Economic Insights

November 20, 2018

Economics

Avery Shenfeld
(416) 594-7356
avery.shenfeld@cibc.com

Benjamin Tal
(416) 956-3698
benjamin.tal@cibc.com

Andrew Grantham
(416) 956-3219
andrew.grantham@cibc.com

Royce Mendes
(416) 594-7354
royce.mendes@cibc.com

Katherine Judge
(416) 956-6527
katherine.judge@cibc.com

"text text text"

http://economics.cibccm.com

Be Careful Out There

by Avery Shenfeld

Forgive the Bank of Canada if they end up sounding a bit sheepish in December. They came out with guns blazing in October, warning markets that "gradual" was no longer in their lexicon and that two hikes in a row were indeed possible. That was only days before oil prices did a full face plant, making a December rate hike unconscionable.

But even before oil's hasty retreat, and even if it manages to rebound on OPEC production cuts in 2019, there were reasons for Canada's central bank to be cautious in terms of just how fast, and how far, they take their current tightening. After all, central bank rate hikes have been at least an accessory if not the full guilty party in just about every recession.

Oil aside, the current circumstances have three notable reasons for the Bank of Canada, and for that matter, many other central banks, to take it nice and slow. For one, while core inflation is hugging the 2% trend, one potential precursor to faster price gains—an acceleration in wages—is nowhere to be found (see pages 9-11). For all the talk about labour shortages, Canadian employers are opting to leave jobs unfilled rather than bid away workers from their competitors, perhaps feeling that they could not pass on the cost increases. As long as that's the case, the Bank can err on the side of letting the economy run a bit hotter.

Second, even with rates below 2%, the hikes to date are starting to bite on interest rate-sensitive sectors (see pages 5-8). Measured from their lows, the total tightening to date has not been particularly gradual relative to past cycles, and a move to 3%, the supposed neutral rate, would have this rate hike cycle eclipse all others since the mid-1990s . Sure, the level for rates would be low, but the hit to a much more indebted household sector would be anything but mild.

Finally, all central banks need to be aware that there's a greater global sensitivity to higher rates. It's not just Joe and Jane Canada who have taken on a lot of debt. It's the corporate sector as well (see pages 3-4). Interest payments are still contained, on average, due to the lower level of effective rates, but on the higher stock of debt, each hike is more meaningful. Globally, there's been a massive surge in issuance at the very low end of investment grade, one that could prove more problematic to refinance if an economic slowdown results in a wave of even minor downgrades.

More attention of late has also been paid to sovereign borrowers, including Italy and some emerging markets. But the biggest sovereign borrower is none other than the US government. Default is unthinkable, but a Washington move to an even modest fiscal tightening, from today's fiscal largesse, would mark a significant slowing in Canada's most important trading partner. So let's be careful out there in deciding how much to curtail our domestic demand with higher rates. Our call for a peak at a 2.25% overnight rate is near the bottom end of the consensus, giving the Bank of Canada credit in advance for seeing it the same way as the data roll in.

MARKET CALL

- We maintain our call that the Fed will significantly undershoot its dot plot forecast in 2019, with only two hikes next year following one this December. The split Congress makes added fiscal stimulus less likely, while equity market jitters and some of the data are giving some FOMC members reasons to muse about how far neutral rates really lie. Pauses in Fed hikes, and a potential ease in 2020 as fiscal restraint hits, should spell the end for US dollar strength against overseas majors.

- The weakness in the C$ was partly oil driven, but even ahead of that, the failure of the loonie to rally on hawkish talk by the Bank of Canada in October left room for the BoC to hike twice more without sending the Canadian dollar to levels that would dent exports. That was one more hike than we earlier projected. But our call for rates to plateau at only 2.25% after Q1 is still below consensus and below BoC rhetoric in October. To get even that, we'll need to see at least a partial recovery in crude prices, tied in turn to OPEC production curtailment.

- We are still cautious about adding long duration, even ahead of the typical term extension that comes with maturities and coupons due in a couple of weeks. The long end will be gradually digesting the undoing of QE portfolios in the US, and soon, the end of QE buying by the ECB. Corporate spreads also could widen, as more attractive government yields, and talk of a slowing in global growth, reduce the appetite to be out the credit curve.

INTEREST & FOREIGN EXCHANGE RATES

		2018		2019				2020	
END OF PERIOD:		**19-Nov**	**Dec**	**Mar**	**Jun**	**Sep**	**Dec**	**Jun**	**Dec**
CDA	Overnight target rate	1.75	1.75	2.25	2.25	2.25	2.25	2.25	2.25
	98-Day Treasury Bills	1.69	1.70	2.15	2.25	2.30	2.20	2.05	1.95
	2-Year Gov't Bond	2.22	2.30	2.80	2.75	2.70	2.60	2.35	2.05
	10-Year Gov't Bond	2.37	2.55	2.80	2.80	2.85	2.70	2.45	2.25
	30-Year Gov't Bond	2.42	2.50	2.75	2.85	2.90	2.90	2.85	2.70
U.S.	Federal Funds Rate	2.125	2.375	2.625	2.625	2.875	2.875	2.625	2.375
	91-Day Treasury Bills	2.36	2.25	2.55	2.65	2.80	2.80	2.40	2.25
	2-Year Gov't Note	2.82	3.00	3.20	3.35	3.35	3.10	2.65	2.50
	10-Year Gov't Note	3.08	3.20	3.40	3.55	3.55	3.40	3.05	2.80
	30-Year Gov't Bond	3.34	3.45	3.50	3.60	3.65	3.65	3.45	3.45
Canada - US T-Bill Spread		-0.67	-0.55	-0.40	-0.40	-0.50	-0.60	-0.35	-0.30
Canada - US 10-Year Bond Spread		-0.72	-0.65	-0.60	-0.75	-0.70	-0.70	-0.60	-0.55
Canada Yield Curve (10-Year — 2-Year)		0.15	0.25	0.00	0.05	0.15	0.10	0.10	0.20
US Yield Curve (10-Year — 2-Year)		0.26	0.20	0.20	0.20	0.20	0.30	0.40	0.30
EXCHANGE RATES	CADUSD	0.76	0.76	0.78	0.76	0.76	0.75	0.76	0.77
	USDCAD	1.32	1.31	1.29	1.31	1.32	1.34	1.32	1.30
	USDJPY	113	113	111	110	108	106	104	100
	EURUSD	1.14	1.14	1.17	1.19	1.21	1.23	1.26	1.24
	GBPUSD	1.29	1.32	1.36	1.40	1.42	1.45	1.46	1.44
	AUDUSD	0.73	0.74	0.75	0.76	0.77	0.78	0.79	0.80
	USDCHF	1.00	1.00	0.96	0.95	0.94	0.92	0.92	0.94
	USDBRL	3.76	3.80	3.90	3.70	3.90	4.10	3.95	3.80
	USDMXN	20.3	20.4	20.2	19.7	19.7	20.1	20.3	21.0

Taking Stock of the Stock of Debt

by Avery Shenfeld and Katherine Judge

It seems like every year that the global economy, or some part of it, is judged to be "awash in debt" and facing the peril of a debt crisis. That was, of course, the central cause of the global financial crisis and the worst downturn since the Great Depression. But have we forgotten the lessons of history and are we doomed to repeat them? If so, what does that mean for the bond market?

