associated with the sale of condos, especially in Florida.

With a growing variety of low-cost mortgages, the American financial system has issued a record number of loans in recent years. At the same time, access to ownership increased substantially, to 69% of households in 2005. The growth of real estate equity has fuelled an important wealth effect and allowed many households to re-establish their financial health. Following the stock market crash of 2000, real estate wealth continued to rise in the United States so much so that by 2001, it had regained the historic lead it held until 1997 over stock market wealth. Moreover, given that for the same price appreciation, the marginal propensity to consume out of household wealth exceeds and outpaces the marginal propensity to consume out of stock market wealth, the net effect on consumption has been tangible.

The real estate boom: good for consumers...

The positive consequences for the economy have been substantial. First, low interest rates, combined with higher housing prices, have allowed American households to refinance their mortgage loans at a lower cost and to convert their home equity into capital. After surging from 2000 to 2003, mortgage refinancing fell by almost half in 2004. However, it rebounded in 2005, with the amount of home equity converted into capital rising to US$243 billion over the last year, an increase of US$100 billion from 2004. Moreover, in addition to re-injecting much of the funds into the economy, mortgage refinancing has allowed homeowners to save billions of dollars in interest charges during the year.

In a recent study co-authored by Allan Greenspan, the Fed calculated the contribution of home equity extraction to household income in recent years. After certain expenses, the extraction of net equity was valued at US$599.5 billion in 2004, or 6.9% of disposable income. In terms of household disposable income growth, the extraction accounts for close to two thirds of the gain recorded between 2003 and 2004.

Used largely for home improvement, durable goods purchases or simply to pay down debt, the funds generated literally sustained household spending, which
Box 1
Description of new mortgage products in the U.S.

<table>
<thead>
<tr>
<th>Type of Loan</th>
<th>Description</th>
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<tbody>
<tr>
<td>Zero down (or near zero down)</td>
<td>Unlike typical loans where a downpayment is required, zero down loans allow households to make a real estate purchase with no downpayment.</td>
</tr>
<tr>
<td>Subprime</td>
<td>Loans with a premium target households with a low credit rating or a high debt-to-income ratio. The creation of this type of loan has given credit access to millions of households that otherwise would not qualify for mortgages. To offset the higher risks this type of loan represents, borrowers are charged a premium over current market rates, pay higher initial charges and may be required to fulfill special loan conditions, such as prepayments.</td>
</tr>
<tr>
<td>Low- or no-documentation</td>
<td>Low- or no-documentation loans allow borrowers to provide less information during the application process. For example, an automated report may replace a complete formal report and income may be disclosed but not verified. In extreme situations, the lender may even waive the requirement to declare income or assets in cases of sensitive information. Borrowers are charged higher interest rates or are required to make bigger down payments. This type of loan is still quite rare.</td>
</tr>
<tr>
<td>Interest only</td>
<td>Interest only loans allow borrowers to overcome home ownership barriers by delaying the principal repayment for a period of three, five or seven years. This type of loan has become especially popular in expensive metropolitan areas of California where median house prices are close to nine times the median household income. According to a report by Loan Performance, almost one third of loans granted in 2004 were interest only loans.</td>
</tr>
<tr>
<td>Option-adjustable</td>
<td>Less popular, these loans allow borrowers to delay not only principal payments but also interest payments for a specific period. They also offer a variety of adjustments and payment periods so that the borrower can make payments based on his cash flow.</td>
</tr>
</tbody>
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Source: The Joint Center for Housing Studies

accounted for close to 75%, on average, of real GDP growth since the end of the 2001 recession.

Beyond that, the real estate boom has helped offset some of the heavy job losses that swept the labour market after the recession. From October 2001 to today, 676,000 new positions have been created in the construction sector, compared with losses of 1.5 million workers in the manufacturing sector. These developments had an impact on residential investment, which rose from 25% of total investment in the early 1990s to 36.6% at the end of 2005.

