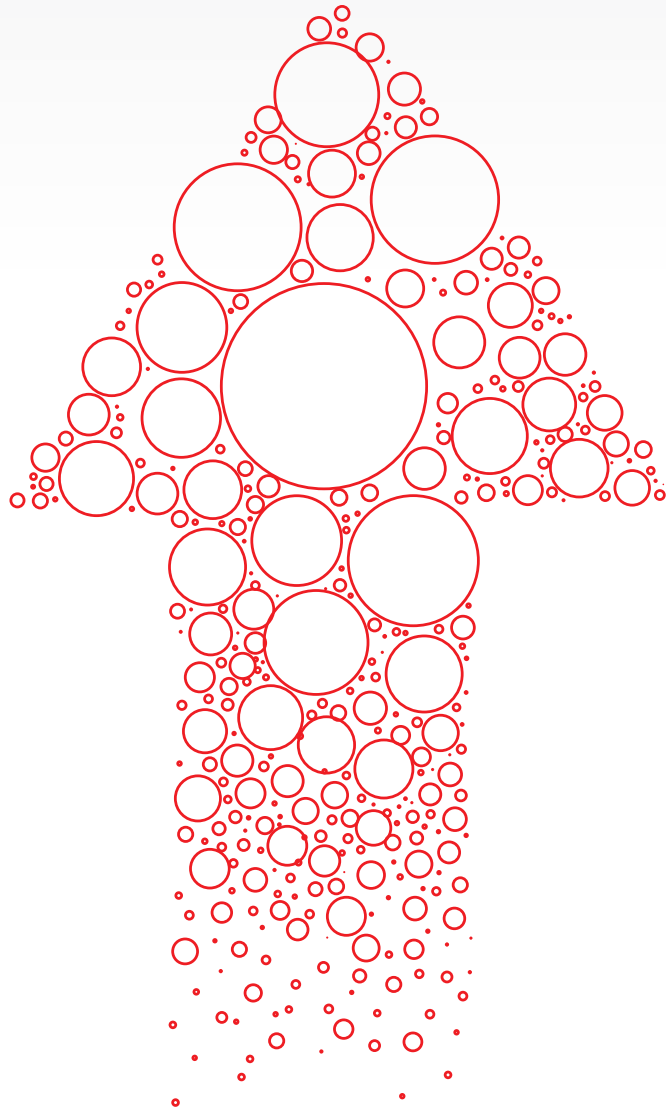


Top Charts

Canada: Top charts to think about going into 2018



December 22, 2017



Canada: Top charts to think about going into 2018

The holiday season is upon us, promising, as every year, to bring its share of joy, celebrations, and well-intentioned New Year's resolutions. For us economists, it's also a time to mull over the last 12 months and fine-tune our forecasts for the coming year. To do so, we often need to revisit some of the notes and charts we've published on the year's plethora of economic news – an enlightening exercise that helps us organize our thoughts about the future.

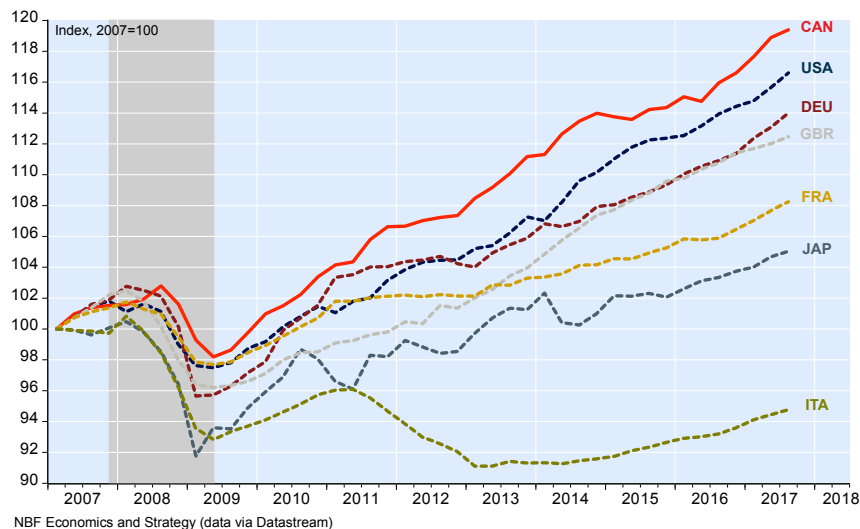
This year we've decided to share the results with our readers by publishing a collection of what we think are the best charts we produced in 2017. Today's piece deals with the Canadian economy, highlighting the trends we find most important to think about on the eve of 2018. We hope you'll find it useful. Enjoy!