In the US, it's not mortgage debt that's raising any alarm bells this time around. Most of what was problematic was washed away in a wave of defaults. Despite a recovery in mortgage growth in this cycle, American household debt is still well below where it was in 2007 as a share of GDP (Chart 1, left). But that's been offset by increased leverage elsewhere, leaving the US total debt/GDP ratio roughly unchanged.

Canada has seen debt run ahead of GDP across the economy (Chart 1, right), taking overall debt well above where it stood in 1997. Note that the gross debt figure for governments misses a better balance for Canada in terms of assets in public pensions relative to the US.

In God We Trust

US federal government debt doesn't really raise an issue of default risk. It's owed in dollars, and to paraphrase what's printed on the greenback, in God (and the central bank) we trust. Governments can use the power of the printing press to deal with debt in their home currency. US state and local government are the issue in terms of credit quality, particularly where pension plans aren't well financed.

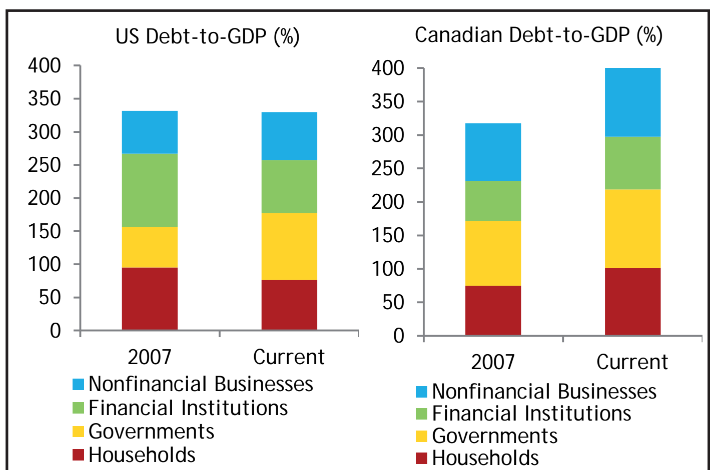
For US federal debt, the risks to the economy are either central bank profligacy that leads to a huge inflation upturn, or more likely with a stern Fed, that the need for fiscal belt tightening slows growth in the future. It's that risk that we've highlighted in our below consensus forecast for 2020 US GDP growth. Canada's long term fiscal outlook, even with rising healthcare burdens that will drive deficits in decades ahead, looks to be on a much sounder footing.

Corporate World Prudent Overall

Non-financial corporate debt has also risen in the US, and even more so in Canada, where the level of debt is

Chart 1

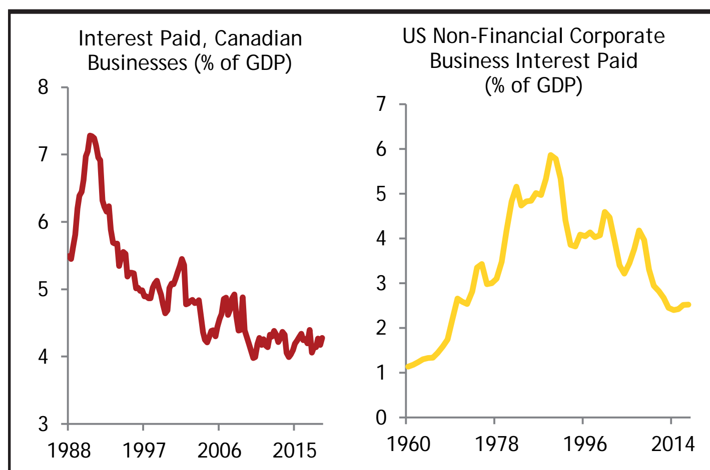
Debt to GDP: US (L) and Canada (R)



Source: Haver Analytics, CIBC

Chart 2

North America Interest Costs Have Fallen Relative to GDP



Source: Statistics Canada, Fred, BEA, CIBC

typically higher given the capital intensive nature of the resource sector. But here we are a bit more sanguine. The additional leverage has been well affordable in terms of the resulting interest burden as a share of GDP (Chart 2). That of course, reflects the past decade of low interest rates, and the higher stock of debt does imply a greater sensitivity to rising rates ahead. Still, with central banks well aware of that, it's just one more reason to expect them to be cautious about how many hikes it takes to induce any given slowdown in activity.

Since public companies don't match up with the economy as a whole, for equity investors, it's worth looking at the degree of leverage in various benchmarks. US publicly traded firms have actually become less leveraged when measured relative to EBITDA, given strong earnings growth in this cycle. That's less the case in Canada, or in the EM space, where leverage to EBITDA has drifted quietly higher (Chart 3).

Less So at the Margin

All of this suggests that, in the here and now, corporate leverage is unlikely to be the root cause of a recession unless central banks seriously overdo their current tightening path. We've earlier reached the same conclusion about Canadian mortgage debt, given the degree to which its insured, and the better distribution of that debt to those who can carry it, versus what we saw in the sub-prime boom prior to the US crisis.

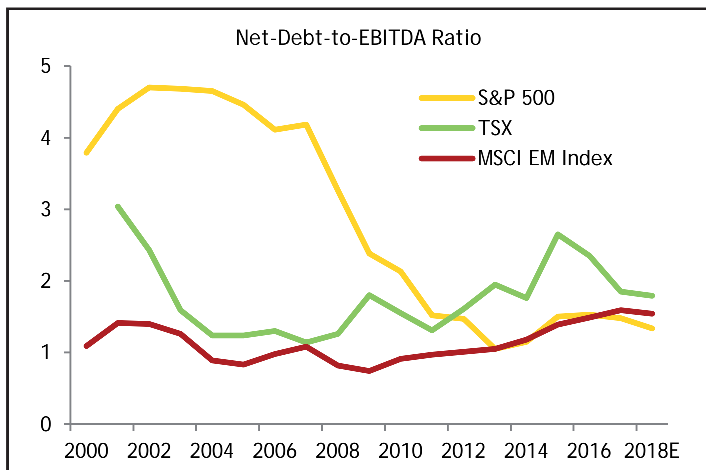
But if debt won't itself cause a downturn, certain elements of today's leveraged world could make the next one more troubling. Stateside, and at the Canadian provincial level, the starting point for deficits and debts leaves less room to use fiscal stimulus in the next downturn.