Residential and non-residential investment should remain robust over the next few quarters due to the reconstruction efforts in the South. That said, recent developments show that the reconstruction could make a small contribution to growth over the next few years rather than a major one. The real estate cycle seems stretched to its limit and...
it looks like a slowdown is around the corner. Given real estate’s major contribution to economic growth in recent years, less pronounced increases in housing prices could signal a slowdown in economic growth by mid 2007.

**Fundamentals point to an overvalued market …**

Before examining the consequences of a plateau or a decrease in housing prices, it is important to first discuss the current situation in the U.S. real estate market. In and of themselves, market price increases are not necessarily indicative of overvaluation. We must first compare the current situation to different industry barometers or market determinants.

A rule of thumb is to measure housing prices in relation to household income in order to determine whether the real estate market is accessible. As the graph shows, the national ratio of housing prices to per capita disposable income is currently at a historic high, or 17.3% above its long-term average. The situation is even worse in major urban centres where the proportion of households that have to pay more than four times their income to purchase a house has more than tripled since 2000.

However, this measure does not take into account the debt burden. While it’s true that surging housing prices pushed mortgage debt to 90.6% of disposable income by mid 2005, or 30 percentage points more than in 1992, it’s also true that low interest rates have brought interest payments down to only 4.5% of disposable income, which is less than the 4.9% observed in 1992. To get a more complete picture, it is therefore important to look at the evolution of the housing opportunity indices.

These indices, which take into account prices, income, interest rates and taxes, indicate the ability of a median income American household to make monthly payments on a median priced home. It appears that despite the surge in prices since 1995, lower interest rates have stabilized the index to close to 135 during the period8. More recently, higher short-term interest rates have changed the situation, pushing the housing opportunity index from a high of 143 in February 2004 to 116.8 in December 2005, a 14 year low. Indeed, at this level, the index is somewhat below its historic average, but it remains at a level where the situation is still under control.
At first blush, buying a home is more expensive than renting

Another interesting measure involves comparing the cost of owning property with renting. The fact is that if housing prices are too high in relation to rental, it is then relatively more advantageous to rent than to buy, which exerts downward pressure on prices. When using such a comparison, the real estate market is clearly overvalued. Not only is the price-to-rent ratio at a peak, it exceeds the historic average by almost 40%. Signs of overheating are even more visible in states with large cities such as California, Massachusetts, New York and Florida, where ratios have risen almost exponentially.

Are we headed towards a pronounced slowdown in the real estate market...

The basic and adjusted measures paint a mixed picture of the real estate market. Still, there are clear signs of deceleration in some places and should it only be a levelling off of real prices, household spending would be affected. The situation is all the more critical given that per capita disposable income, which between ’85 and ’95, grew faster than house inflation, has largely been overtaken by the latter over the past 10 years.

But here again there is a caveat. In a balanced market, the costs of owning a home should be the same as renting. These costs include the loss of interest an owner could have realized on another investment, property taxes, depreciation and maintenance of the property, and future capital gains or losses. In a recent study conducted by the OECD, the authors showed that from 1995 to 2000, the price-to-rent ratio was theoretically undervalued in relation to its fundamental value in the U.S. Since 2000, the gap between the current and fundamental values have dissipated and the markets now seem balanced, which suggests that according to this adjusted measure, the real estate market situation is not all together out of line.
In addition, the durability and vigour of the current cycle is atypical. First, despite the slow recovery of the labour market, the real estate boom continued after the recession. Then, it picked up even more steam even though interest rates have gone up 350 basis points since June 2004. U.S. monetary policy remains relatively accommodating, which may explain the durability of the real estate cycle, but the rate hikes will sooner or later affect the market, which suggests that a correction is on the horizon.

