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MONEY AND MONETARY POLICY IN CANADA

MODULE 8:

EXCHANGE RATES

"Money and Monetary Policy In Canada" by Gary Rabbior
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Contents

8.1 THE INTERNATIONAL EXCHANGE OF CURRENCIES

The Value of Our Money Is Important to Canadians

Canadians have a keen interest in the value and purchasing power of their money. Its value affects our ability to buy goods and services produced here at home.

Canadians also buy goods and services from other countries. They don't usually buy them directly from foreign producers—although that is becoming much more common with online shopping. But they do buy imported goods from retailers in Canada who bought them from foreign producers. Either way, Canadians spend a lot of money on imported goods and services.

Economic Insight: *why Canadians buy goods and services from other countries*

Why Do Canadians Buy Goods and Services Produced in Other Countries?

There are various reasons why Canadians buy goods and services produced in other countries, such as:

- Some goods—for example, bananas—are simply not produced here in Canada.
- The goods and services of other countries may be cheaper than those provided by Canadian producers.
- Canadians may perceive the foreign-produced good or service as being of a superior quality.
- The foreign-produced good or service may have a better reputation or be better known.

Canadian firms often purchase capital equipment that they need from other countries for similar reasons. And consumers in other countries also buy goods and services that are produced in Canada.

Export Sales Lead to Buying Canadian Dollars in Foreign Exchange Markets

***Economic Insight:** Sales of exports increase demand for the Canadian dollar*

As Canadian exporters sell their goods and services to other countries, they usually want payment in Canadian dollars. They may accept foreign currencies as payment but, if they do, they will likely then convert these other currencies into Canadian dollars. Some might accept U.S. dollars because of their prominence in the global economy and use them for purchases they make in foreign markets.

Let's assume, though, that Canadian sellers want Canadian dollars and that they receive these dollars either directly from foreign buyers or by converting the foreign currency themselves. As a result, when Canadian exports are sold to other countries, this leads to a demand for Canadian dollars in foreign exchange markets.

***Economic Insight:** Purchasing imports increases the selling and supply of Canadian dollars in foreign exchange markets*

Import Purchases Lead to Selling Canadian Dollars in Foreign Exchange Markets

Similarly, producers in Tokyo or London or New York who sell goods and services to Canadians typically don't want to be paid in Canadian dollars. They want Japanese yen, British pounds or U.S. dollars. If Canadian buyers paid for Japanese exports in Canadian dollars, the Japanese would convert the Canadian dollars to yen. So, Canadians buying imports from other countries leads to more selling of Canadian dollars in foreign exchange markets as they are exchanged for the currencies of other countries.

To summarize, Canadian export sales lead to a demand for Canadian dollars in foreign exchange markets. Similarly, the purchase of imports by Canadians increases the supply of Canadian dollars in those markets.

***Economic Insight:** Foreign exchange markets facilitate the buying and selling of currencies*

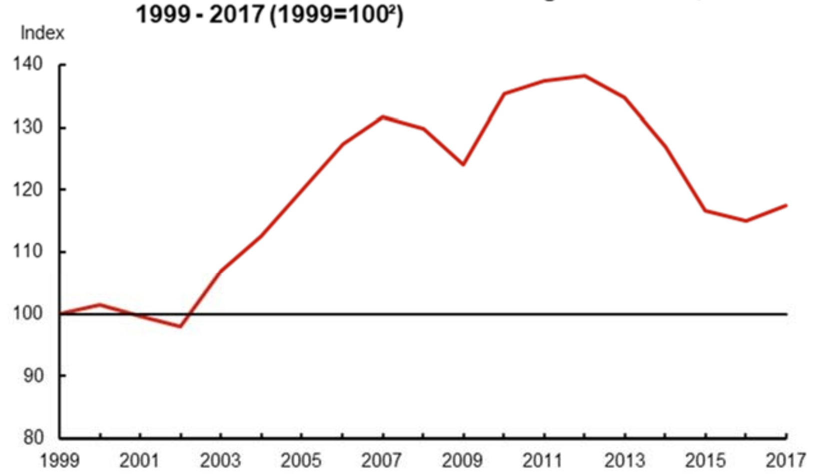
Currencies Are Bought and Sold in Foreign Exchange Markets

Just as we need a payments system to support exchange within our own economy, we need a system to facilitate international exchanges and payments. This system operates through the foreign exchange markets around the world. Canadian dollars are bought and sold in these foreign exchange markets, as are the currencies of other nations. In these markets, there is a demand for Canadian dollars from those who want to buy our currency and a supply of Canadian dollars as they are are sold to acquire other currencies. This buying (demand) and selling (supply) of Canadian dollars is affected by, and affects, our exchange rate.

8.2 THE EXCHANGE RATE

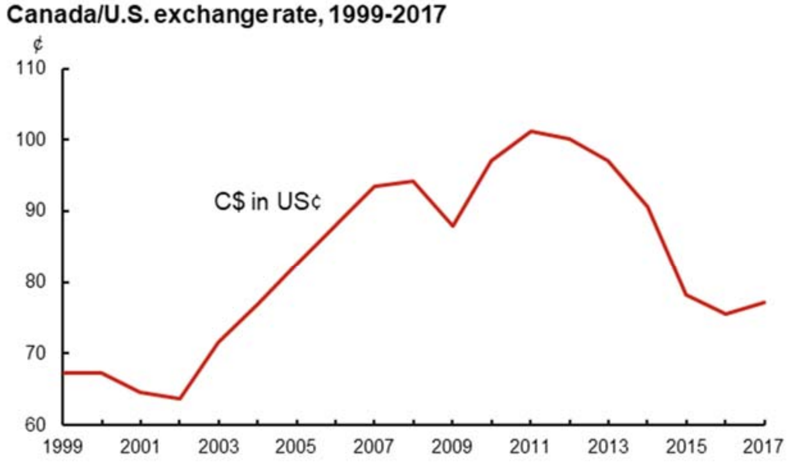
The exchange rate is the cost of exchanging our dollar for the currency of any other country the rate at which our dollar is exchanged for the currency of any other country.