At the corporate level, our concern is with the wall of debt that sits just at the margin of investment grade. We've seen a torrent of BBB issuance (Chart 4), feeding the appetite of investors around the world who faced unappealing low yields on higher grade debt, and who therefore needed to risk moving out the credit curve. That's what central banks intended when they depleted the supply of government and high grade corporate or MBS debt through quantitative easing.

But if a downturn were to come before this debt is better seasoned, we could have an unusually large volume of debt dip from investment to speculative grade. It's a new world out there with more bonds now held by ETFs, and those with a debt-rating limit might be pressured into quick sales. Liquidity in corporate debt is also not what it once was given heavier costs for dealers to hold inventories. A sharper correction in bond prices won't itself trigger defaults, but it will make refinancing more of a challenge, and could help make the next economic downturn a tougher one for corporate bond investors.

Chart 3

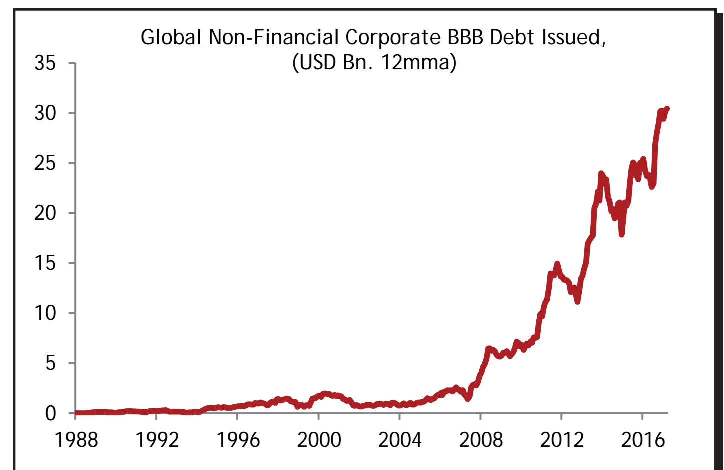
US Public Firms Have Become Less Leveraged



Source: Bloomberg, CRB, CIBC

Chart 4

Global Corporate BBB-Rated Debt Issuance Has Surged



Source: Bloomberg, CIBC

And So It Begins: The Biting Effects of Rate Hikes in Canada

by Royce Mendes

It's an old saw that monetary policy works with long and variable lags. There's no reason to believe that isn't as true today as it was when penned almost six decades ago. However, policymakers haven't always heeded that advice, tending to underestimate those lagged effects, something we may be seeing again today. Despite the Bank of Canada hiking interest rates five times since the middle of last year and growth running just above potential, officials sound confident that the journey higher is only halfway complete.

No doubt central bankers would like to see rates rise to levels well above those that prevail today, given that they don't currently have the requisite ammunition to fend off a slowdown. But, in the end, it will be the economy which dictates how high rates can rise, not the inclinations of central bankers. There's already evidence that the effects of higher rates are showing up earlier and with more ferocity than in past cycles. With those effects only magnified as time passes, the Bank will ultimately fall short of reaching its goals for interest rates.

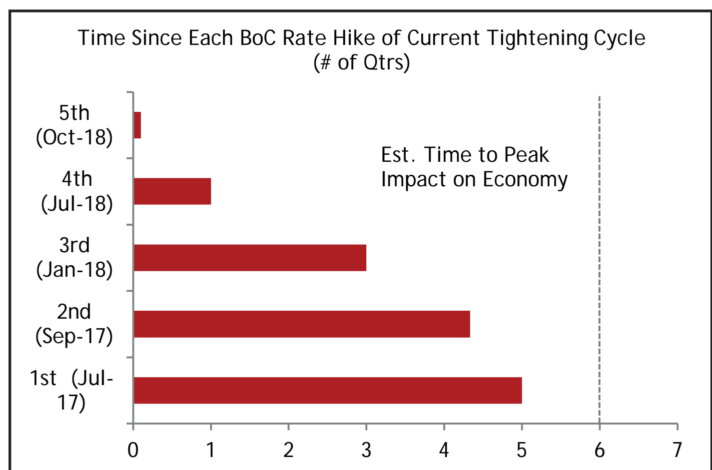
Cracks in the Foundation

A technical report on the macro model used at the Bank of Canada suggests that the peak impact from any monetary shock shows up roughly six quarters later. But, even though the first rate hike of this cycle, let alone the subsequent moves, was administered less than six quarters ago (Chart 1), there's already pain being felt.

Changes in monetary policy are generally understood to work their way through the housing market and big-ticket household purchases first. It's difficult to identify how much of the recent slowdown in housing activity has been due to tighter mortgage rules versus higher interest rates. But, based on prior estimates of the effects of the rule changes alone, the slowdown in lending has been more precipitous (Chart 2). It's hardly a stretch then to say that the housing market is already feeling some pressure from rate hikes, particularly since many mortgages are now rolling over at higher rates for the first time in a quarter-century. Given the lags in monetary policy, even as the effects of the mortgage rule changes wane on a year-over-year basis in the months to come, the impacts of rate hikes will actually become more apparent.

Chart 1

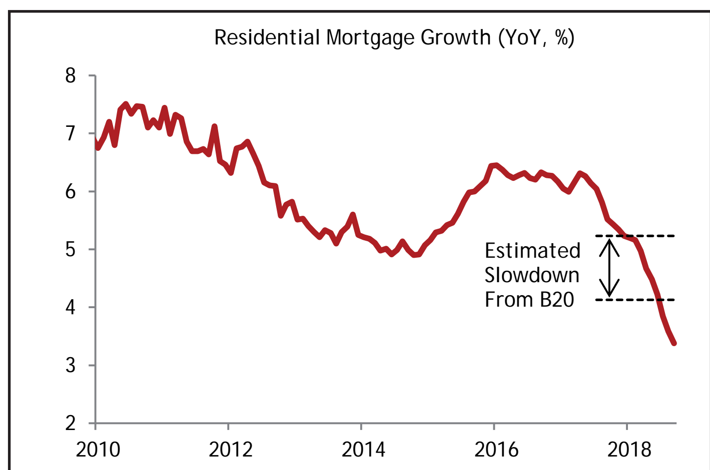
Even First Rate Hike Still Making its Way Through Canadian Economy



