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Central Bank Credibility and Policy Normalization

Introduction

I am happy to be in the City and to have the opportunity to speak with you this afternoon. You can feel the pulse of the global financial system here, and it feels a bit like an irregular heartbeat to me.

The recovery from the Great Recession has been a long, drawn-out affair, with some countries emerging faster than others. Long-term interest rates are extremely low, well below central banks' inflation targets. Financial market volatility has gone up across the board, as economies and policies diverge and the prospect of policy normalization becomes more real.

Today, I would like to consider what this all means for central bank credibility, which is something we should all care about. Do very low long-term interest rates and recent increases in financial market volatility represent an erosion of central bank credibility? It probably won't come as a surprise to you that I would say no. Central banks are doing their jobs in a very challenging setting. In my time today, I will talk about what we can learn from low interest rates and increasing financial market volatility, as well as what we can expect as we go through the process of normalizing monetary policy.

Long-Term Interest Rates and Credibility

Let's begin by looking at the extremely low borrowing costs we see in many economies. Consider, for example, the return that one would receive on a 10-year bond issued by any G-7 government and held until it matured. Investors would be accepting an annual return that would be below the central bank's inflation target—in some cases, well below.

What is it telling us when investors are willing to receive such low returns? Central bank policy frameworks may differ, but the concept of inflation control is

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at the heart of monetary policy in most economies. Are low yields an indication that investors think we will be unable to bring inflation back up to its target?

To help answer this question, let's look at the Canadian data. In a recent paper, Bank of Canada economists Bruno Feunou and Jean-Sébastien Fontaine used a term structure model to decompose the yield on a 10-year Government of Canada bond into three components: long-term inflation expectations, expectations of real short-term interest rates and the term premium.

Our analysis shows that Canadian long-term inflation expectations have stayed quite close to our 2 per cent target since the onset of the financial crisis. This message is corroborated by other methods we have of measuring longer-term inflation expectations. These include surveys of professional forecasters and the break-even inflation rate that is based on comparing nominal and Real Return Bonds.

Let me pause here to stress a point. Why are inflation expectations so important? It's because well-anchored expectations help promote stability in inflation and output as well as the financial system. Solid inflation expectations also give central banks more leeway in responding to temporary shocks, such as changes in energy prices or movements in the exchange rate.

Evidence shows that, for the most part, central banks have been doing well at keeping expectations anchored in a very challenging environment. Measured in this way, it is clear to me that our credibility is intact. But we won't take false comfort. Vigilance is required, because if long-term expectations shift away from the target, it can be very difficult to re-anchor them.

So, to understand why long-term interest rates are so low, we need to look at the two other components—expectations for real short-term interest rates, and the term premium. These components account for the drop in long-term bond yields that we have seen since the crisis.

This is relevant to our topic because these components have also been heavily influenced by central banks as they worked to meet their inflation goals in the aftermath of the crisis.

Let me make four points here. First, expectations for real short-term interest rates depend on the level of the real neutral rate of interest—the rate that will generate just enough savings to finance investment in the long run. The Bank of Canada's Senior Deputy Governor, Carolyn Wilkins, gave a speech last year in which she outlined why we should expect to see a lower real neutral interest rate globally. The reasons include slowing labour force growth and productivity growth in developed economies, suggesting a drop in demand for investment, and a very strong supply of savings from many emerging economies. So we must start thinking about equilibrium interest rates from a lower starting point.

Second, on top of these structural factors, we've seen central banks react to the financial crisis and subsequent Great Recession by aggressively lowering policy rates. Several central banks, including the Bank of Canada, also found themselves constrained by the effective lower bound on interest rates. By issuing forward guidance in various forms, we were able to reduce expectations for the

future level of the policy rate. This added to the pressure on expectations for real short-term rates.

Third, central bank actions and forward guidance have served to reduce uncertainty about short-term policy interest rates, thus reducing the term premium.

Fourth, the quantitative easing programs employed by some central banks included purchases of long-dated bonds, reducing the yields on those bonds. There is strong evidence that those purchases have even pulled down yields in markets that did not have quantitative easing, such as Canada.

To sum up, there are very good reasons why long-term interest rates are unusually low, but the de-anchoring of inflation expectations is not the central driver. Rather, low long-term interest rates reflect a combination of a declining neutral rate of interest and the actions being taken by central banks to foster stronger growth in pursuit of their inflation targets. Ultimately, inflation expectations, and the inflation outcomes that support them, are how a central bank's performance should be judged.

Financial Market Volatility and Credibility

But some would judge a central bank's credibility against a wider range of criteria, including the level of financial market volatility. In recent months, measures of volatility have risen in a wide variety of asset classes and across a number of countries, in U.S. Treasuries, in exchange rates, and in the Standard & Poor's 500, just to give a few examples. There are many factors contributing to this increase, and I won't try to list them all. But I will mention four.