1

We begin with the broadest measure of economic health, GDP growth. Here Canada has been a star performer in the last few years, suffering less than other advanced economies from the 2008 financial crisis and recovering faster. Canadian growth since early 2007 has surpassed that of all other G7 economies.

Canada: The top performer among G7 countries

Real GDP. Last observation: 2017Q3

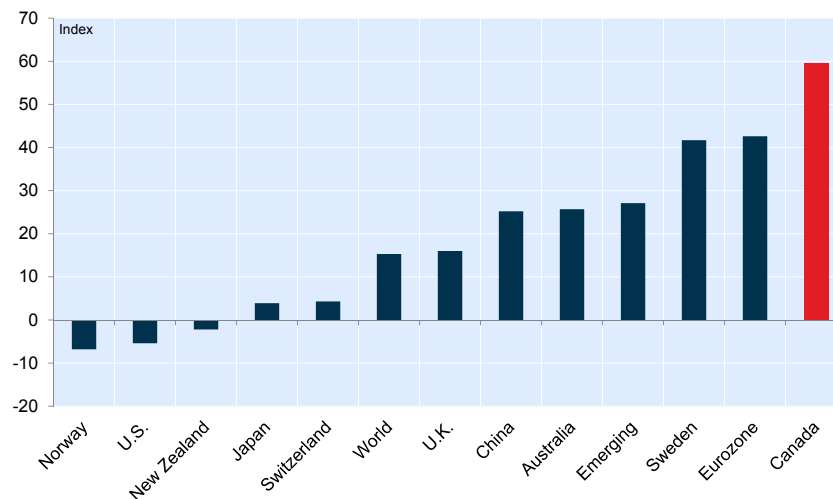


2

Its momentum has shown no sign of abating in 2017. On the contrary, Canada's economy is on track to end 2017 with a G7-topping expansion of 3.0%, the largest since 2011. Few predicted such a performance when the year began, but as the year went on a stream of positive economic surprises forced analysts to revise up their forecasts.

Canada: A most surprising year indeed

Citi index of economic surprises, 2017Q1-2017Q3



NBF Economics and Strategy (data via Datastream)

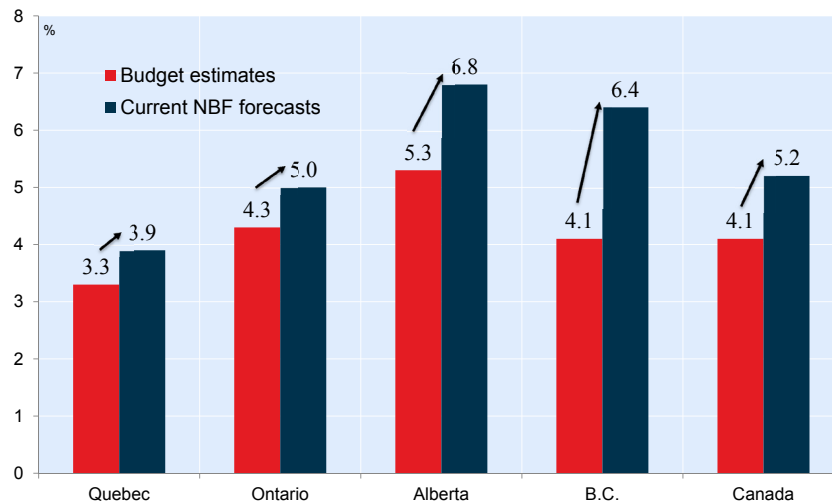
3

In our view there remains considerable room for expansion in the year ahead. We see 2018 GDP growth of 2.5%, fuelled by:

1. still-accommodative monetary policy;
2. an exchange rate still advantageous for Canadian exporters;
3. minimum-wage increases in Ontario and Alberta; and
4. higher-than-expected surpluses in several Canadian provinces, surpluses that are likely to pave the way for fiscal stimulus – especially in provinces that go to the polls in 2018 (Ontario, Quebec, and New Brunswick).