Source: Bank of Canada, CIBC

Chart 2

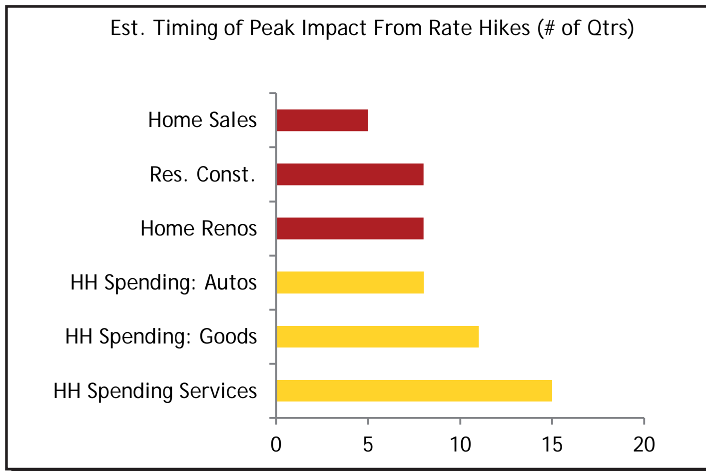
Mortgage Growth Slowing More Than Just Recent Rule Changes



Source: Haver Analytics, CIBC Equity Research, CIBC Economics

Chart 3

Housing and Autos First to Feel the Pinch of Higher Rates



Source: Bank of Canada Staff Research, CIBC

Other areas of the economy haven't been immune to the effects of higher rates either. Staff research from the Bank of Canada suggests that the peak impact on car purchases occurs a full two years after a rate hike (Chart 3). Our analysis of past cycles similarly shows that car sales continued to trend higher in the year after the first rate hike, but in the year following that, growth all but vanished (Chart 4, left). Looking at this cycle, though, with eight months still to go before reaching the estimated time of peak impact from just the first rate hike, growth in auto sales has already turned negative (Chart 4, right).

A number of other durable goods categories including building materials, electronics and appliances have also slowed down more dramatically than other retail sales recently (Chart 5, left). Furniture sales have fared slightly better, but with home sales slowing, they could be set for a further decline (Chart 5, right). And, remember, research suggests that there's still a lot of time before sales feel the full effects of past rate hikes.

The fact that the effects are showing up sooner this time around could simply be a sign that the storm will pass quicker. But more likely it's a reflection that models based on historical evidence will tend to underestimate the effects of rate hikes on the Canadian household sector in its current indebted state.

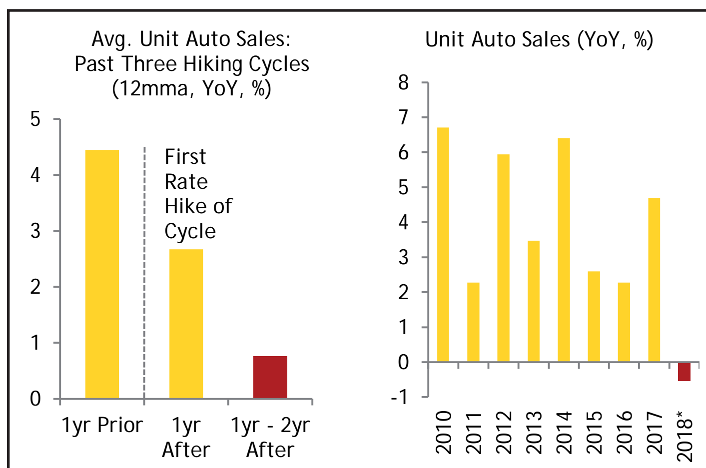
Tread Carefully

The made-in-Canada economic recovery of the past ten years has been built on a foundation of debt-fueled growth in residential investment and household spending. Elevated debt levels mean that each rate hike is far more powerful than it would have been even just a decade ago. But, it's also true that the two most interest rate sensitive sectors now make up a substantial chunk of the Canadian economy (Chart 6).

The share of the Canadian economy devoted to housing and household spending on autos had tracked that of the US for decades heading into the crisis. Fast forward ten years, and Canada is now looking like a victim of its

Chart 4

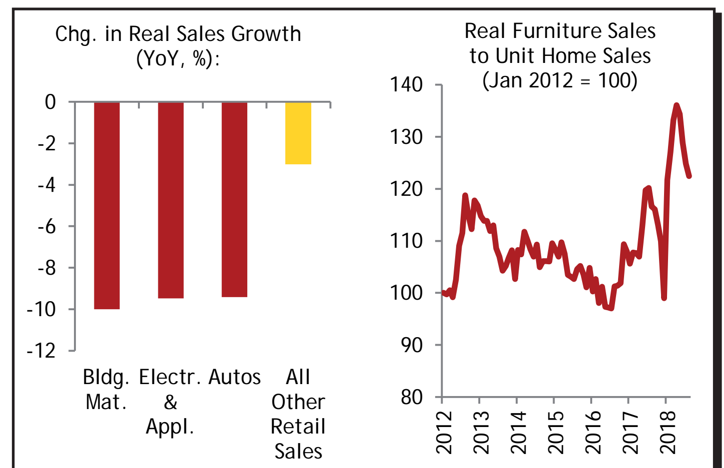
Auto Sales Growth Slow After Hikes (L), But Sales Have Already Declined This Time (R)



Source: Statistics Canada, CIBC ** year-to-date annualized*

Chart 5

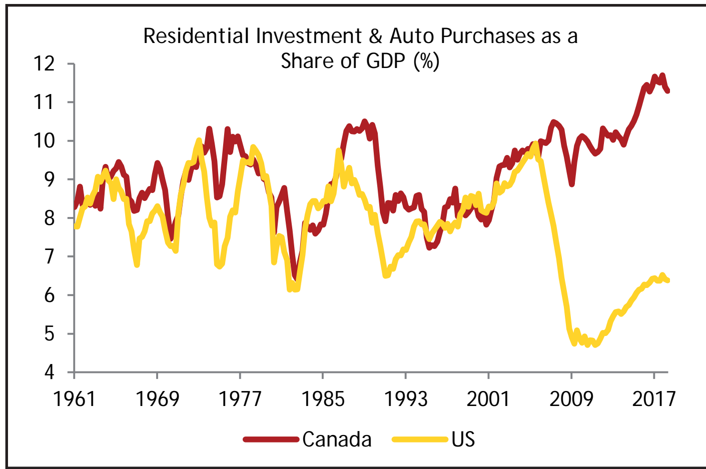
Durables Weighed Down More Than Other Retail (L), Elevated Furniture Sales Have Turned Corner (R)