Chart 8-1: Nominal Canadian effective exchange rate index[1], 1999 - 2017 (1999=100[2])



1. The Canadian effective exchange rate index is a weighted average of bilateral exchange rates for the Canadian dollar against the currencies of Canada's major trading partners.
2. A rise in the index indicates an increase in the value of the Canadian dollar.

Canada/U.S. exchange rate, 1999-2017



Source: Bank of Canada

Last observation: 2017

We do not usually see the value of the Canadian dollar quoted in terms of how many Canadian dollars it takes to acquire a single unit of another currency, for example, one U.S. dollar. Instead, we usually see the reverse—how many U.S. dollars (or what portion of a U.S. dollar) it takes to acquire one Canadian dollar. If you hear the value of the Canadian dollar quoted as $.85, that means it takes 85 U.S. cents to buy one Canadian dollar. (Note: We will use C$ to refer to Canadian dollars and US$ to refer to U.S. dollars.)

If we see that the value of the Canadian dollar has risen from $.85 to $.87, it means more U.S. funds are now needed to acquire one Canadian dollar. This represents a rise, or an appreciation, in the value of the Canadian dollar. A drop from $.85 to $.83 would represent a decline, or a depreciation—fewer U.S. funds are needed to acquire one Canadian dollar. The purchasing power of the Canadian dollar, in terms of the U.S. dollar, has declined as it fell from $.85 to $.83.

Economic Insight: *Our exchange rate is often looked at against an index of currencies*

The significant position of the United States in the world economy means that U.S. dollars are frequently accepted and used in settling international payments. This is also the reason that the exchange rates of various currencies are usually expressed in terms of the U.S. dollar. However, the exchange rate of the Canadian dollar is often looked at against an index of currencies of other countries. One such index is the Bank of Canada's CEER—or the Canadian effective exchange rate index. An *effective exchange rate* for the currency of any country attempts to capture, and reflect in a single index, the changes in a country's bilateral exchange rates with its important trading partners. Doing so helps to show how a country's effective exchange rate is affecting its international competitiveness in global trade markets.

Both CEER and the exchange rate with the U.S. dollar are important, but we will focus on the exchange rate most commonly considered—the value of the Canadian dollar compared with the U.S. dollar.

Economic Insight: *The exchange rate for the Canadian dollar is usually similar in foreign exchange markets around the world*

Foreign exchange markets are not necessarily physical centres. Although a large proportion of currency transactions take place in major financial centres such as London, New York and Tokyo, currencies are exchanged in many places (such as financial institutions) and in many ways—in person, by phone or computer, etc.

The Exchange Rate for Currencies Can Be Affected by Arbitrageurs

The exchange rate for the Canadian dollar is similar at all these centres throughout the world. Why? The consistency of the exchange rate is due to the actions of arbitrageurs. An arbitrageur makes a profit by buying a currency at a relatively low price in one market and reselling it in another market where the price is higher. Any time something has a different price in one market than in another, a profit can be made. And arbitrageurs seek to make that profit.

When arbitrageurs buy in a low-price market, their purchases increase demand and, eventually, the price in that market. Selling in a high-price market increases the supply, eventually lowering the price there. Over time, the two prices become virtually the same through this dealing by arbitrageurs. The word “virtually” is used because you don’t buy and sell currencies free of charge. There is a cost for the exchange. The key point, though, is that arbitrageurs cause the value of a nation’s currency to be about the same in any of the world’s financial markets in which it is traded. This is particularly true in today’s digital world, where information moves and transactions happen almost instantly.

To understand the importance of our exchange rate in Canada, we need to consider two key characteristics of our economy—its *openness* and its *relative size.*

8.3 CANADA'S ECONOMY—RELATIVELY OPEN AND RELATIVELY SMALL

Canada’s economy is relatively open. This means that a large number of transactions occur between Canada and other nations of the world. The larger the share of a country’s total production that is traded to other nations, the more open the economy.

Approximately 30% of Canada’s output is traded to other nations. Compared with other countries, that is quite a high percentage, which is why we are said to have a relatively open economy.

The more open a nation’s economy, the more important the exchange rate is for that nation. If our trade with another country were small, we really wouldn’t have to care much about the exchange rate between our currency and the currency of that nation. But we are very interested in the exchange rate between our dollar and the currencies of our major trading partners. Why? Because, among other things, it will affect the costs of imports and exports exchanged between our countries. Since about 75 to 80% of our exports go to the United States and around 60% of our imports come from that country, we are particularly interested in the exchange rate between our dollar and the U.S. dollar.

This brings us to the other major characteristic of the Canadian economy that we should consider: its size. In geographic terms, Canada is a very large country. However, in economic terms, Canada’s economy is relatively small. When compared with the output of nations such as the United States and China, Canada’s proportion of total world output is about 2%. Yet, we still have a very substantial economy—the tenth largest in the world. So, we may be small, but we’re not that small.