Canada: Governments have room for maneuver

2017 Nominal GDP: budget estimates at the beginning of the year vs. current NBF forecasts

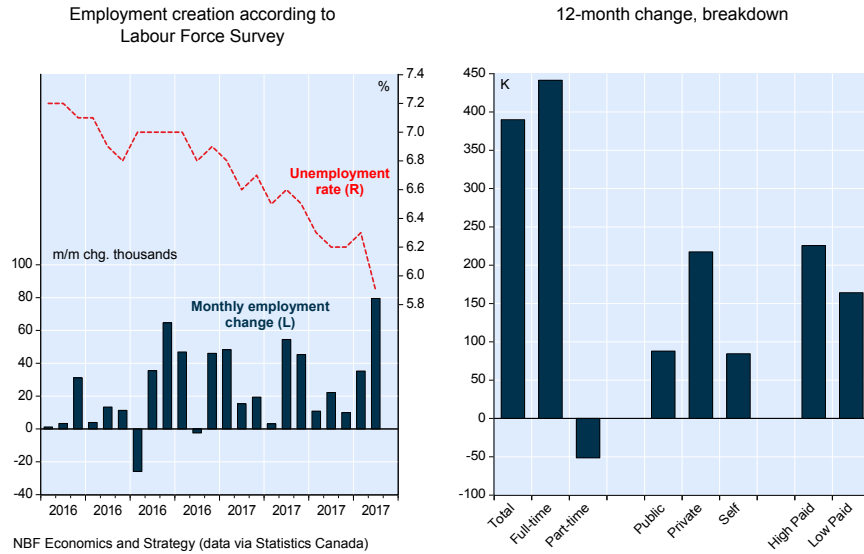


NBF Economics and Strategy

4

The huge employment gains of recent months are likely to add consumer spending to the list of growth drivers. The economy created no fewer than 390,000 jobs in the 12 months ending in November, the best showing in 10 years. Even greater was the increase in full-time jobs – 441,000, the best 12-month gain since 1999! This truly amazing performance has translated into a one-point drop of the unemployment rate to 5.9%, just one-tenth of a point above the all-time low of October 2007.

Canada: A phenomenal year for employment

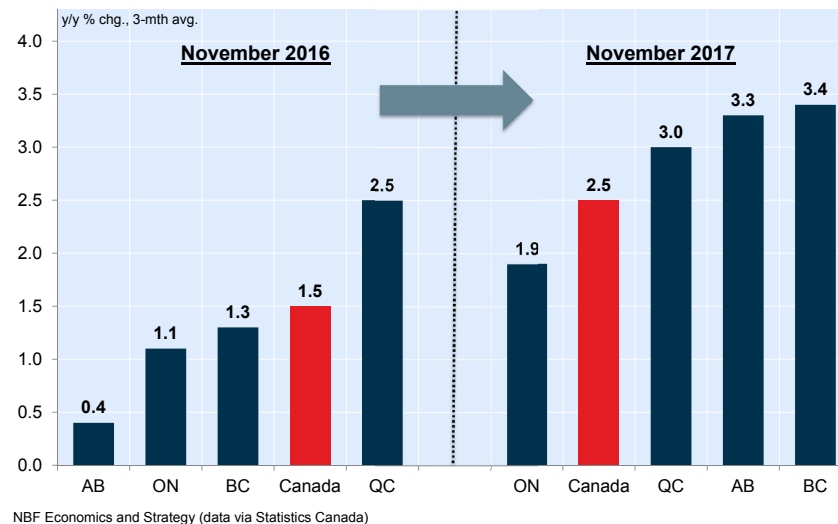


5

A tighter labour market has led in turn to something that some economists thought they would never see again: wage growth.