As Ben Bernanke stated in his first speech to Congress on February 15: "Signs of slowing in the housing market have appeared in recent months." Sales of new and existing houses ebbed in December and January. Homebuyer sentiment, as measured by the National Association of Home Builders, fell six times in the last seven months. Homes are on the market longer and mortgage applications are down. And the inventory of unsold homes has been growing since the beginning of last year. Housing starts and building permit applications gained surprising ground in January 2006, but because this growth seems to be based on temporary phenomena such as weather fluctuations, it is safe to expect a downturn in this area as well in the coming months.
Household consumer confidence in the real estate market is also falling. According to the University of Michigan monthly survey, the proportion of consumers who believe the real estate market is currently conducive to buying a home is clearly down. In fact, it is at its lowest level since the 1991 recession. Surveyed households stated that real estate was no longer a good investment.

... or rather a return to normalcy?

That said, we believe that the U.S. real estate market is headed more towards a soft landing than a crash. The risk of a serious drop in housing prices, which could plunge the U.S. into a recession, is in fact, very slim. On the one hand, although the market is showing clear signs of overheating in some geographic areas (see Box 2: increases in housing prices in 2005), the situation still seems under control at the aggregate level. This is because although mortgage financing is integrated on a national scale, the real estate market is fairly disparate across the nation: A house in New York City is certainly quite different from one in Oregon. Consequently, there is little chance of a real estate bubble forming from coast to coast. Also, average national home prices have never fallen since World War II. There have been decreases in local prices, such as in Houston in the 1980s and in California during the ‘90s but never right across the country and at the same time. Moreover, a prerequisite for a drop in real prices is an imbalance between supply and demand. Although it’s true that the supply of existing and new homes increased in 2005, it remains at a historically low level.

On the other hand, the American taxation system remains highly conducive to a strong real estate market. Tax incentives aimed at encouraging home ownership are numerous in the United States. And federal deductions for mortgage interest and property taxes allow American households to save an average of US$562 each year (US$80.9 billion in total).

As well, the Fed’s monetary tightening looks like it’s coming to an end and we do not anticipate any hikes in long-term bond rates. In fact, at 4.75%, the federal 10-year bond rate appears to have almost reached a cyclical high and is likely to fall about 20 basis points by mid 2007. Excess savings outside the U.S., sustained demand for U.S. securities, the absence of inflationary pressures, the smaller proportion of the federal deficit in relation to the economy and a projected deceleration in economic growth all point to lower rates. In these conditions, fixed and variable mortgage rates will continue to sustain demand for houses, and by extension, prices.

Lower inflation could also play a predominant role in the scope and duration of the market correction. Historically,
when inflation is generally low, real decreases in housing prices when they appear after a boom tend to take effect more slowly and can extend over a longer period of time. Also, given the downward nominal rigidity in housing prices, real prices tend to fall less during a period of low inflation.

U.S. real estate financing experts\(^{13}\) expect things to return to normal, i.e., price fluctuations should abate. The conditions are in place for single family home prices to return to their historical average growth rate. As such, after reaching 13% in the fourth quarter of 2005, they will increase on average between 4 and 6% per year by 2013.
In these conditions, the household situation is not in jeopardy

Of course, the recent introduction of new financial products over the past few years could put some owners at risk, especially those with adjustable-rate loans, who would be left reeling if rates climb any further. The spread between fixed and variable rates has already narrowed from 1.6% in the last quarter of 2004 to 1.1% at the end of 2005. Households that qualified with a debt ratio close to acceptable limits set by financial institutions will be particularly affected. That said, the fact is that more than 50% of all mortgages are 30-year fixed-rate loans, meaning that most households are sheltered from potential rate hikes.

Nonetheless, the recent swelling of household debt remains a source of weakness for the U.S. economy. At 126.1% of disposable income, household debt is currently at a record high. This is mostly due to the surge in residential property investment in recent years because the proportion of consumer loans has remained relatively stable (it bears mentioning, however, that a significant part of the recent increase in real estate debt helped finance consumer spending).

Until now, low interest rates have allowed consumers to keep their debt payments relatively low despite higher debt levels. Property-related financial obligations (principal and interest payments on mortgages and other charges, including insurance and taxes) were, at the end of 2005, close to 10.8% of disposable income. This is the highest ratio since these statistics were introduced in 1980. However, the situation is not very far from the historic average of 9.4%. In addition, as previously mentioned, mortgage refinancing has no doubt limited the growth of consumer loans (which typically carry a much higher interest rate than mortgage loans). As such, the proportion of income allocated to consumer debt service has fallen in the last two years.