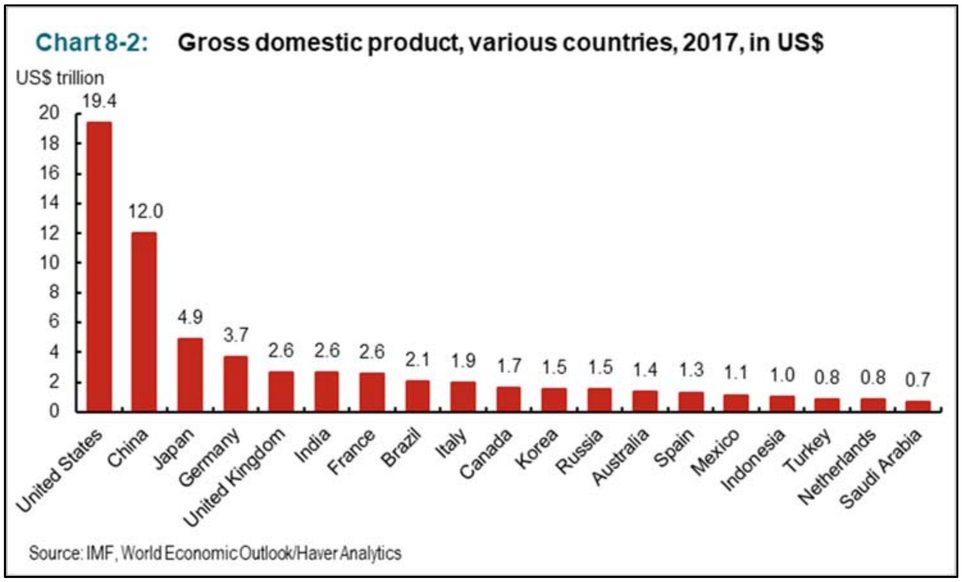


Chart 8-2: Gross domestic product, various countries, 2017, in US$

Source: IMF, World Economic Outlook/Haver Analytics

Canada Is Generally a Price-Taker in Global Markets

What is the consequence of our relatively small economic size compared with the economies some other countries? Most importantly, Canada is largely a price-taker in global markets. That means we don't usually influence global prices. We take the prices as given.

Consider another market where a producer (a potato farmer, for example) supplies a relatively small share of the total output. Each potato farmer in Canada produces a small proportion of the total potato output. As a result, the decisions of each potato producer have little, if any, effect on the market price for potatoes. The price is determined in the overall market for potatoes, which involves the many farmers who supply potatoes and the large numbers of people who buy them.

What if a particular farmer tried to sell at a price different from the market price? He or she would soon find out how little effect an individual can have. With a large number of sellers, if one farmer raised the price for potatoes above the market price, buyers would simply go elsewhere and the farmer would lose sales. And the farmer's price would soon fall back down to the market level.

In a highly competitive market, producers can sell as much as they want at the price that's set by the market. But each producer is unable to influence the market price. The stronger the forces of competition in a market, the more this kind of condition and response will prevail.

Economic Insight: *The exchange rate will affect how much exporters receive from their sales*

So, because an individual farmer has no influence on the overall market price, each farmer is said to be a price-taker. Each farmer has to accept the market price as a given and then sell as much as possible at that price. However, the more success a farmer has in increasing productivity and lowering production costs, the higher the profit he or she can earn at the going market price.

Economic Insight: *A lower-valued dollar often boosts export sales*

In contrast, if a producer isn't efficient, and production costs are relatively high, profit margins may be quite low. Losses may even occur if the market price declines. A producer may become uncompetitive in the market and either need to improve productivity, hope for a rise in the price, or close up production and look for something else to do.

Economic Insight: *A higher-valued dollar usually lowers the cost of imported goods and services*

The same is true for Canada in large, highly competitive, global markets. There are many buyers and sellers throughout the world for goods and services. Canada is a price-taker for most of the goods and services sold in global markets, where their international prices are determined. All we can do is attempt to sell as much as we can at those prices and aim to increase our productivity—and the gains to Canadians—from our international sales.

The Exchange Rate Can Affect the Revenues of Our Exporters

But one other thing will affect how much our exporters receive for their output—the exchange rate. The foreign currency prices (for example, US$) for many goods and services we produce are set in international markets. If the value of the Canadian dollar falls, then our producers receive more in Canadian dollars for what they sell, although they receive the same amount in the foreign currency that they would have received before the fall in the dollar. For example, suppose the international price of an item was US$100. If a Canadian producer sells that good to an international buyer, the producer receives US$100, which is converted to Canadian dollars. Now, suppose the value of the Canadian dollar falls (depreciates) against the U.S. dollar. The international price won't be affected by this—the producer would still receive US$100. But when the US$100 is converted to Canadian dollars, the producer would receive more Canadian dollars than before because of the decline in our dollar's value. The depreciation also reduces the cost of producing in Canada (measured in U.S. dollars). This raises Canada's competitiveness and provides an incentive for Canadian producers to produce and offer more of their product or service in international markets. That is why a depreciation in the value of the Canadian dollar can help in terms of export sales.

At the same time, if the value of our dollar declines against the U.S. dollar, Canadians would have to use more of our dollars to buy imports, even though the international price might be the same. This will likely reduce spending by Canadians on imports, but can help Canadian producers. The opposite is true if the value of the Canadian dollar appreciates. This can hurt our exporters but consumers may be happy with lower-cost exports.

In highly competitive global markets, changes in the world prices for goods and services and in the exchange rate affect how much our producers receive for what they sell. These changes also affect how much Canadians have to pay for imports internationally.

***Economic Insight:** The exchange rate affects trade, export sales and import purchases*

One key point to make here is the importance of productivity, or how good we are at producing things. For example, finding ways to spend less on resources to produce a good or a service than producers in other countries can help Canadian producers.

Suppose the global price for a product falls. If Canadian producers are more productive and able to supply this product at a lower cost, they may be able to deal with the lower global price and still make a profit. Their profit may be reduced, but they could still stay in business, whereas less productive producers may not be able to.

There are some markets in which Canadian exporters do influence the international price. In these cases, changes in the exchange rate will affect how much buyers in other countries will have to pay for our exports.

To summarize, Canada has a relatively small, open economy. We engage in a significant amount of international trade. The international value of our money—the exchange rate—is determined by the buying and selling of the Canadian dollar in foreign exchange markets. Knowing that, let’s examine who buys and who sells Canadian dollars and how this buying and selling can affect the value of the Canadian dollar.