First, the forces acting on the global economy are powerful and affecting many economies differently. The post-crisis headwinds to growth, including widespread deleveraging and lingering uncertainty about the future, have proved highly persistent. Furthermore, the sharp drop in oil prices is having a significant effect, positive for some economies and negative for others. This shock surprised everyone, and the fact that it is so large and happened so quickly means that many of us have had to work hard to fully grasp all of its implications. Several central banks around the world, including the Bank of Canada, reacted to this environment with policy announcements that weren't fully anticipated by investors.

Second, these forces are leading to a divergence in monetary policy paths among the big three central banks. The European Central Bank and the Bank of Japan are implementing quantitative easing while the Federal Reserve is beginning the process of normalizing its policy. This divergence is naturally leading to a significant adjustment in the outlook for interest rates and currencies, as well as higher volatility in bond and foreign exchange markets.

A third contributor to financial market volatility is related to global regulatory reform. The Basel III and other reforms are clearly making the global financial system safer, and that is job one. But they have also reduced incentives for banks and some dealers to hold inventory, act as market-makers and provide a shock-absorber function in times when volatility is high.

Fourth, financial market volatility has been compressed in recent years by the one-sided nature of our economic outlook. With many economies operating with excess capacity, economic growth remaining weak and deflation a real threat in some economies, interest rates have been expected to stay very low for a very long time. This expectation was reinforced by forward guidance and other unconventional policies of central banks. But those expectations are starting to shift. The global recovery, although uneven and fragile, is progressing, and we are approaching a transition phase—taking the first steps on a path toward normalization, if you will.

Eventually, the global headwinds will dissipate and central banks will be able to transition away from unconventional policies and return to more conventional ways of conducting monetary policy. This will mean a return to two-sided risks, where interest rates could rise or fall depending on how economies evolve. During this transition toward normal, more financial volatility is to be expected.

To me, these seem to be legitimate reasons to expect higher financial market volatility today. And is the volatility we're seeing now abnormally high? No. While market volatility has risen recently, it has done so from historically very low levels. It has begun to return closer to historical averages, not abnormal levels.

So, is this increase in volatility actually a negative development? No. Above all, volatility relates to unexpected economic developments to which central banks will necessarily respond in order to fulfill their mandates. When shocks to the economy occur, whether positive or negative, higher financial market volatility is a natural consequence, an integral part of the economy's equilibration process. Such financial volatility is neither inherently bad nor good. And if it reflects the emerging possibility that the one-sided outlook we have experienced for several years is finally becoming more balanced, then that is unambiguously good news.

Getting Back to Normal

Still, as we begin to work through the process of getting back to normal, the question remains: if explicit forward guidance can suppress financial market volatility, why not keep using it?

In this context, what I mean by forward guidance is explicit statements around the future path of interest rates. Central banks inevitably talk about the future, and any such statement can be construed as a form of guidance for markets. All such forms have their uses, in the right context. But I reserve the term "forward guidance" to mean specific comments, or conditional commitments, around interest rates.

There's absolutely no question that forward guidance is a valuable part of the central bank tool kit. It has clearly been helpful in Canada and elsewhere. But as I said in a paper published last year, we at the Bank of Canada believe that statements to explicitly guide market expectations about the future path of interest rates are best reserved for extraordinary times, such as when policy rates are at the effective lower bound, or during periods of market stress. Keeping forward guidance in reserve ensures that it will have a greater impact

when it is deployed. Otherwise, it becomes addictive and loses some of its impact—in short, forward guidance is not a free lunch, it comes with costs.

Let me elaborate by stressing some of the points I made in that paper. Forward guidance works by taking some potential actions by the central bank off the table. A commitment not to raise interest rates for a given period, or until certain economic conditions are met, can flatten the yield curve and add stimulus to the economy. But in doing so, the commitment creates a skewed bet for investors. Volatility falls, for the time being, as market participants naturally position themselves around this bet, often using significant leverage to do so.

So, what happens when circumstances change, as they inevitably do? What happens when investors start to consider the possibility that the guidance will change? The positions that are stacked around the central bank's guidance unwind, and all that suppressed volatility suddenly resurfaces in financial markets, often to levels that surpass historical averages. That's when we pay the price of forward guidance. To be sure, when the policy rate is at the effective lower bound, the benefits of forward guidance can easily outweigh the costs. At other times, the costs loom larger.