Canada: Wage inflation is on the rise

Growth in average hourly wages in Canada and the big-four provinces: 2017 vs 2016

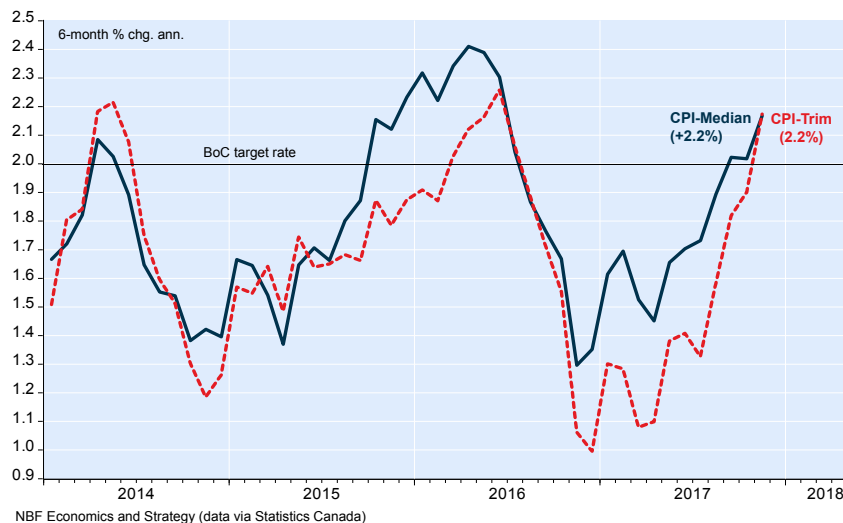


6

Meanwhile, inflation has continued to puzzle economists by remaining stubbornly low despite all the good news from the GDP and employment fronts. At this writing, core inflation is still hovering at 1.7%. Is this about to change? We think a change is not only about to happen but has already started. The latest data show CPI-trim and CPI-median, two measures of core inflation favoured by the Bank of Canada, running above the central bank's target rate in the last six months. We expect inflation to continue accelerating, eliminating yet another dovish argument.

Canada: CPI-Trim and CPI-Median running above BoC mid-point target

CPI-Trim and CPI median. Last observation: November 2017

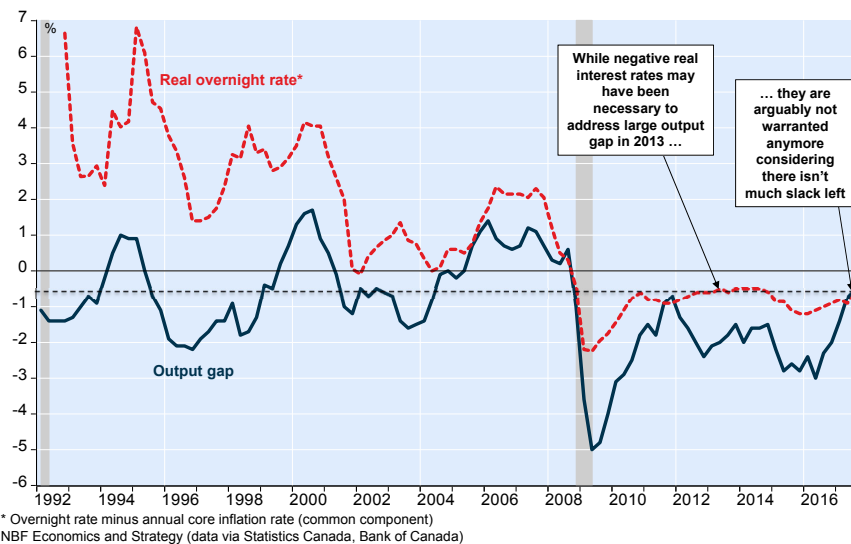


7

With the unemployment rate falling, wages increasing, growth persisting and inflation rising, it will be hard for the Bank of Canada to stay dovish. We think monetary policy is too loose as it is. The present combination of near-zero output gap and negative real overnight rate is unprecedented outside of recession. And if inflation accelerates as we expect, three rate hikes (the most likely scenario according to market odds) would still leave the real policy rate highly accommodative.

Canada: Are negative real interest rates still necessary?

