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Monetary Policy and Exchange Rate Movements

Good afternoon. It is always a pleasure for me to return to Vancouver, a city I called home for a year. And now that I live in Ottawa, I can tell you that it is particularly nice to get the chance to come here in the middle of February.

Every year, the Canadian Press surveys news directors and editors to select the top business story of the year. In 2004, they picked the rise of the Canadian dollar. That was not a surprising choice. The dollar's appreciation drew a lot of attention from the media, from business people, from individual Canadians, and indeed, from the Bank of Canada. Changes in the external value of the dollar are one of the key factors that we scrutinize and work hard to understand. We watched the dollar closely as it depreciated during the 1990s, as it fell to an all-time low against the U.S. dollar in early 2002, and as it rose by roughly 25 per cent between January 2003 and January of this year.

With the rapid appreciation of our dollar has come an increase in public commentary about the currency—its effects on the Canadian economy in general, and the Bank of Canada's monetary policy in particular. There has been no shortage of stories broadcast or articles written. At the Bank, we welcome this increased interest. Canadians should discuss important economic issues that affect their daily lives. However, some of this commentary has oversimplified how movements in the exchange rate affect the Canadian economy and monetary policy. I don't mean this as a criticism. The relationship between the exchange rate, the economy, and monetary policy is complex. So today, I want to talk about the various factors that influence the exchange rate, examine how these factors affect the Canadian economy, and lay out how the Bank takes them into account as we conduct monetary policy. In doing so, I will elaborate on the contents of a technical box in our latest *Monetary Policy Report Update*, published on 27 January.

The Exchange Rate in an Inflation-Targeting Framework

Let me begin with a brief review of Canada's monetary policy framework. At the heart of our monetary policy is the idea that the best contribution the Bank can make to the Canadian economy is to keep inflation low, stable, and predictable. By aiming to keep the annual rate of inflation at the 2 per cent midpoint of a 1 to 3 per cent

target range over the medium term, we lay the groundwork for the economy to grow in a strong and sustainable way.

To keep inflation low and stable, we aim to maintain a rough balance between demand and supply in the economy. When aggregate, or total, demand exceeds aggregate supply, the economy will push against its capacity limits—and inflationary pressures will tend to build over time. If we see that inflation is threatening to rise above target over the next 18 to 24 months, the Bank will tighten monetary policy to dampen demand. Similarly, if there is too little aggregate demand relative to supply, the economy will operate below its capacity. If this gap between aggregate demand and supply were to persist, the projected trend of inflation would fall below target. The Bank would then ease monetary policy to stimulate demand and close the gap. That's why it is important for us to understand how developments in the Canadian and world economies affect the balance between demand and supply in Canada.

Now let's bring the exchange rate into the picture. To understand the effect of exchange rate movements, we need to understand why exchange rates are moving, and how these movements affect the balance between demand and supply. Exchange rate movements tell us something about economic developments that may be having a direct impact on Canadian aggregate demand. And the movements themselves have their own impact on aggregate demand, by changing relative prices for Canadian goods and services and by shifting demand between domestic- and foreign-produced products. The challenge for the Bank is to evaluate these movements, together with other data, and set a course for monetary policy that works to keep demand and supply in balance and inflation low and stable.

Two Types of Exchange Rate Movement

With this general framework in mind, let me now talk in more detail about the forces that can influence the exchange rate. Here, I want to emphasize a key point: From the Bank's point of view, the causes of a movement in the exchange rate are just as important as the movement itself. I will spend the balance of my time today explaining why this is so.

For monetary policy purposes, there are two basic types of exchange rate movement—and no, I don't mean "up" and "down." I mean movements in the Canadian dollar that directly reflect changes in the demand for Canadian goods and services, and those that do not.

Consider the first type of movement, which I'll call Type One. Growing world demand for Canadian goods or higher world prices for Canadian products both prompt a direct increase in aggregate demand in Canada. And both tend to cause an appreciation of the Canadian dollar. Put simply, when demand for our goods and services increases, our currency tends to appreciate. Conversely, when demand for our goods and services decreases, our currency tends to depreciate.