8.4 WHO BUYS AND SELLS CANADIAN DOLLARS?

Here are groups that would be interested in buying and selling our currency in foreign exchange markets.

Sources of Demand for the Canadian Dollar

- Foreign purchasers and Canadian exporters. Those who buy our exports will buy our dollars, since they have to convert their own currency to pay our producers in Canadian dollars. Alternatively, if foreign purchasers pay in foreign currencies, Canadian exporters typically buy Canadian dollars as they convert the currencies. Note that our exports also include spending by people from other nations on travel and tourism in Canada, and on other services such as insurance and transportation.
- Investors. Those who want to invest in Canada or buy Canadian securities usually have to convert their currencies into Canadian dollars. Similarly, Canadians investing in other nations receive interest and dividend payments. For example, a U.S. investment will pay interest or dividends to Canadian investors in U.S. dollars. The investor buys Canadian dollars as the funds are brought to Canada.
- Speculators. Those who believe the value of our dollar is going to rise may speculate on that belief. In other words, they buy our dollar now with the intention of selling it later, at a higher value, for a profit.

Sources of the Supply of Canadian Dollars in Foreign Exchange Markets

- Importers. Canadians importing from other countries need to convert their Canadian dollars to the currencies of the nations providing the goods or services. Note that this includes spending by Canadian travellers abroad and spending to acquire services such as insurance.
- Investors. Canadians investing abroad usually have to sell our dollars to buy the currency of the nation where the investment will occur. Also, any foreign investors choosing to reduce their investments in Canada, or who are paid interest and dividends in Canadian dollars, will sell our dollar to buy their own currencies as funds are taken back home.
- Speculators. Those who believe the value of the Canadian dollar is going to fall will sell in anticipation of the decline and buy other currencies in an effort to earn a profit.

In addition, the Bank of Canada and the Government of Canada can intervene in the foreign exchange market. Canada’s current policy is to take such action only in exceptional circumstances. However, if policy-makers believe there are signs of a serious, near-term market breakdown indicating a severe lack of liquidity, they can intervene by buying or selling Canadian dollars. Note that this is rarely done.

Overall, buying and selling Canadian dollars in foreign exchange markets by these “players” determines the exchange rate. If demand for the dollar rises more than the supply, the value of the dollar will rise. If the supply increases over demand, the value will fall.

8.5 FACTORS INFLUENCING THE BUYING AND SELLING OF OUR DOLLAR

Now let's turn our attention to some of the key factors that can influence the exchange rate and the buying (demand for) and selling (supply of) of our dollar.

Interest Rates and Expected Inflation

If investors see interest rates in Canada as more attractive than interest rates in other countries, they may invest in Canada. This will increase demand for the dollar. The higher interest rates are in Canada, compared with those of other nations, the more likely foreign investors will be to buy Canadian dollars to invest here, puttinging upward pressure on the dollar's value. How Canadian interest rates compare with those in other nations, then, is one factor influencing the buying and selling of the Canadian dollar.

There is a key point to note here, though. Suppose interest rates are 4% in Canada and 3% in the United States. Does this mean foreign investors will be attracted to Canada and invest here rather than there? Not necessarily. Why? For a couple of reasons.

First, suppose that the expected rate of inflation is 3% in Canada and 1% in the United States. Since inflation erodes the value of money, the expected higher inflation in Canada should lead to greater erosion in the value of the Canadian dollar than in that of the U.S. dollar. Even though nominal interest rates are higher in Canada, the value of the Canadian dollar could be expected to fall in relation to the U.S. dollar because of the higher inflation. Therefore, the difference in inflation rates and the expected decline in the value of the Canadian dollar could lead to investing in the United States. The likely real rate of return would be higher in the United States.

It may also be the case that, for one or more reasons, investors foresee a relative depreciation in the value of the Canadian dollar. This could lead them to invest in the United States over Canada. So, in general, expectations for a decline in the value of the Canadian dollar can affect investors' decisions.

Second, even if the expected rate of inflation is the same in Canada and the United States, some investors may still not invest in Canada for a 3% return as opposed to 2%. Why? The U.S. economy is so prominent in the world economy that investors may be inclined to have more faith in it. They may feel a natural attraction to the United States and its potential future economic strength. Canadian real rates of interest may have to be higher to entice investors to overcome their inclination to invest in a strong world superpower such as the United States.