Output gap (integrated framework) vs. real overnight rate*. Last observation: 2017Q3

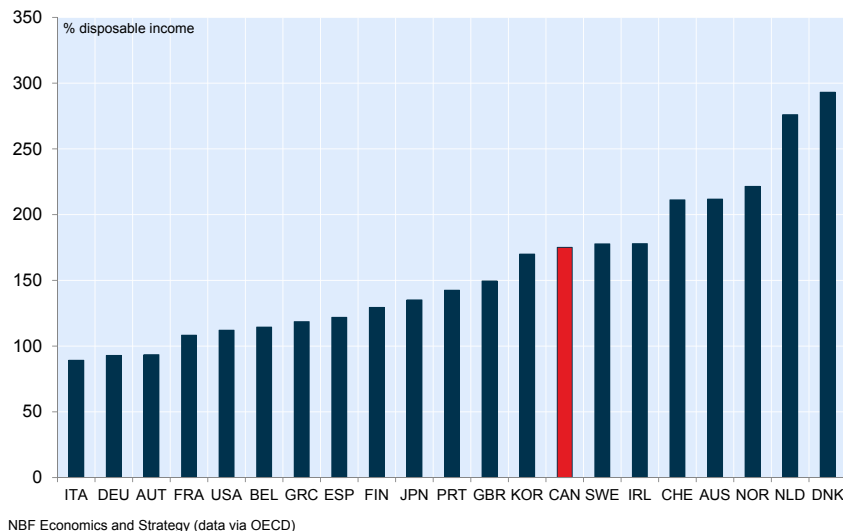


8

Given Canada's high household debt, faster normalization could have many consequences. In recent months many pundits, not least the OECD and IMF, have questioned the sustainability of Canadian household leverage. Bank of Canada governor Stephen Poloz has referred to it often to justify the gradualism of his approach to normalization. There are some grounds for these concerns. Canada does stand near the top of OECD countries for household debt. That said, countries like Denmark and the Netherlands, which have received far less scrutiny, are arguably in a much worse position.

World: Perspective on household leverage

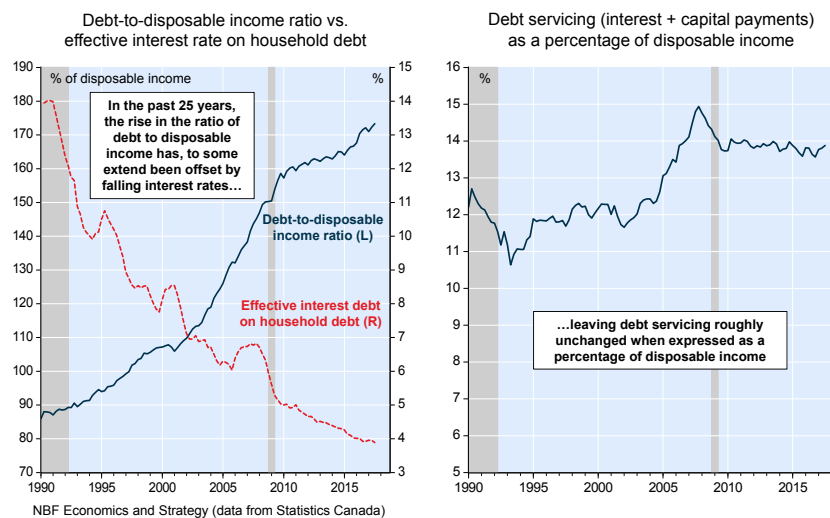
Household debt as a percentage of net disposable income (major OECD countries)



9

Perhaps what draws attention to Canadian household debt is not its level but its rapid expansion since the 1990s. In the last 25 years, it has risen from 85% of disposable income to about 175%. But that is only half the story. Over the same period the effective interest rate on household debt has plummeted from 14% to less than 4%, encouraging households to take on leverage. These two trends combined have left the cost of debt service roughly unchanged as a percentage of disposable income.