But not all exchange rate movements are Type One. Some movements, let's call them Type Two, reflect the rebalancing of portfolios in financial markets, which may have nothing to do with current demand for Canadian goods and services.[1] One example of a Type Two movement would be a flight to so-called "safe havens" during an international financial crisis. Another example is a movement that relates to expectations of what might be necessary to resolve global imbalances. I'll say a bit more about this later on. But for now, let me just stress the key point about Type Two exchange rate movements. While they are more difficult to describe, their defining feature is that they do not reflect current changes in demand for our goods and services.

It's important for us at the Bank to try to distinguish between exchange rate movements that reflect changes in demand for our goods and services and those that do not. That's because these movements have different implications for aggregate demand and, hence, for monetary policy. This is a complicated issue, all the more so because both types of currency movement sometimes occur at the same time. So I want to spend some time talking about these two different types of exchange rate movement. I'll give you some real examples and explain their different implications for monetary policy.

Let me start with Type One. I've already noted that when global demand for Canada's goods and services rises, the demand for our dollar also increases, so it tends to appreciate. Similarly, when global demand for Canada's goods and services falls, so will the demand for our currency, which then tends to depreciate. But the exchange rate, by reacting to these changes in demand, also acts as a shock absorber. For example, when global demand for our goods and services weakens, and our dollar depreciates in response, the lower dollar pulls down the relative prices of Canadian goods and services, making them more attractive. And, of course, the opposite happens when global demand rises for Canadian goods and services; the increase in demand is dampened by the associated appreciation of our dollar.

Let me give you an example from here in British Columbia. In 1997 and 1998, the world economy was dealing with the effects of economic crises in Asia, Russia, and other emerging markets. In this environment, global demand for the primary commodities that Canada produces was very weak. That weakness resulted in falling prices for many commodities, including some of the raw materials produced in British Columbia or shipped through its ports. At that time, there was a sharp depreciation of the currencies of countries that export raw materials—Canada, Australia, and New Zealand—while the U.S. dollar appreciated. While there were other forces driving the exchange rate at that time, the drop in global demand for raw materials was a direct,

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[1] This is not to suggest that all Type Two movements in the exchange rate originate in the capital account of the balance of payments and are driven by investment flows. Although most of the examples described later in the text are based on shifting investor expectations and on the rebalancing of portfolios, other Type Two movements are possible and can be driven by non-financial factors. Similarly, while most of the discussion in this text focuses on aggregate demand and the effects of exchange rate movements on net export sales, aggregate supply considerations can also be important and can exert a significant influence on exchange rates. My focus here on demand considerations reflects their greater relevance in the current economic context.

negative shock to Canadian aggregate demand, and this shock led to a depreciation of the Canadian dollar. The lower dollar, in turn, helped to offset the shock by making other Canadian exports more attractive to global markets, and by making foreign products and services less attractive to Canadians.

Over the past two years, we have seen this movement work in the opposite direction. In 2003 and most of 2004, both the demand for, and prices of, Canadian products rose. Once again, there were other factors at work on the exchange rate during this time. But this direct, positive shock to Canadian aggregate demand led to increased demand for our currency and an appreciation of the Canadian dollar. The stronger Canadian dollar, in turn, increased the relative price of Canadian goods compared with foreign products, and helped to restore the balance between demand and supply. In these two instances, the flexible exchange rate helped to absorb positive and negative shocks to our economy.

That's the first type of exchange rate movement. Let's now turn to Type Two. You may wonder: if this second type doesn't reflect changes in demand for Canadian goods and services, what does it reflect? What are the forces behind this type of movement?

