How Exchange Rates Affect Agricultural Markets

Introduction

The exchange rate between two currencies specifies how much one currency is worth in terms of the other. The Canadian exchange rate impacts the competitiveness of the agriculture sector by affecting prices of agriculture products and inputs and, therefore, farms' profits. This module provides an overview of what is an exchange rate, what factors determine the exchange rate, the effects of changes in exchange rates on agricultural markets, and how to manage the risk of currency exchange fluctuation.

Although the major market for currency in the world is FOREX, other markets like CME (Chicago Mercantile Exchange) or CBOE (Chicago Board Options Exchange) offer currency exchange rate products. The currency abbreviation or currency symbol for the Canadian dollar is CAD and for the US dollar is USD. In this article, C$ and US$ represent the Canadian and the US dollar respectively, with the dollar sign.

What is the Exchange Rate?

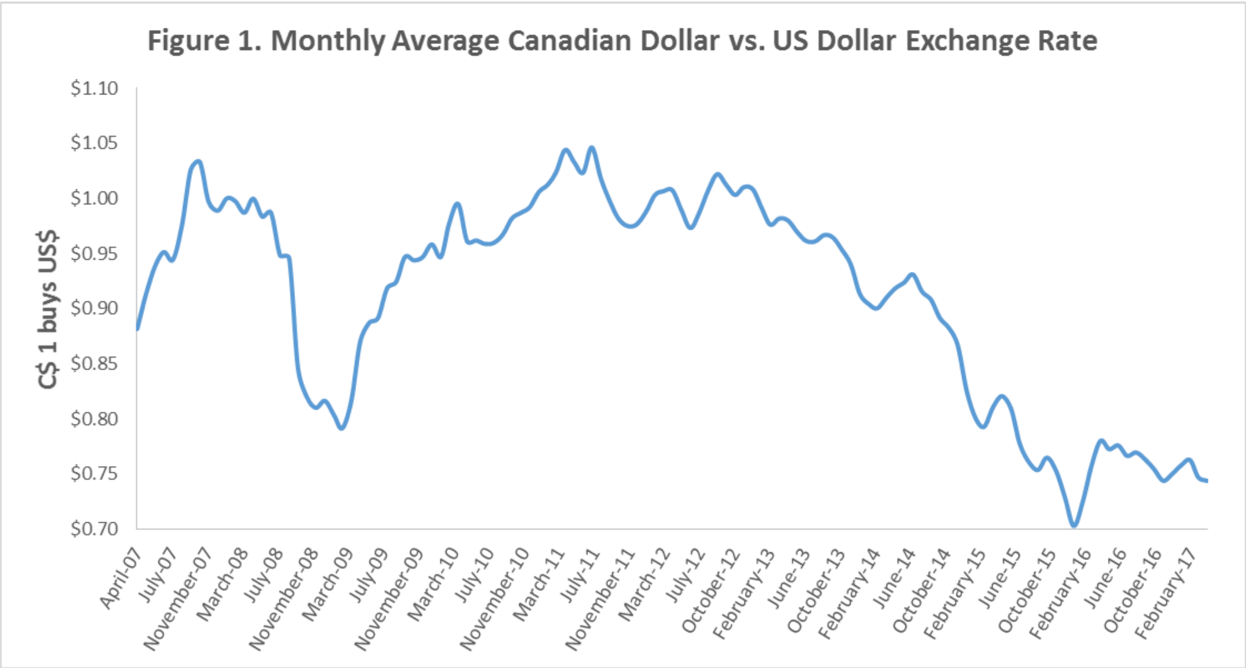
The exchange rate is the rate in which one currency of one country is valued relative to the currency of another country. There are two ways to express exchange rates:

- The number of units of foreign currency necessary to purchase one unit of domestic currency. For example, an exchange rate of 0.9312 means US$ 0.9312 would be needed to purchase one Canadian dollar.

or

- The number of units of domestic currency necessary to purchase one unit of foreign currency. For example, the 0.9312 rate could also be expressed as requiring C$1.0739 to buy one US dollar. In other words, $0.9312 is really 1/1.0739 and 1.0739 is really 1/0.9312.

Changes in exchange rates are relevant to farm businesses. The most significant foreign currency to the Canadian agriculture and food business is the US dollar. This is due to the high level of trade between Canada and the US. A large percentage of Canadian agri-food exports are sold to the US and a considerable amount of Canadian farm inputs (e.g., machinery and pesticides) are imported from the US. In addition, most of Canada's agri-food trade that takes place with other countries is priced in US dollars. Because the US dollar is the dominant world currency, Figure 1 shows the Canadian dollar exchange rate in terms of the US dollar.



Source: Bank of Canada

What Factors Influence the Exchange Rate?

In the short-term, the exchange rate is determined by the flow of a currency between two countries. Currency flow is affected by interest rates, trade balance, investors' confidence and issues or expectations in one country relative to another country.