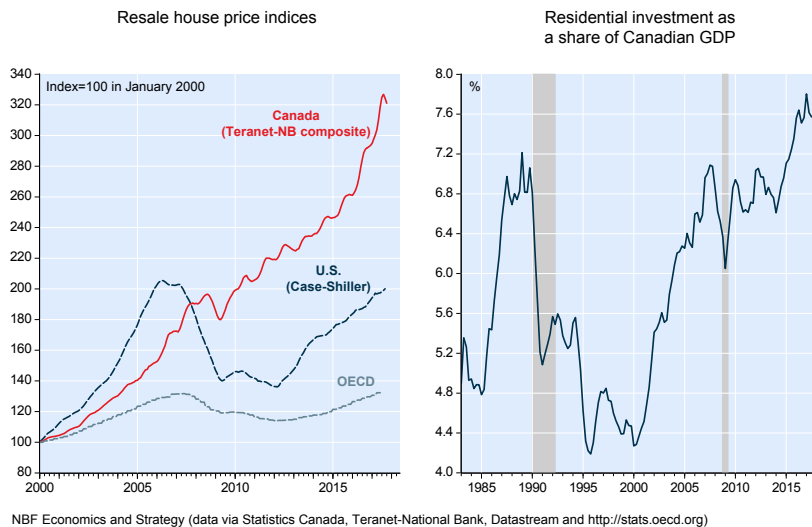
Canada: Household debt service has remained stable thanks to falling rates



10

But what if interest rates start rising again? That would make the housing market an area of particular concern. Real estate in Canada has been on a tear in the last few years. Prices have almost doubled since 2009 and starts have averaged nearly 200,000 annually over the last five years. Overall, the importance of housing in the economy as a whole has also increased, leaving the country more exposed to a housing shock.

Canada: Surging home prices have encouraged investments in the sector

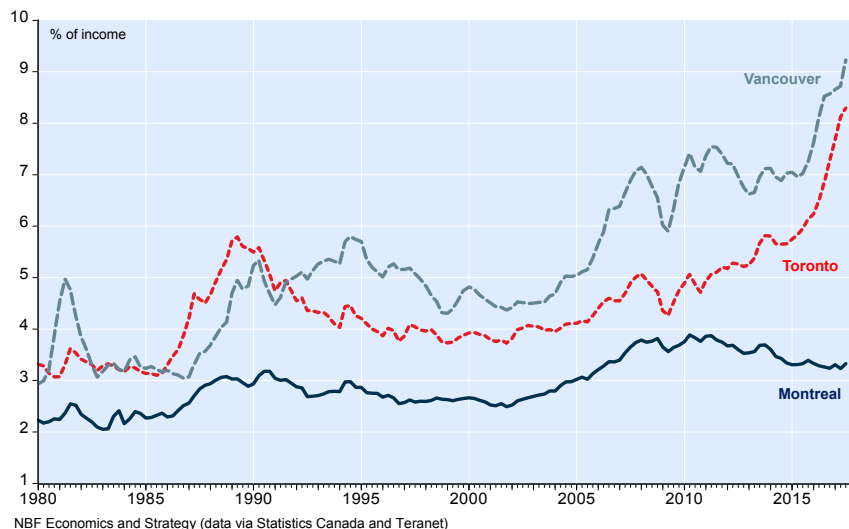


11

The effect of higher interest rates would not be the same everywhere in Canada. In some markets, notably Vancouver and Toronto, a rate hike could prevent new buyers from entering the market, putting home prices under pressure. Consider the effect on new buyers of a 1-point increase in mortgage rates in those cities. Twenty years ago such a hike would have increased the burden of debt service by 4% of median income. Today the hit would be twice that.

Canada: Some markets are more stretched than others

Payment difference of a 100 bps rate shock as a percentage of monthly income (All dwellings)