Indeed, in normal times, when economic and financial risks are clearly two-way, there is a very basic law of economics at work. Volatility happens. It is a force of nature. Economists call this underlying volatility "shocks"—unexplained shifts in consumer demand or business behaviour, or oil-price shocks, or shocks from foreign economies, and, yes, financial market shocks. This volatility must go somewhere in the economy. Central banks target inflation, which means stabilizing inflation and economic growth, not interest rates. Pursuing that mandate means that financial markets carry more of the natural volatility that arises.

To make this point in its most extreme form, consider how a hypothetical, all-seeing central bank would behave. That central bank would anticipate all shocks to the economy and move interest rates up and down to offset them, so inflation would always stay right on target. Looking at the data afterward, we might think that all the interest rate and financial market volatility was unnecessary, because inflation was on target the whole time. In other words, perfect policy making might look silly, simply because people cannot see the underlying shocks—but the financial market volatility would be a natural consequence of the central bank's efforts to achieve its mandate.

Of course, we haven't been in normal times for quite a while. We are just taking the first tentative steps toward normalization, and the road won't always be smooth, as our recent experience in Canada illustrates. Late last year, we saw encouraging signs that the economic recovery was broadening. Stronger exports had started to be reflected in greater business investment. However, as we approached our January decision on interest rates, we had to consider the unexpected plunge in global oil prices. Given the importance of oil to our economy, this shock represented a significant downside risk to our projected inflation profile. It also posed a risk to financial stability through the reduction in income that it implied. Because lower oil prices mean lower Canadian income, the shock would worsen the debt-to-income ratio of Canadian households, even if no new borrowing occurred.

We thought in January that it would be best to act sooner rather than later, given the magnitude of the shock and the immediacy of its likely effects. Indeed, oil prices were still falling, and to levels below the assumptions built into our forecast. Accordingly, we took out some insurance in the form of a 25-basis-point cut in interest rates. The reaction to this cut across the yield curve and in the exchange rate would help to cushion the blow to the economy from the oil-price decline, bringing us back sooner to full capacity and sustainable 2 per cent inflation. It would also help mitigate the rise in the debt-to-income ratio by reducing the drop in income, although debt levels could rise at the margin.

We knew that financial markets would be surprised by the move in January, and we generally prefer to avoid surprises. But we will do what is necessary to fulfill our inflation-targeting mandate.

Over the following weeks, we saw inflation decline as expected, and output expand in line with our projection. We saw financial conditions ease, and oil prices stabilize in a range reasonably close to our January projection. This made us feel increasingly comfortable with the amount of insurance we had already taken out, which led to the decision to keep rates unchanged earlier this month. The negative effects of lower oil prices are beginning to appear; the positives will take longer to emerge. So we need to watch these competing forces play out in the economy, and the January rate cut has bought us some time to monitor the situation as it evolves.

Some have characterized this as a move to “data dependency.” I have to say I find this a bit strange. Data are always crucial in determining how the economy is progressing. Even in extraordinary times, central banks depend on data to help them evaluate how the economy is performing relative to expectations.

As our economy gradually gets back to normal, we will continue to speak with business leaders to get their perspectives. We will continue to watch the data closely, as we always do, and see how the numbers evolve relative to our forecasts. And we will look to market participants to keep watch on the same data, and form their own opinions about what they mean.

Our communications focus on explaining how we expect the economy to unfold and being transparent about the risks that the central bank is weighing. All else equal, this should help reduce the chances of surprising markets. Still, in normal circumstances, it's natural that there would be volatility as economic surprises occur. But, we think it best to have this volatility reflected in prices in informed, well-functioning financial markets, rather than be artificially suppressed by forward guidance.

Conclusion

Allow me to conclude. As we have seen, well-anchored inflation expectations reflect the unwavering pursuit of our inflation goals. They show that market participants continue to believe both in our commitment and our ability to return inflation to its target.

Unconventional monetary policies have played a key role, in Canada and elsewhere, in promoting growth and helping to meet our inflation goals. As the

global economy shakes off the Great Recession, and the era of unconventional policies comes to an end, a return to ultra-low levels of financial market volatility is unlikely. Bouts of increased volatility can be expected as guidance-influenced positions are unwound and as markets react to shocks. As we go through the normalization process, this represents the natural reaction of financial markets to economic uncertainty and a return to a normal trading environment—not an erosion of central bank credibility.

The Bank of Canada will continue to pursue and fulfill our inflation-targeting mandate. We will continue to follow the policies necessary to ensure a timely return of inflation to target while being mindful of financial stability considerations. This process takes place in an uncertain world where shocks happen daily, behaviour shifts repeatedly, and our analytical tools and models can offer only rules of thumb. In that sense, monetary policy is a very imprecise business—less like engineering and more like risk management.

Ultimately, our credibility will hinge on how well we meet our mandate over extended periods of time. I'm confident that we will continue to get the job done.