Source: Statistics Canada, CIBC

Chart 6

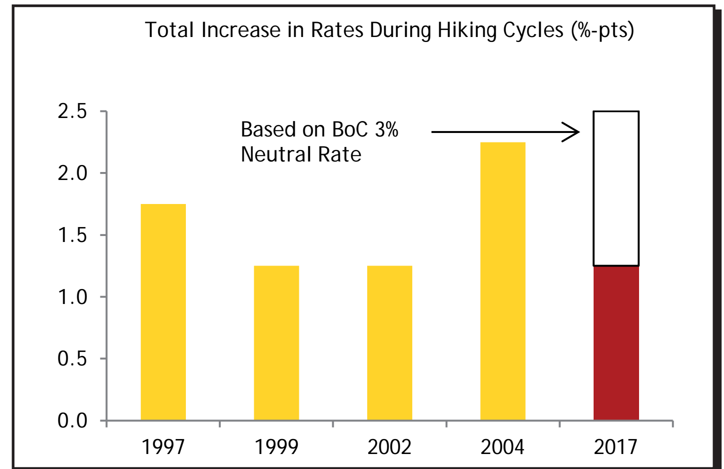
Interest Rate-Sensitive Sectors Now Make Up a Substantial Chunk of the Canadian Economy



Source: Haver Analytics, CIBC

Chart 8

Taking Rates to BoC's Neutral Estimate Would Represent Most Rate Hikes of Any Recent Cycle



Source: Bank of Canada, CIBC

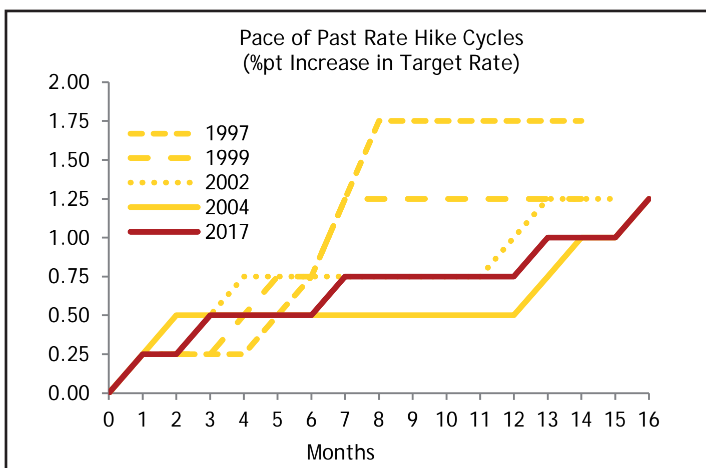
own success. Households north of the border weren't forced to go through the painful deleveraging process that occurred in the US, but by extension the economy also wasn't able to wean itself off those interest rate sensitive sectors.

The Bank of Canada says it's been moving rates gradually to leave time to monitor the effects of higher interest rates on the economy. But the current hiking cycle hasn't actually been all that gradual. In fact, relative to those of the past couple of decades, the pace looks pretty average (Chart 7). Furthermore, raising rates to the Bank's estimated three percent neutral rate would represent the most rate hikes of any cycle trough to peak in decades (Chart 8). So what's behind the Bank of Canada's confidence that rates not only need to rise further but can also rise faster?

It appears as though the central bank's models indicate that the economy can hold strong even if they double up on the number of rate hikes already conducted. That's indeed possible if some of the less interest rate sensitive sectors of the economy pick up the slack. But it's a risk. A risk that past Bank of Canada officials have not been

Chart 7

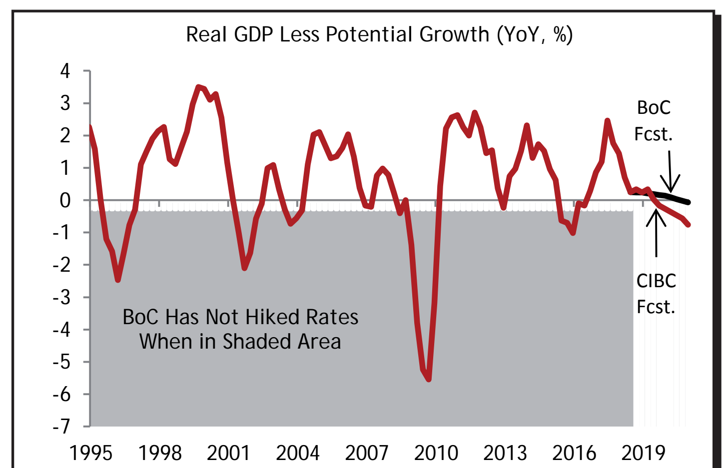
Rate Hike Cycle Not Particularly Gradual Relative to Recent Past



Source: Bank of Canada, CIBC

Chart 9

BoC Aggressiveness Unlikely to be Sustainable With Growth Already Cooling Toward Potential



Source: Statistics Canada, Bank of Canada, CIBC

so ready to take on in this type of environment. Only three times since the early 1990s have rates been raised when current growth readings were tracking this close to estimates of potential (Chart 9). That accounts for only about 10% of all the rate hikes during that time.

Remember, that's the period for which the Bank of Canada has targeted inflation via the output gap. It makes sense then that officials would be cautious of letting growth undershoot potential.

Timing the Reckoning

For the next couple of quarters, year-over-year growth should remain in healthy territory and the outlook could actually get a slight boost if the federal government unveils any material measures to improve Canada's competitive position. That will give the Bank cover to raise rates a couple more times early next year. But, thereafter, the effects of higher interest rates will have a greater bite on Canadian growth than the central bank now expects, pushing the Bank into a holding pattern on rates.

Capacity, Labour Markets and Inflation — Reality Check

by Benjamin Tal and Andrew Grantham

Sometimes theoretical concepts work better in theory than in practice. The output gap is wonderful on paper but impossible to accurately measure. The same is true for the neutral rate of interest. Yet those two concepts dominate the current thinking of the Bank of Canada and its new-found hawkishness.

But what about things that we can actually measure? The Bank is telling us that wages are "backward looking" and should accelerate soon. We are not so sure. As well, the capacity utilization rate has reached just under 86%—the strongest showing in more than a decade. According to *Economics 101* that must be inflationary. Again, we are not convinced.

Capacity Use(less?)

Let's start with the capacity utilization rate. It is widely believed that when capacity utilization is low, inflation will decelerate, and when capacity utilization is high, inflation is about to accelerate for three reasons: bottlenecks in the economy lead to upward pressure on producer prices and to a slowdown in productivity growth; increased investment, which in turn stimulates economic activity and inflation; and the spillover of higher wages in manufacturing to the service sector.