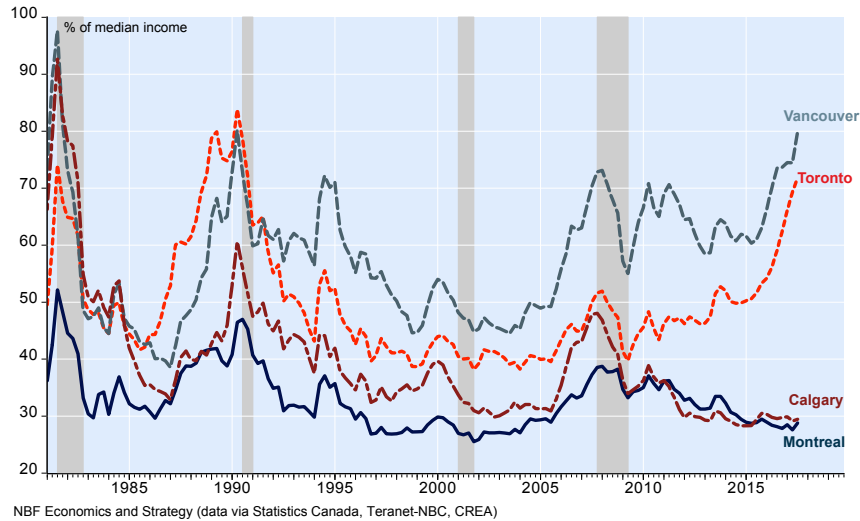


12

It is important to keep in mind that those two markets are not representative of the country as a whole. The Toronto and Vancouver markets have spilled a great deal of ink, but in the country's other urban centres housing remains relatively affordable.

Canada : Perspective on housing affordability

Monthly mortgage payment on median home price (25 year amortization, 5-year term)

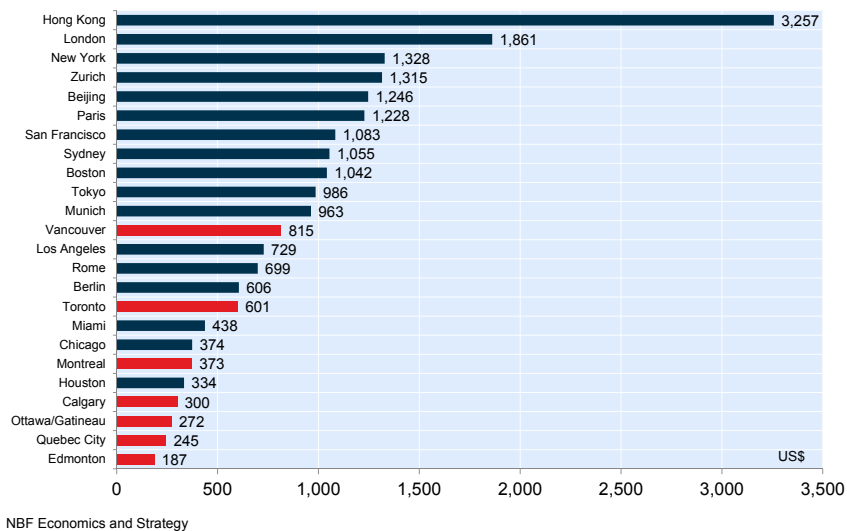


13

Even Toronto and Vancouver prices don't seem so lofty compared to those of other international metropolises. The price per square foot of a condo apartment in downtown Toronto, for instance, is roughly half that in Boston even though Toronto has become one of the world's most vibrant financial centres.

World: Perspective on the cost of housing in major cities

Price per square foot for a 645 square feet apartment downtown

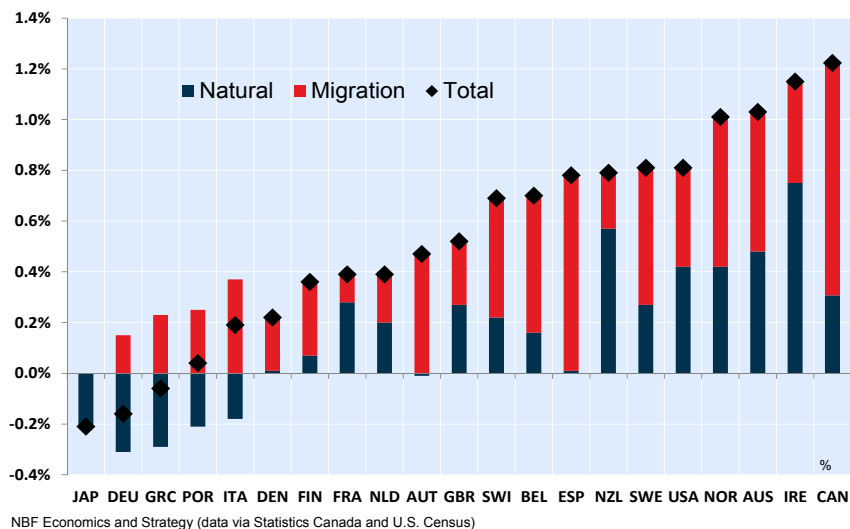


14

International comparisons aside, what is often lost sight of in debates about the country's household debt and home prices is the strength of their fundamental drivers. Demography, for instance, is a key factor supporting leverage and home prices. Well, Canada's population growth is the fastest in the OECD.