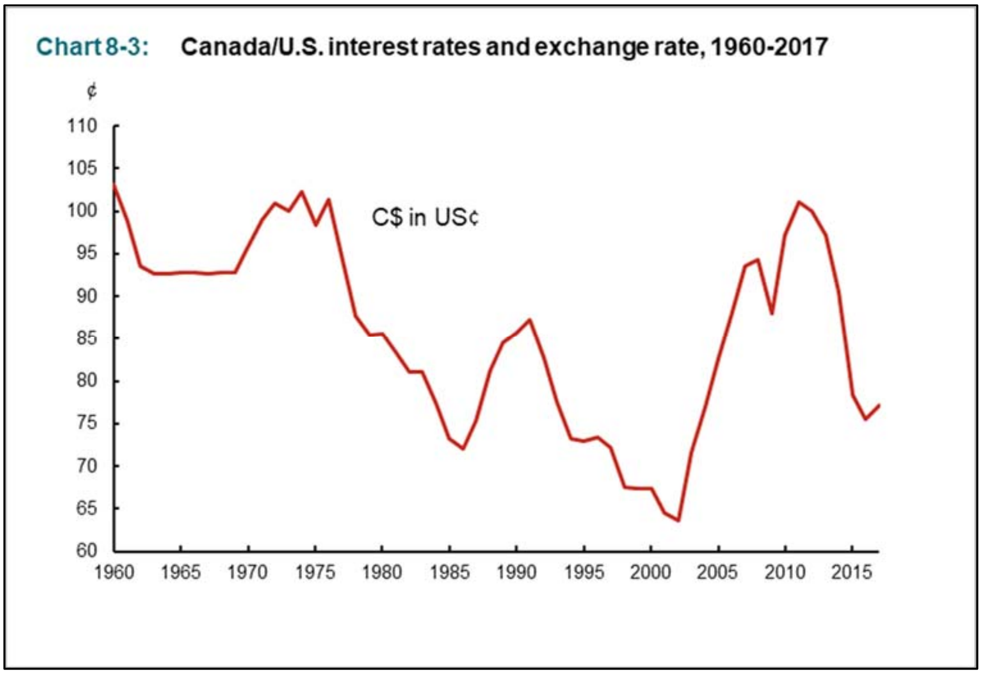
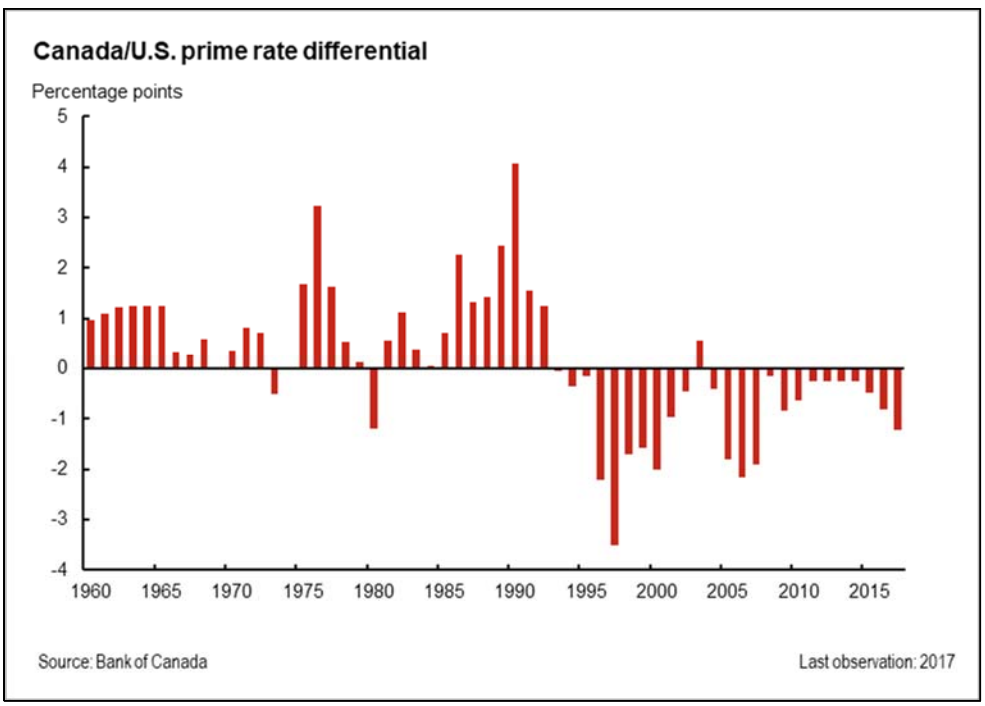


Chart 8-3: Canada/U.S. interest rates and exchange rate, 1960-2017
¢
110
105
100
95
90
85
80
75
70
65
60
1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
C$ in US¢


Canada/U.S. prime rate differential
Percentage points
5
4
3
2
1
0
-1
-2
-3
-4
1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Source: Bank of Canada
Last observation: 2017

So, interest rates clearly have an effect on foreign investors, their investment decisions, and their buying and selling of Canadian dollars. In addition, if Canada has relatively high interest rates, Canadians who wish to borrow for investment may be encouraged to borrow the funds abroad, at lower rates. They can then bring the funds into Canada for investment purposes. This also increases demand for—and puts upward pressure on—the Canadian dollar, as the borrowed foreign funds are used to buy Canadian dollars.

Generally, the higher the expected rate of inflation in Canada compared with that in other nations, the higher our interest rates will have to be to attract foreign investors.

Purchasing Power Parity

Comparing inflation rates among nations brings us to the concept of purchasing power parity. Suppose the expected inflation rate in the next year is 2% in Canada and 4% in the United States. This means that the purchasing power of the U.S. dollar can be expected to decline relative to that of the Canadian dollar. One would expect the U.S. dollar to lose 2% more of its purchasing power than the Canadian dollar.

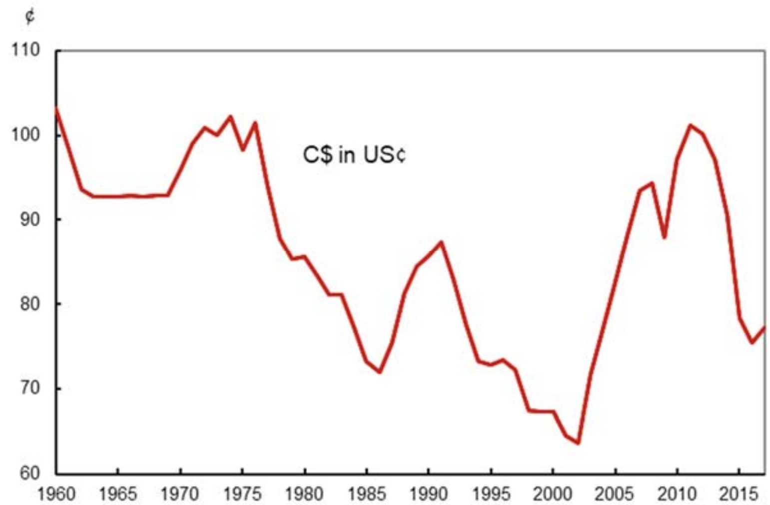
Economic Insight: *The better Canada is at controlling inflation, the higher will be the value of our currency*

This should have an impact on the exchange rate. Think about it. If the exchange rate between the two currencies stayed the same, it would imply that there was no relative change in the external value and purchasing power of the two currencies. In fact, as we now know, there will be a change in the relative value and purchasing power of the two currencies in our example because of the differences in inflation rates.