Quite often, it reflects changes in foreign demand for Canadian financial assets or changes in Canadian demand for foreign financial assets.[2] For example, if investors develop a greater appetite to hold Canadian equities or bonds, this drives up the demand for our currency, which then tends to appreciate. The reverse also holds true. A shift in investor sentiment away from our bonds and equities reduces the demand for the Canadian dollar, and it tends to depreciate. But let's remember that these changes in demand for equities and bonds are not related to current changes in aggregate demand for goods and services produced in Canada. The fact that these movements are not related to changes in aggregate demand is the essential difference between a Type One and a Type Two currency movement.

A textbook example of a Type Two currency movement occurred during the Mexican Peso Crisis of 1994–95. As a result of the Mexican situation, investors became less comfortable with holding the financial assets of countries with governments that were heavily in debt—and this included Canada at the time. As a result, investors sold the financial assets of those countries and sought the relative safety of investments in the United States. This was one of the factors behind the sharp depreciation of the Canadian dollar during this period.

Let me give you another example of an exchange rate change that is not driven by a change in Canadian aggregate demand. The period near the end of the 1990s saw investors become increasingly optimistic—some have said irrationally exuberant—about the prospects for the U.S. economy. The associated financial flows into the United States helped to drive up the U.S. dollar over this period—at the expense of other

[2] I am referring here to a change in demand for Canadian assets that does not involve a change in investment in physical capital in Canada.

currencies, including the Canadian and Australian dollars, the euro, and the yen. This optimistic view about the U.S. economy, combined with the decline in commodity prices that I mentioned earlier, helped push down the value of the Canadian dollar from 71 cents (US) in March 1998, to about 62 cents (US) in January 2002.

Of course, the process also works in the other direction. During the past two years, investors have become more concerned about the large and growing U.S. current account deficit—which has arisen out of that country's large fiscal deficit and its very low level of private savings. While the United States saves too little, Asian countries are saving too much, and this situation cannot be sustained indefinitely. More domestic demand in Asia and some other countries, and more savings in the United States, are needed to help restore global economic balance. Against this backdrop, market participants have come to the view that further depreciation of the U.S. dollar will be needed to help resolve these imbalances. The earlier "irrational exuberance" about the prospects for the U.S. economy has been cooled by an increased focus on the risks facing that economy. And so we have seen the U.S. dollar fall against many major currencies, including the Canadian dollar.

Let me stress the relevant feature that is common across all Type Two movements. These movements do not reflect a change in the aggregate demand for our goods and services. However, the exchange rate movements, by having the usual effect on relative prices, still lead to changes in Canada's net exports and, thus, in Canadian aggregate demand.

The Implications for Monetary Policy

At this point, it might be tempting to say, "So what?" After all, Canadians looking to head south for a winter break probably don't care what is causing the exchange rate to move. They only want to know how many U.S. dollars or Mexican pesos they can buy with their hard-earned Canadian dollars. But it is important for us at the Bank, and for those who follow our actions, to understand what is causing the exchange rate to move. This is because the monetary policy implications of a currency movement depend on its cause, and on what other forces might be at work in the economy.

Let's look at examples of the two types of exchange rate movement that result in a stronger Canadian dollar. In Type One, we start with an increase in foreign demand for our goods and services and, hence, an increase in aggregate demand. The Canadian dollar strengthens in response, increasing the relative price of Canadian goods. This increase offsets some of the higher foreign demand by encouraging imports and dampening exports. In other words, the appreciation of the Canadian dollar works to dampen the initial increase in aggregate demand. To the extent that the dampening effect on aggregate demand exactly offsets the direct increase in demand, there would be no need for a monetary policy response.

A Type Two appreciation is a different story. Consider the example where the U.S. dollar weakens, driven by market concerns about global imbalances. In this case, there is no initial increase in Canadian aggregate demand. But the stronger Canadian dollar still raises the relative prices of domestic products and leads to a decline in net exports. The overall effect on Canadian aggregate demand is clearly negative. And this decrease in demand—if it persisted—would likely lead to undesirable downward pressure on inflation. All other things being equal, this would require monetary policy to be more stimulative than it otherwise would have been.