Canada: Leading OECD countries in terms of population growth

2017 population growth, natural vs. caused by migration

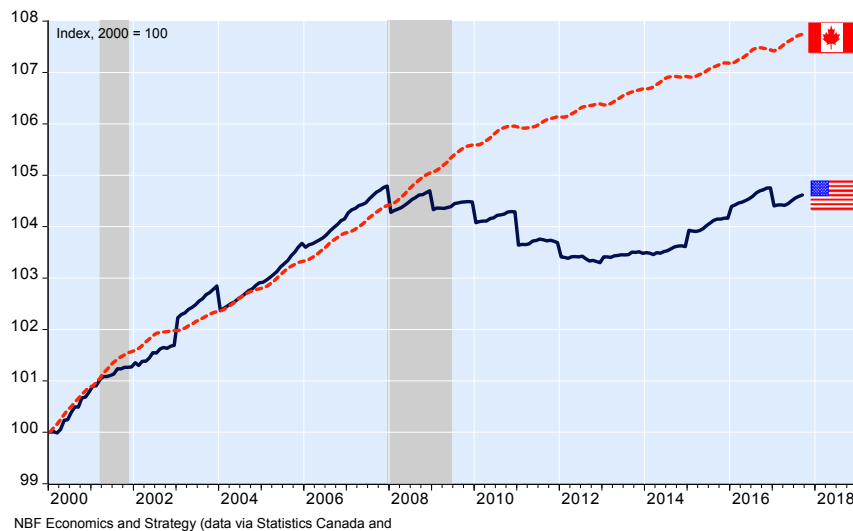


15

More particularly, the growth of the prime-age population (25- to 54-year-olds – the people most likely to use leverage and buy homes) has been especially impressive of late.

Canada: Population growth

Population aged 25-54: Canada vs. the U.S.



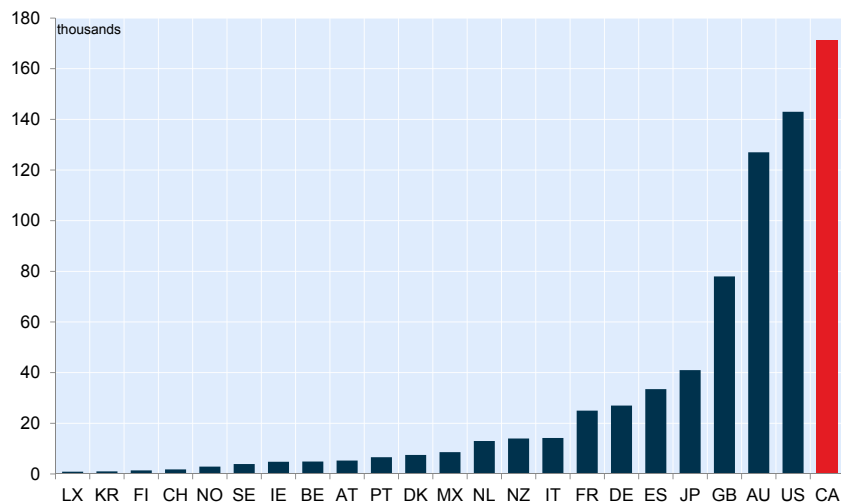


16

Much of that growth has come from immigration, which has brought to Canada an immense pool of new talent. The OECD estimates that 170,000 of the 272,000 people whom Canada accepted for permanent residence in 2015 were “economic category” admissions – people selected for “their ability to become economically established in Canada.” That is well above the absolute number of economic-category admissions to the U.S. – a country 10 times our size – and about equal to the combined intake of the rest of the G7 (Germany, France, Italy, Japan and the U.K.)! These are the immigrants most likely to find jobs, form households and, ultimately, buy homes.

Canada: Highest inflow of educated immigrant workers in the OECD

Annual inflows of permanent immigrants: Economic category admissions (2015)



NBF Economics and Strategy (OECD data <https://data.oecd.org/migration/permanent-immigrant-inflows.htm#indicator-chart>)

*Season's Greetings
from the
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