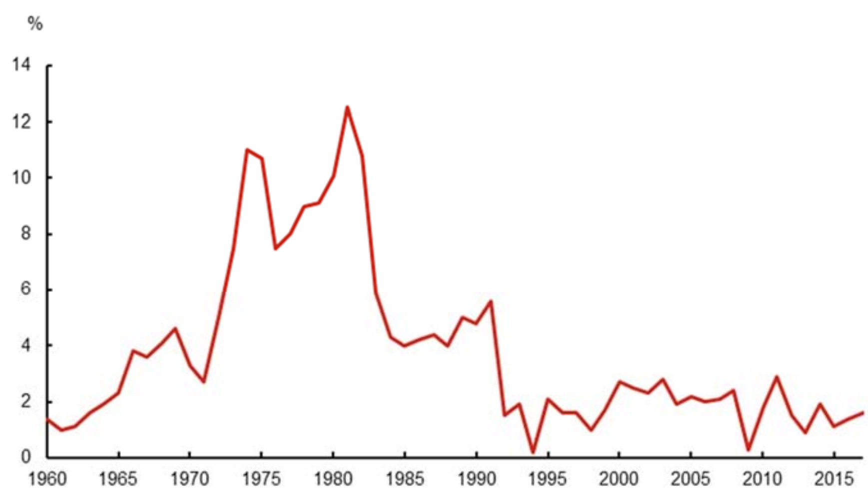
The purchasing-power-parity theory states that changes occur in the exchange rate of the currencies of two countries to reflect differences in their rates of inflation. That is, in the long run, the value of the Canadian dollar should change in relation to the value of the U.S. dollar when the rate of inflation in Canada differs from the inflation rate in the United States. This happens to the point where the “law of one price” would apply. That is, in the long run, exchange rates should adjust to the point that consumers could buy the same basket of goods regardless of the country where that basket is purchased. It should not matter whether they use the currency of one country or convert it to the currency of another country to make the purchase. That is the main point to understand about purchasing power parity.

The better Canada is at controlling inflation (compared with other countries), the higher will be the relative value of our currency.

Chart 8-4: Rate of inflation and value of Canadian dollar, 1960-2017



CPI (annual per cent change)

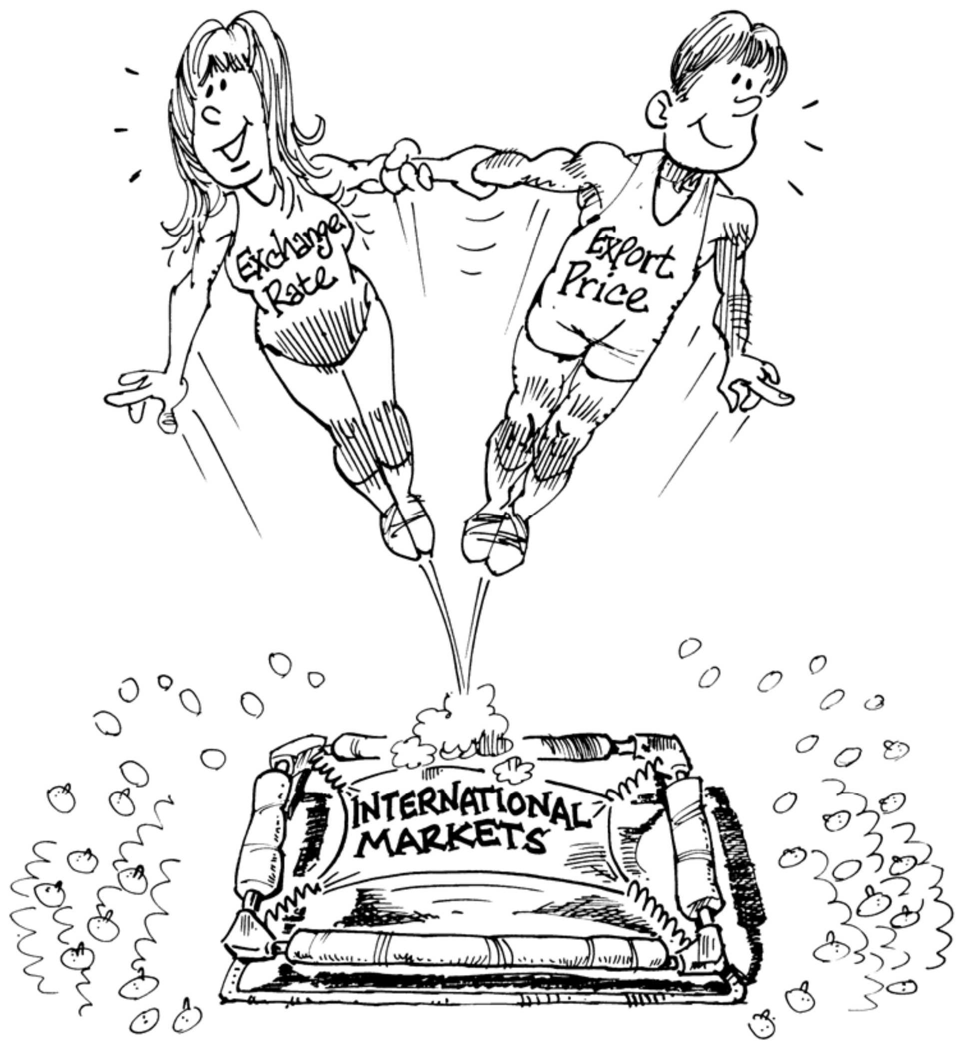


Sources: Statistics Canada and Bank of Canada, Table 18-10-0004-01 Last observation: 2017

__Economic Insight:__ Our exchange rate is affected by our terms of trade

Export Sales

As we saw, the more success we have in selling our goods and services abroad, the higher the demand will be for our dollar—and the higher its potential value. This may sound as if our export sales may eventually be hurt if the value of our dollar climbs as a result of the success. However, even if the dollar rises in value, if we continue to produce high-quality goods and services that other nations want, we can continue to have export success.