The precarious nature of this debt situation stems from the reduced margin between mortgage debt and the value of household real estate assets. If, against all expectations, housing prices were to plummet across the board in the near future (reducing the value of assets held by Americans without changing the debt incurred), the financial situation of households would become rather bleak.

Therefore, overall, the financial obligations of owners remain under control (16.4% of disposable income in 2005) and well below the ratio of financial obligations for renters (28.9%), which includes rent payments. Still, an unexpected significant increase in mortgage rates could jeopardize this precarious situation.
Conclusion

Since the end of the recession in fall 2001, the U.S. economy has, on average, enjoyed quarterly annualized growth of 3.1%. Residential construction alone has accounted for 13% of this growth. On the employment side, of the 3,681,000 jobs created since the end of the recession, 676,000 were in construction. However, when the incredible wealth effect attributable to housing price increases is taken into account, it becomes clear just how important the real estate sector has been to economic growth. This gain in real estate wealth has had an impact on retail sales, on household financial investments, and of course, on renovation spending. Given that much of the recent economic growth is owed to the real estate boom, a slowdown in this market would drag the economy down with it.

Along with the drop-off in construction, the flattening of the market will limit its contribution to economic growth. Lower real estate prices along with interest rate hikes that for the most part have already taken place, should bolster household savings despite a decline in disposable income refinancing. Consumption should therefore be tempered, bringing about more subdued economic growth, and in accordance with our economic scenarios, a slight slowdown that should peak in 2007.

Given that the real estate market is particularly sensitive to interest rate fluctuations, it is difficult to assess whether the plateau in construction and home resales will have a significant effect on financial markets. Once the residential sector’s contribution to economic growth begins to slip, the Fed is bound to ease the monetary tightening that began in 2004. And once the economy slows and home price growth moderates, investors will temper their inflation expectations, thus limiting the increase in bond rates. It would take a full-fledged crash-plausible but not probable-to disrupt the markets. A more likely scenario is one of moderate, controlled real estate activity, which will affect investors less than all the other variables that make up the economic and financial picture of the United States.

In fact, signs of a downturn are increasing. Although real estate activity continues to grow, it appears to be nearing a plateau. It would be surprising to see a sustained recovery in construction or home sales in the upcoming quarters. Although the post-hurricane housing reconstruction efforts in the South could affect the statistics, in general, new construction is expected to decline while home sales are projected to slow considerably. Although 2005 saw housing starts advance 6.3% over the previous year, to 2,072,000 units, 2006 is expected to record the first drop since 2000. As a result of higher interest rates and a slowing market, new construction is projected to fall to below 2 million units again, or a 7.6% decrease. In 2007, the real estate market will continue its soft landing but the anticipated decrease in interest rates will bolster the real estate market to some extent.
The divergent demographic evolution of these countries must be pointed out. Taking into account population movements and profiles, the growth potential of the real estate market is less pronounced in the U.S. than in many other countries, notably, Ireland. See Robert F. Martin, "The Baby Boom: Predictability in House Prices and Interest Rates," Federal Reserve Board, November 2005.


OECD Economic Outlook, volume 2005/2 No.78, December.


A home opportunity index at 135 indicates that a median household has 135% of the income required to purchase a median priced home.

It bears mentioning, however, that many large cities exercise rent control. This means that prices are kept below market level, thus increasing the price/rent ratio.

Former Federal Reserve Chair Allan Greenspan stated in June 2005: "Although a "bubble" in home prices for the nation as a whole does not appear likely, there do appear to be, at a minimum, signs of froth in some local markets where home prices seem to have risen to unsustainable levels." Testimony of Allan Greenspan before the Joint Economic Committee of the U.S. Congress, Federal Reserve Board, June 9, 2005.

This statistic was introduced in 1982.