All sound reasonable—but it doesn't work in real life. If Chart 1 looks like a mostly disorganized scatter plot, it's because it is. The level of capacity use in Canada explains only 15% of changes in core inflation rates over the subsequent year, and today's level is associated with a wide range of outcomes.

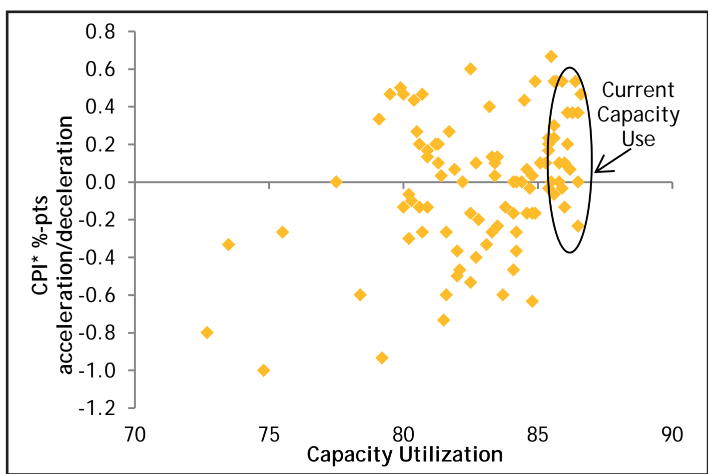
In fact, as illustrated in Chart 2 left, the current rate of inflation is higher than when the capacity utilization rate historically was been above the 85% mark. Chart 2 right is also telling us that inflation accelerations were no more dramatic on average when they took place during periods of higher capacity use levels.

One problem with using Canadian capacity use rates to gauge domestic CPI risks is that the country imports such a large share of its consumer goods. Much of Canadian industry is engaged in the production of processed materials or intermediate goods that are sold on world markets at global prices, which are little affected by the tightness in production capacity in Canada.

As well, the very notion that capacity utilization can impact inflation relies on the inability of labour, capital and technology to change in the short run. However, labour is now more elastic as its supply increases in response to

Chart 1

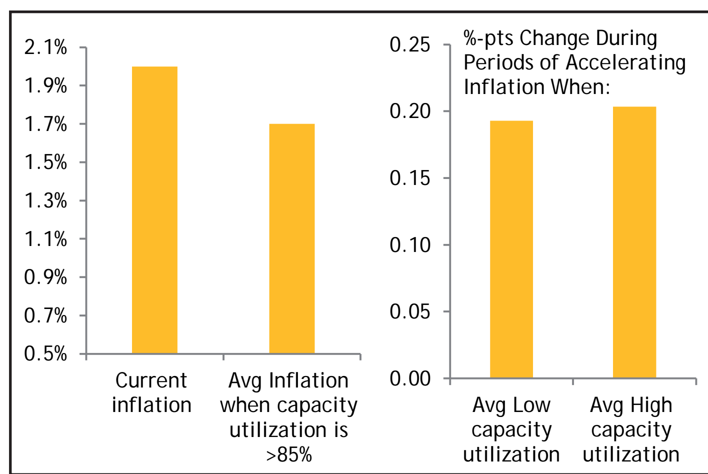
Only Loose Correlation Between Capacity Use and Subsequent Core Inflation Rate Changes



Source: Bank of Canada, Statistics Canada, CIBC

Chart 2

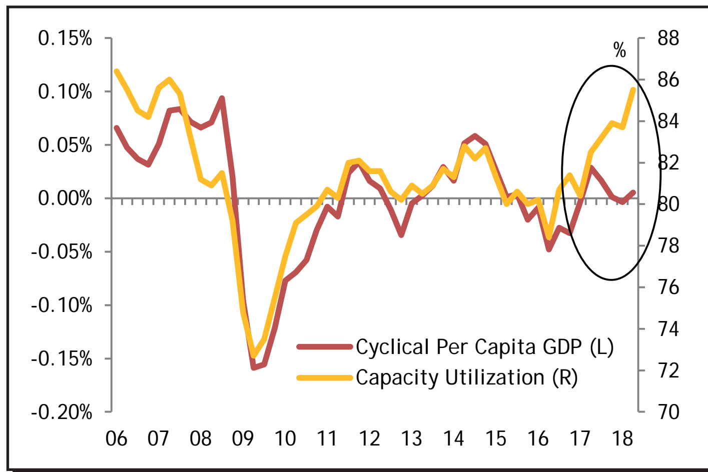
Inflation* Not Always High When Capacity >85 (L) and Doesn't Always Accelerate Much (R)



Source: Bank of Canada, Statistics Canada, CIBC
*Avg Bank of Canada's three inflation measures

Chart 3

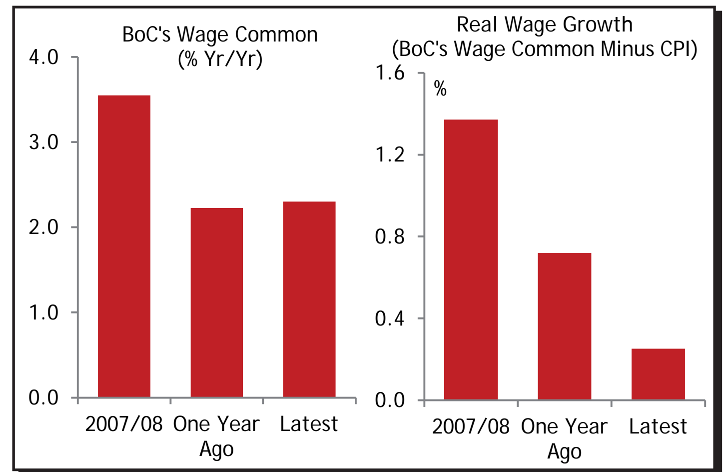
Is Cyclically Adjusted GDP Telling Us There's More Spare Capacity?



Source: Statistics Canada, CIBC

Chart 5

Wage Inflation Still Low (L), Even Worse in Real Terms (R)



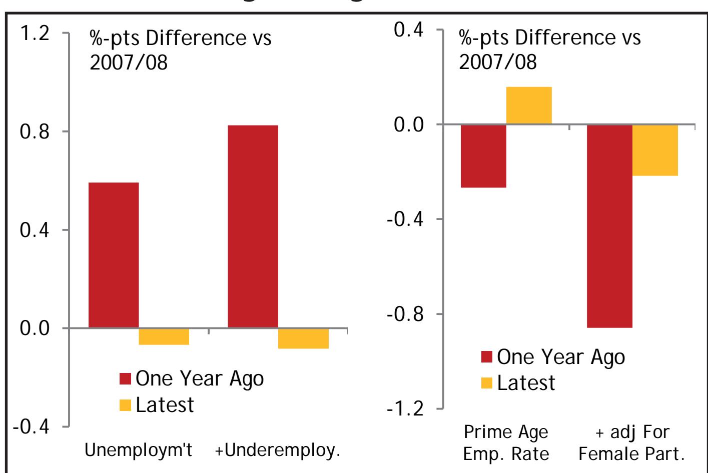
Source: Statistics Canada, CIBC

demand (re-entry of retired workers is a good example) and ongoing technological changes suggest that more efficient production techniques can accrue in the short run.