As the value of the Canadian dollar rises in international foreign markets, the international prices of some of our exports also tend to rise.

The impact of our higher-valued dollar for foreign buyers is that they see the cost of our currency rising for them. So, it costs them more to make the same purchases from Canada than it did in the past. That challenges our exporters to do an even better job in terms of efficiency, marketing, quality of technology etc. to remain competitive in global markets.

Our Exchange Rate and Our Terms of Trade

Our exchange rate is also affected by our *terms of trade*. If world prices for what we produce and export rise compared with the world prices for what we import from other nations, we would enjoy more favourable terms of trade. That is, we would be receiving more from our higher-priced export sales than we would be spending on lower-priced imports. This would lead to a higher demand for the Canadian dollar and put upward pressure on its value.

If, however, the world prices for what we export fall compared with the prices for what we import, we would less favourable terms of trade. Demand for the Canadian dollar would decrease as a result of the lower global prices for our exports, putting downward pressure on its international value.

Economic Insight: *Canada's currency is significantly affected by global commodity prices*

For example, Canada produces and exports a large quantity of resources—commonly referred to as commodities—such as oil, natural gas, gold and uranium. So, if the world price of oil rises, that should mean more favourable terms of trade, since Canada is a large exporter of oil. The higher oil price our exporters receive creates an increase in demand for the Canadian dollar in foreign exchange markets.

Overall, then, one of the most significant factors affecting the international value of the Canadian dollar is the global prices for commodities that we export.

In general, the more favourable the terms of trade for Canada and the higher the global prices for our major exports, the higher the demand for our dollar. The opposite is true if our terms of trade are less favourable and the global prices of our key exports decline.

Investor Confidence

Economic Insight: *The value of our dollar is affected by the degree of confidence investors have in our economy*

The more confidence investors have in the future performance, growth and strength of our economy, the more attractive Canada will be to investors. They will buy more Canadian dollars and put more upward pressure on the dollar's value.

Furthermore, the more confidence other nations have in Canada's economic policy-makers—and the more effective economic policies are in maintaining stability, fostering growth and controlling inflation—the more attractive Canada will be to foreign investors and the stronger our overall economic performance will be.

The Exchange Rate Is a Relative Price

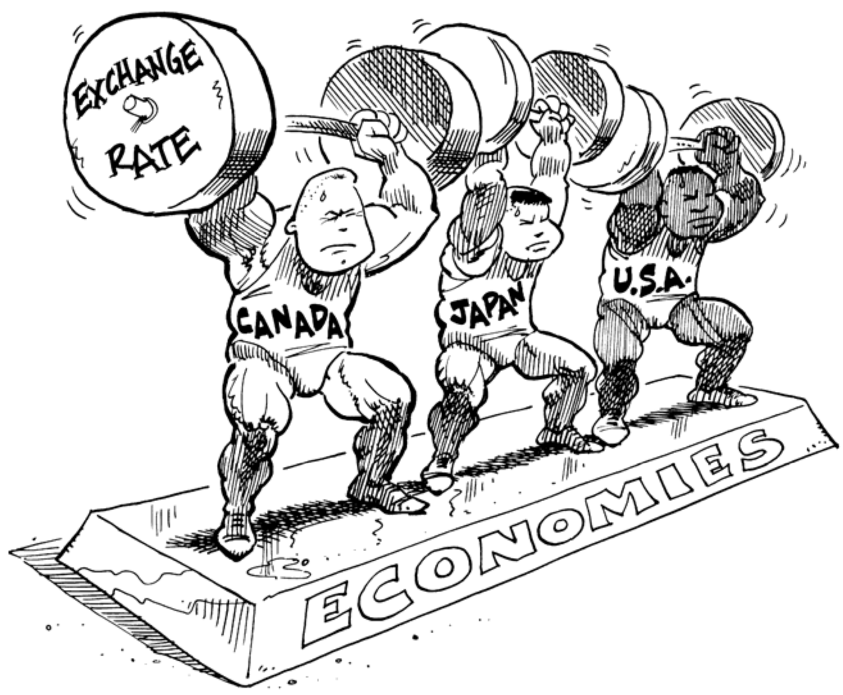
As we consider the factors that influence the exchange rate, it is important to understand that it is a *relative* concept; in fact, the exchange rate is referred to as a relative price. Why?

Economic Insight: *The exchange rate is a relative concept*

The value of our dollar varies according to how Canada performs *relative* to other countries in a number of ways. We noted that the dollar varies in relation to our terms of trade. Our exchange rate is also affected by how high or low interest rates in Canada compared with rates in other countries. In other words, the value of the dollar depends on a number of relative factors—prices, terms of trade, level of domestic demand, interest rates, etc. Economic decisions—buying, selling and investing—are affected by changes in these relative factors and, in turn, affect the exchange rate.

