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THE IMPACT OF THE APPRECIATION OF THE CANADIAN DOLLAR ON CANADA’S GRAIN AND OILSEED PRICES AND TRADE

Canada is the fourth largest exporter in the world grains and oilseeds (G&O) market. With a relatively small domestic market for its products, the Canadian G&O industry depends heavily on the international market. The appreciation of the Canadian dollar, against the United States (US) dollar, since 2002-2003 has significantly reduced domestic and export G&O prices and returns to Canadian producers, in terms of Canadian dollars. For 2006-2007, the Canadian dollar is projected by the major Canadian banks to be slightly stronger than 2005-2006, which will continue to depress Canadian G&O prices.

BACKGROUND

The exchange rate is the value of one currency in terms of another. Under a floating exchange rate system, the value of a country’s currency is determined by supply and demand for that currency which, in turn, reflects a country’s international trade in goods and services, and foreign investment. The value of the Canadian dollar against the US dollar is very important because the US dollar has been the world's pre-eminent international currency for the past half century and most Canadian trade is with the US. On average, CAN$100 billion per day is bought and sold on the international exchange markets.

Central banks are sometimes directly involved in the foreign exchange market as a means of achieving monetary policy objectives. The Bank of Canada intervenes in foreign exchange markets only on a discretionary, rather than a systematic, basis and only in the most exceptional of circumstances. However, it influences the exchange rate by changing the target for the Overnight (Interest) Rate.

The main factors determining exchange rates are *interest rates, inflation rates* and *the balance of payments*. These factors, in turn, influence supply and/or demand for a particular currency. When the demand for a currency increases or the supply of a currency decreases, the currency appreciates in value relative to another currency; and vice versa.

Differentials in interest rates between two countries influence international capital flows and, thus, short-term exchange rates. An increase in the interest rate is expected to attract foreign capital, raising the demand for and value of the domestic currency. When the inflation rate is high, investors are less likely to invest in a country - even with higher interest rates - because the value of the currency will be eroded by inflation.

The balance of payments approach emphasizes the flow of goods, services and investment capital. A deficit in a country’s balance of payments indicates stronger demand for foreign currencies, relative to demand for its own currency, resulting in a depreciation of its own currency.

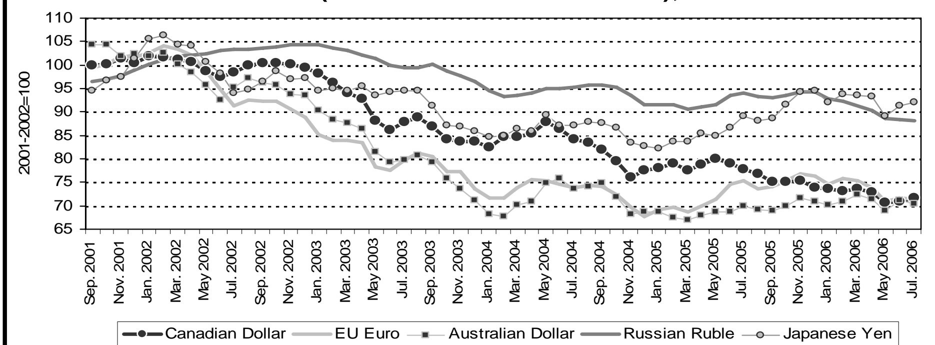
The Multilateral Depreciation of the US dollar

The US dollar has depreciated sharply against other major currencies in recent years, as shown in Figure 1. For the past five crop years, the average value of the US dollar has dropped by 30% relative to the Australian dollar, 26% to the Canadian dollar and the European euro, 12% to the Brazilian real, and 8% to the Japanese yen and Russian ruble. The exception is the Argentine peso, which depreciated by 46% against the US dollar during the same period.

The single largest factor contributing to the weakness of the US dollar has been the large and growing *US current account deficit*. Some suggest that further depreciation of the US dollar is necessary to resolve the "global imbalance".