Maybe the weak relationship between utilization and inflation is also due to shortcomings of that rate as a measure of resource usage, given that it is calculated only for goods-producing industries and ignores the growing service industry. To deal with that question we computed "cyclical per-capita GDP", defined as the percentage deviation of per capita GDP from its smoothly evolving time trend. This measure of course includes the service sector and therefore is more broadly based. As illustrated in Chart 3, the two measures are highly correlated, suggesting that generally speaking the cyclically adjusted GDP series was a good barometer of capacity usage in the economy. That is until recently. We admit that we are not sure what's behind the recent divergence of the two measures. But at the minimum it raises the possibility that capacity is not as tight as perceived.

Chart 4

Labour Market Tightening on All Measures



Source: Statistics Canada, CIBC

Labouring Wages

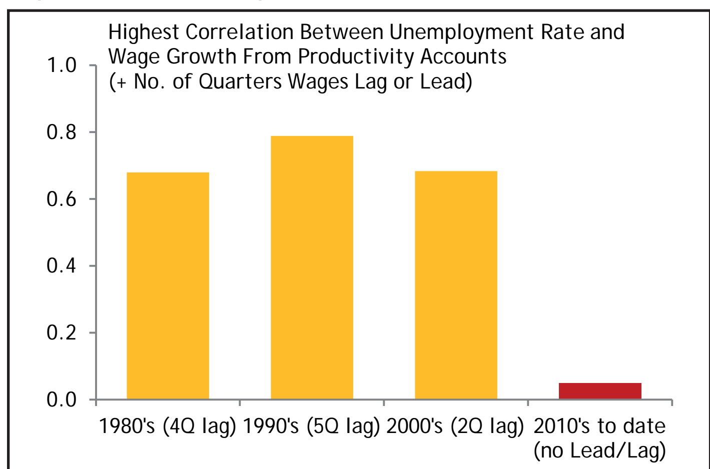
As with the link between capacity use and inflation, the relationship between labour market strength and wage growth also appears to have broken down. All measures of labour market health, even wider ones such as the employment-to-population ratio, are now at or close to levels reached at the height of the previous cycle (Chart 4). And all have improved markedly over the past year.

However, wage inflation hasn't accelerated and remains well below rates seen in that prior cycle (Chart 5, left). While there's no one perfect measure of wages in Canada, the Bank of Canada's "Wage Common" measure (basically an amalgamation of different series) has held steady at 2.3% for four consecutive quarters. Moreover, the pace of wage inflation looks even worse when adjusted for inflation (Chart 5, right) and would be even lower were it not for minimum wage increases earlier this year which are still flattering the annual growth rate.

Policymakers don't appear extremely worried about this, with Senior Deputy Governor Carolyn Wilkins stating that "this is a backward looking indicator". But is it? That assertion has been true in the past. Looking at

Chart 6

Prior Relationship Between Labour Market Tightness and Wages Breaks Down



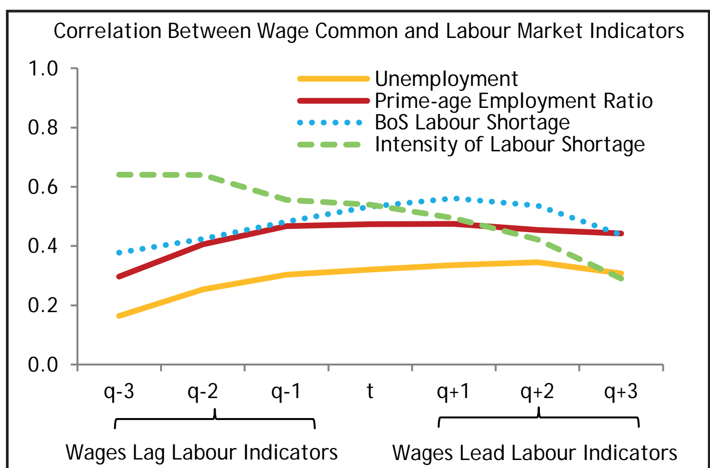
Source: Statistics Canada, CIBC

an average of those components of "wage common" that are available going back to the 1980s, in previous decades the highest correlations between wages and unemployment were seen with a lag (Chart 6). However, so far this decade the best correlation has been virtually non-existent and without such a lag.

The relationship in recent years doesn't improve that much when we focus on wider measures of labour market tightness either. While the best correlation between the prime-age employment ratio and the BoC's wage measure is higher than just with the unemployment rate, it comes with wages leading rather than lagging (Chart 7). That's not the relationship you would typically expect or that policymakers are counting on.

Chart 7

Wages Not a Lagging Indicator Recently



Source: Statistics Canada, CIBC

The Bank of Canada appears to be hanging its hat on evidence from its Business Outlook Survey, and in particular the results on the intensity of labour market shortages. Now, looking at Chart 7 again, it is true that statistically speaking that series has been a leading indicator of wage growth in the past.

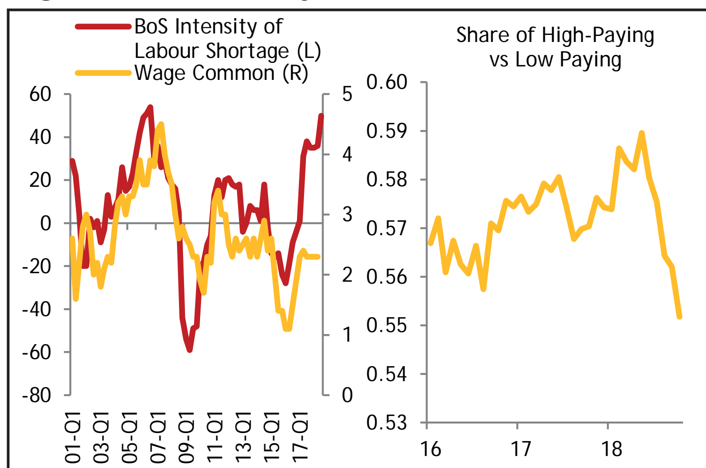
But if it worked in the past that no longer seems to the case. Just plotting the two series shows that there's never been a bigger gap (Chart 8, left). As such, even if wage inflation does pick up, it's unlikely to reach runaway levels unless labour shortages become even more dramatic.