I hope that this helps to clarify why these two different types of exchange rate movement have different implications for monetary policy. However, I don't want anyone to think that we at the Bank have a mechanical or formulaic approach to dealing with exchange rate movements. The truth is exactly the opposite. Analyzing foreign exchange movements and determining the appropriate monetary policy response is a complicated business.

Consider the sharp appreciation of the Canadian dollar against the U.S. dollar over the past couple of years. Which type of movement drove this appreciation? How much of this movement was related to stronger demand for Canadian goods and services, and how much was related to widespread weakness in the U.S. dollar?

As we noted in our *Monetary Policy Report Update* last month, both types of exchange rate movement seem to have been at play over the past year. However, their relative importance appears to have shifted over this period. And that made it difficult to determine the appropriate monetary policy response.

Looking at the economic data at the beginning of 2004, we saw that net exports had made a significant negative contribution to Canadian economic growth in 2003. We were concerned that, on balance, much of the exchange rate appreciation in 2003 was of the Type Two variety. This assessment was one of the factors that led the Bank to lower interest rates in early 2004. However, by late last summer and early last autumn, we had seen strong commodity prices and strong world demand. And net exports had made a solid, positive contribution to Canadian growth in the first half of 2004—a typical Type One effect. With our economy approaching its capacity limits, we raised interest rates in order to reduce the amount of monetary stimulus in the economy.

But towards the end of 2004, the balance of Type One and Type Two forces appeared to shift again, with Type Two dominating. The U.S. dollar weakened against all the major floating currencies, and the Canadian dollar rose to a 13-year high of about 85 1/2 cents (US). This occurred despite the fact that world commodity prices had declined somewhat and the outlook for the global economy had weakened. The Bank's target overnight rate was therefore left unchanged at the fixed announcement dates in December 2004 and January 2005.

Each monetary policy decision that we make is complicated by uncertainty about the persistence of exchange rate changes and about the length of time it takes for

both exchange rate and monetary policy movements to influence the economy. This has been one of the Bank's major challenges in the recent conduct of monetary policy. It's one thing to observe a movement in the exchange rate. It's quite another to determine its implications for aggregate demand and, hence, for monetary policy.

We continue to struggle with the same complications today as we chart a path for monetary policy. Canadian interest rates remain low by historical standards. Eventually, this considerable monetary stimulus will have to be reduced; that is, at some point, interest rates will have to rise. But as I said, the second type of exchange rate movement appears to have gained relative importance in recent months, which means that aggregate demand in Canada will be weaker than we had expected last autumn. That is why in our recent *Update* we slightly lowered our growth projection for 2005, to 2.8 per cent from 2.9 per cent. And it is why we said in the *Update* that: "…the pace of reduction in monetary stimulus is likely to be slower than envisioned in the October *Report*." By slowing the pace at which we will reduce monetary stimulus, we will continue to provide support for domestic demand to offset the additional drag we expect from net exports.

Conclusion

Let me conclude by reminding you of what I said at the beginning of my remarks today. The relationship between the exchange rate, the economy, and monetary policy is complex. And the effects of movements in the currency are spread out over time. You can't look at one day's or one week's performance of the Canadian dollar and pinpoint the reason behind the movement. There is no precise way to measure the relative importance of the two types of movement that I have described, or their likely persistence. So, in setting monetary policy, we at the Bank use an analytical framework based on historical evidence, assess a lot of current data and, even then, we must apply a lot of judgment to our analysis. And the analysis and the judgment can change over time as new information becomes available.

Ultimately, the Bank of Canada's commitment to Canadians about monetary policy boils down to this: We will continue to work at maintaining a rough balance between demand and supply in the economy, in order to keep inflation low, stable, and predictable. And as we pursue this objective, we will continue to explain the reasons behind our policy actions, and our view of the outlook for inflation and for economic growth in Canada.