The Canadian trade balance affects the value of the Canadian dollar. When Canada earns more from sales of exports than it pays for imports, it has a trade surplus. A trade surplus increases the demand for the Canadian dollar and usually results in a rising Canadian dollar. On the other hand, a trade deficit will lower the demand for Canadian dollars and cause a decrease of the Canadian dollar exchange rate.

Foreign investors' confidence and expectations will also influence the exchange rate. If investors are confident in the political and economic stability of Canada, they are more likely to purchase Canadian assets. This may push up the value of the Canadian dollar.

Why Are Exchange Rate Changes Important for Farm Business?

Exchange rate changes impact Canadian export prices, the price of imported inputs, and the competitiveness of the Canadian agriculture industry. The Canadian exchange rate versus the US dollar is arguably the most important as over 40 per cent of Alberta's total agri-food export sales were to the US in recent years.

Changes in the exchange rate affect the competitiveness of Canadian exports in the international market. An increase in the Canadian dollar will influence the agriculture industry by making Canadian products more expensive for importers, unless Canadian producers accept a lower price for their product. A decrease in the Canadian dollar will make producers more competitive and generally would increase exports. The exchange rate will also affect Canadian commodities that are priced in the US futures market.

As an example, a Canadian hog producer signs a contract to sell hogs in the US in US dollars. The Canadian dollar increased in value from US$ 0.95 per C$ to US$ 1.05 per C$. If the price of lean hogs on the US contract is US$ 135/cwt, the price the Alberta farmer would receive at the 0.95 exchange rate would be C$142.10/cwt (which is US$135/0.95). At the 1.05 rate, the farmer would receive C$128.57/cwt (which is US$135/1.05). The price of the hogs in the US had not changed, but the revenue that the Alberta farmer received fell as the Canadian dollar rose. Canadian hog producers in this situation would have to lower their price, look for ways to increase margins or decrease costs to remain competitive.

Even if agricultural products are not destined for the US, many of these products are priced in US dollars. If the Canadian dollar exchange rate rises and the price of the product remains constant in Canadian dollars, Canadian exports will appear more expensive to buyers. When these exports compete with US products directly, the increase in Canadian exchange rates will result in a competitive disadvantage for Canadian exports. When Canada competes against other exporters (e.g., European Union and Australia), the competition depends on the direction and magnitude of the competitor's currencies against the US dollar compared to ours.

As a large amount of farm inputs (e.g., machinery and pesticides) are imported, exchange rates will affect those costs. An increase in the Canadian dollar will decrease the cost of imported products and a decrease in the Canadian dollar will increase the cost of imported inputs. However, the price change on imported inputs depends on the willingness or ability of the suppliers to pass on the exchange rate changes to producers.

In the long-term, exchange rate changes influence the investment and production of the agriculture sector. The agri-food industry needs to improve productivity and efficiency in order to remain competitive in the international market if the Canadian dollar remains high.

How to Manage the Exchange Rate Risk - a Quick Tool

Exchange rate risk may be managed in two ways:

- by hedging transactions on the futures or options markets

or

- through an exchange forward or options contract with a bank

When a Canadian producer plans to sell a product at a price which is originally set in the US market, the risk is that the cash price the producer receives in Canadian dollars will fall if the Canadian dollar rises. The exchange rate risk can be hedged by taking a long (buy) position on the Canadian dollar futures market. Loss in the cash value of the product resulting from the rising Canadian dollar will be offset by the gain on the long (buy) position of the Canadian dollar futures. The product seller reverses the futures hedge by selling back the long Canadian dollar position when the product is actually sold.

Alternately, if a processor or producer needs to buy a product in the US, the risk would be that they must pay a higher commodity price if the Canadian dollar falls. In this case, the processor or producer would take a short (sell) hedge Canadian dollar futures position. If the value of the Canadian dollar drops, the higher price in Canadian dollars paid for the product would be offset by a profit on the Canadian dollar futures position. When the product purchase is made, the product buyer reverses the futures hedge by buying back the short position.

An exchange forward contract allows the producer or processor to buy or sell one currency against another for settlement on the day that the contract expires. A forward contract eliminates the risk of fluctuation of the exchange rate by locking in a price today for a transaction that will take place in the future. The producer or processor can arrange a forward contract or option with a bank. However, the producer or processor needs to be aware of bank specific credit requirements as well as costs associated with these transactions. Local bank representatives are the first contact for anyone considering using an exchange forward contract.

Summary

Understanding exchange rate and its basic application is important for agricultural producers. Exchange rates impact agricultural commodity prices and farmers' margin. Most international agricultural transactions are in US dollars. Agricultural businesses need to recognize the impact of fluctuating currency on their business and consider ways of managing this risk. Exchange rate risk may be managed in two ways. Producers can hedge transactions on the futures or options markets or they can hedge through an exchange forward or options contract with a bank.

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