Instead, the soft wage figures could be telling us that the labour market isn't as strong as even some of the wider measures of the jobs market. One factor could be a low quality of jobs being created, with increasingly more coming in lower paying sectors (Chart 8, right). That will in itself be placing downward pressure on aggregate wage measures, but also is not an encouraging split of employment from a household income and spending point of view.

Despite highs levels of capacity and labour utilization, we're not as convinced as the Bank of Canada that wage and inflationary pressures more generally are going to accelerate meaningfully from here. And with interest rate sensitive areas of the economy already starting to decelerate and become a drag on growth (see pages 5-8), it's unlikely that capacity pressures will tighten much from here. That should see the Bank of Canada hike only twice in 2019, falling well short of the 3% mid-point of its current neutral rate band.

Chart 8

Even "Intense" Shortages Not Leading Wages Higher (L), Job Quality Has Been Low (R)



Source: Statistics Canada, CIBC

ECONOMIC UPDATE

CANADA	18Q3F	18Q4F	19Q1F	19Q2F	19Q3F	19Q4F	20Q1F	2018F	2019F	2020F
Real GDP Growth (AR)	2.0	1.9	1.7	1.8	1.4	1.7	1.3	2.1	1.8	1.3
Real Final Domestic Demand (AR)	1.3	1.9	1.7	1.7	1.3	1.2	1.5	2.5	1.6	1.4
Household Consumption (AR)	1.5	2.1	1.6	1.6	1.4	1.3	1.7	2.1	1.7	1.5
All Items CPI Inflation (Y/Y)	2.7	2.0	1.9	1.9	1.8	2.4	2.1	2.3	2.0	1.9
Unemployment Rate (%)	5.9	5.9	5.9	5.8	5.8	5.8	5.9	5.9	5.8	6.1

U.S.	18Q3A	18Q4F	19Q1F	19Q2F	19Q3F	19Q4F	20Q1F	2018F	2019F	2020F
Real GDP Growth (AR)	3.5	2.2	1.3	2.0	2.0	1.6	0.8	2.9	2.2	1.4
Real Final Sales (AR)	1.4	2.1	2.6	1.9	2.0	1.6	1.0	2.8	2.3	1.4
All Items CPI Inflation (Y/Y)	2.6	2.5	2.4	2.3	2.5	2.6	2.4	2.5	2.4	2.1
Core CPI Inflation (Y/Y)	2.2	2.2	2.1	2.4	2.5	2.5	2.5	2.2	2.4	2.2
Unemployment Rate (%)	3.8	3.7	3.6	3.7	3.8	3.6	3.9	3.9	3.7	4.3

CANADA

The pop higher in Canadian growth during the second quarter hasn't been sustained. Monthly GDP readings have cooled off and the economy now looks set to barely post an average advance of 2% over the second half of the year. New downside risks have also cropped up in the form of floundering oil prices. However, even if that headwind proves temporary, the effects of higher interest rates will still have the economy posting a sub-2% growth rate in 2019.

UNITED STATES

Another solid quarter of growth in Q3 leaves the US economy on track to expand by 2.9% as a whole in 2018, only a hair higher than our previous forecast. That said, fading tax cut effects appear to already be showing up in business investment and will work to cool consumption growth in upcoming quarters. The recent nose dive in the price of oil has CPI now tracking a touch lower this year and next.

CIBC World Markets Inc., CIBC World Markets Corp., CIBC World Markets Plc., CIBC Australia Limited and certain other corporate banking and capital markets activities of Canadian Imperial Bank of Commerce operate under the brand name CIBC Capital Markets.

This report is issued and approved for distribution by (a) in Canada, CIBC World Markets Inc., a member of the Investment Industry Regulatory Organization of Canada, the Toronto Stock Exchange, the TSX Venture Exchange and a Member of the Canadian Investor Protection Fund, (b) in the United Kingdom, CIBC World Markets plc, which is regulated by the Financial Services Authority, and (c) in Australia, CIBC Australia Limited, a member of the Australian Stock Exchange and regulated by the ASIC (collectively, "CIBC") and (d) in the United States either by (i) CIBC World Markets Inc. for distribution only to U.S. Major Institutional Investors ("MII") (as such term is defined in SEC Rule 15a-6) or (ii) CIBC World Markets Corp., a member of the Financial Industry Regulatory Authority. U.S. MIIs receiving this report from CIBC World Markets Inc. (the Canadian broker-dealer) are required to effect transactions (other than negotiating their terms) in securities discussed in the report through CIBC World Markets Corp. (the U.S. broker-dealer).

This report is provided, for informational purposes only, to institutional investor and retail clients of CIBC World Markets Inc. in Canada, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such offer or solicitation would be prohibited. This document and any of the products and information contained herein are not intended for the use of private investors in the United Kingdom. Such investors will not be able to enter into agreements or purchase products mentioned herein from CIBC World Markets plc. The comments and views expressed in this document are meant for the general interests of wholesale clients of CIBC Australia Limited.

This report does not take into account the investment objectives, financial situation or specific needs of any particular client of CIBC. Before making an investment decision on the basis of any information contained in this report, the recipient should consider whether such information is appropriate given the recipient's particular investment needs, objectives and financial circumstances. CIBC suggests that, prior to acting on any information contained herein, you contact one of our client advisers in your jurisdiction to discuss your particular circumstances. Since the levels and bases of taxation can change, any reference in this report to the impact of taxation should not be construed as offering tax advice; as with any transaction having potential tax implications, clients should consult with their own tax advisors. Past performance is not a guarantee of future results.

The information and any statistical data contained herein were obtained from sources that we believe to be reliable, but we do not represent that they are accurate or complete, and they should not be relied upon as such. All estimates and opinions expressed herein constitute judgments as of the date of this report and are subject to change without notice.

This report may provide addresses of, or contain hyperlinks to, Internet web sites. CIBC has not reviewed the linked Internet web site of any third party and takes no responsibility for the contents thereof. Each such address or hyperlink is provided solely for the recipient's convenience and information, and the content of linked third-party web sites is not in any way incorporated into this document. Recipients who choose to access such third-party web sites or follow such hyperlinks do so at their own risk.

© 2018 CIBC World Markets Inc. All rights reserved. Unauthorized use, distribution, duplication or disclosure without the prior written permission of CIBC World Markets Inc. is prohibited by law and may result in prosecution.