8.6 SHOULD ONE CANADIAN DOLLAR EQUAL ONE U.S. DOLLAR?

As we consider the international value of our currency, there is a point worth mentioning. Some Canadians think that one Canadian dollar should be equal to one U.S. dollar. But our discussion has shown that there is no reason for this, which shouldn't be surprising when you think about it. Do people believe that one Canadian dollar should be equal in value to one yen, or one pound or one euro? No. Hong Kong and Singapore also use dollars, but we never assume that one Canadian dollar should equal a Hong Kong or Singapore dollar. We get caught up with the word "dollar" and our proximity to the United States. However, the dollar will find its value according to the changes that occur in the relative factors we have mentioned. What we generally want is a Canadian dollar that is appropriately valued according to these fundamentals.



Ultimately, the international value of the Canadian dollar reflects the strength of the Canadian economy in relation to other economies throughout the world.

So, we can't say that we want a high-valued or low-valued dollar. What we want is a dollar that has an international value that accurately reflects the state of our economy relative to that of other nations in the world. After all, if we are performing poorly, if our terms of trade are not favourable and if our rate of inflation is higher than that of other countries, we cannot expect to have an appreciating dollar. In such circumstances, the lower-valued dollar simply reflects our terms of trade and the higher rate of inflation in Canada. It also permits Canadian exporters to continue to sell to foreign buyers. Note that, since most advanced economies have now set a 2% inflation target, variations in the rates of inflation among countries are becoming less of a factor affecting exchange rate movements.

In contrast, a higher-valued Canadian dollar based on a strong economy and favourable terms of trade is not something we want to resist. Our exporters are not hurt by a strengthening dollar if its rise reflects success in keeping costs down in Canada.

8.7 THE BANK OF CANADA AND THE EXCHANGE RATE

***Economic Insight:** Interest rate changes can affect the exchange rate*

We have now looked at the factors that might influence the buying and selling of Canadian dollars and, therefore, the exchange rate. We begin to see how changes in the exchange rate can affect spending and prices in Canada. The Bank of Canada is interested in this. It is also interested in how interest rate changes can affect the exchange rate. Why? Because the Bank can affect short-term interest rates.

The effect of interest rates on the exchange rate is an important relationship to understandbecause changes in the exchange rate affect spending and demand in our economy. Since changes in the exchange rate will affect export sales and import purchases, they can also directly affect inflation through the prices of imported goods and services.

Monetary policy actions can therefore influence export sales and import purchases because changes in interest rates can influence the international value of our money. For example, if the inflation rate is threatening to move higher than the 2% target owing to an overheating economy, the Bank may use its policy interest rate to raise short-term interest rates to cool things off. This would return the rate of inflation to the target range of 1 to 3 per cent, which may lead to an increase in the value of the dollar. If the value of the dollar rises, spending on exports may be dampened, as foreign buyers have to use more of their currency to acquire Canadian dollars. Lower spending on our exports would contribute to lower total spending in our economy.

***Economic Insight:** The Bank of Canada rarely intervenes in foreign exchange markets to affect the dollar's value*

A higher-valued dollar also tends to boost import sales, as Canadians find the price of imports lower. Recall from Module 5 that total spending equals consumption (C) + investment (I) + government spending (G) + [exports (X) – imports (M)]. If a higher-valued dollar reduces X and boosts M, this would put downward pressure on output in Canada.

We have looked at why Canadian dollars might be bought or sold in foreign exchange markets. We have also considered some of the factors that can influence the buying or selling of our dollars. And we have noted that monetary policy can, through changes to interest rates, influence the exchange rate.

8.8 Fixed Versus Flexible Exchange Rates

In our discussion here, we have regarded the exchange rate for the Canadian dollar as something that can change, for a variety of reasons. It is not difficult to conclude, then, that what we have been discussing is a *flexible exchange rate*.

Economic Insight: *Canada pursues a flexible exchange rate policy*

The exchange rate can shift, owingto market forces such as those we have discussed. It is fair to say that a possible disadvantage of flexible rates is that in a changing world, periods of volatility in the exchange rate can occur. Swings in the exchange rate can pose real challenges to our exporters and importers as they adjust to changes in the international value of our money. This is not to imply that flexible rates are necessarily volatile. Most of the time they are not.

Moreover, when there have been substantial shifts in the exchange rate, they have usually had a stabilizing effect on the Canadian economy. For example, the dramatic drop in the global price for oil in 2014 had a significant impact on our terms of trade—and on the value of the dollar. If foreign buyers could pay less for oil, it meant that they didn't need as many Canadian dollars. This lowered the demand for Canadian dollars in foreign exchange markets and led to a decline in the dollar's value. But the weaker Canadian dollar made our non-oil exports more competitive, helping to offset the adverse impact of lower oil prices on the economy.

Economic Insight: *A flexible exchange rate policy enables greater policy independence*

What about *fixed exchange rates*? A country with a fixed exchange rate is committed to maintaining the international value of its currency at a particular level. Suppose that Canada decided to go to a fixed exchange rate regime and stated that the Canadian dollar would be held at a value of US$.80 (remember, we are using the exchange rate as it is commonly reported in the media rather than how it is actually quoted in international exchange markets). That means that the Canadian government and its monetary arm, the Bank of Canada, would commit to maintaining that value even if market forces were pressuring the value of the Canadian dollar away from that $.80 level. For example, if demand for the dollar started pushing its value up, Canada would have to act to increase the supply of Canadian dollars in foreign exchange markets or undertake actions to lower the demand. Similarly, if pressures mounted for the value of the dollar to decline, actions would have to be taken to either decrease the supply or increase the demand.

Canada was on a fixed exchange rate regime in certain periods in the past, but not in recent years. Fixed exchange rates may be used to achieve international stability in the value of a nation's currency as a way of reducing the rate of inflation if the country fixes its currency to that of a country committed to achieving price stability. In fact, a number of countries around the world have adopted fixed exchange rate policies to try to attain more stability in the external value of their currencies.

We are now prepared for a detailed look at how the Bank of Canada conducts monetary policy in Canada.