Three other factors have contributed to the weakness of the US dollar: (1) the sharp increase in *US federal budget deficit* has undermined investor confidence and US state and local governments have also run high deficits, (2) US *households* have increased their debt load to record high levels, and (3) confidence in US stocks, bonds and other investments, triggered by corporate accounting scandals has declined.

FIGURE 1: CHANGES IN EXCHANGE RATES FOR MAJOR CURRENCIES (AGAINST THE US DOLLAR), 2001-2006



Source: Pacific Exchange Rate Service

The Appreciation of the Canadian dollar
In the last five years (August-July), the Canadian dollar has appreciated by 26% against the US dollar, from CAN$1.57 per US dollar (/US$) for 2001-2002 to CAN$1.16/US$ for 2005-2006. This appreciation appears to be largely due to three factors: (1) the weakness in the US dollar, (2) strong foreign demand for Canadian goods, and (3) decreased deficit in investment income.

World prices for energy and non-energy commodities have influenced the value of the Canadian dollar. Sustained strength in the US economy and tremendous growth in China and other parts of Asia have led to a substantial increase in world demand for oil and gas, metals, and other commodities that Canada exports.

Canada's deficit in investment income has been shrinking rapidly for both direct and portfolio investments. As the current account surpluses accumulate, the deficit on portfolio investment has been falling, which can be tracked back to the elimination of fiscal deficits. The other factor is a shrinking deficit on direct investment income which moved into a surplus in the first quarter of 2006 for the first time since 1994.

THE IMPACT ON CANADIAN G&O MARKETS

Canada's Reliance on G&O Trade
Canada is the fourth largest exporter in the world G&O market. Since 2000-2001, Canada has exported about 22.6 Mt of G&O annually, which accounts for about 8.1% of world exports. The US is the largest exporter, with 109.1 Mt of exports or 38.9% of the market. This is followed by Argentina with 10.7% of the market, and Brazil with 8.2%. Among the other major exporters, Australia and the EU each account for 7.8% of the market share, and Russia and Ukraine each account for 3% of the world market.

The Canadian G&O sector is heavily dependent on international markets to sell its products, but that reliance is diminishing. For the past five years, G&O exports have accounted for about 39% of Canadian production, compared to 46% during the 1990s and 50% during the 1980s. For the past 5 years,, exports accounted for 26% of the total production for the US, 23% for Brazil, 40% for Argentina and 61% for Australia.

Canadian imports, mainly corn and to a lesser extent soybeans, from the US, have increased significantly in the last decade. As well, Canadian domestic prices for G&O follow international prices closely.

The Dominance of the US dollar
Exchange rates are probably the most important macroeconomic variable affecting Canada's international trade in G&O. Exchange rates affect export prices and volumes, domestic prices, Canada's competitiveness in world markets, and import prices and volumes.

Under the current international financial system, the US dollar is the predominant currency in world trade, including trade in G&O, in terms of pricing, payments and settlements. This role has been strengthened further by the fact that the US is the world's largest G&O producer and exporter.

Canadian G&O prices are largely determined by global supply and demand conditions, especially in large producing countries, such as the US and the EU. Canada is a relatively small player in the world market and is essentially a "price taker" in the world G&O markets, except for durum wheat, in which Canada accounts for 50% of the world exports. Since G&O are traded in world markets in US dollars, the appreciation of the Canadian dollar, compared to the US dollar, results in lower G&O domestic and export prices in terms of Canadian dollars.

Export Prices
Wheat is Canada's most important grain export, accounting for 70% of the total G&O exports for the last five years. Canada has established a reputation for supplying high quality wheat for the world market. No. 1 Canada Western Red Spring wheat with 13.5% protein (1CWRS13.5) competes with the US Dark Northern Spring wheat with 14% protein (US DNS14.0). The Canadian export price for 1 CWRS13.5 FOB St. Lawrence follows the price for US DNS14.0 FOB Pacific Northwest very closely, with the spread reflecting the difference in quality, location, and other factors.

Figure 2 illustrates the effect Canada's stronger dollar has had on wheat export prices. The price for US DNS14.0 has been at high levels since 2001-2002 and moved up in three of the four years. For the same period, the Canadian dollar has appreciated significantly against the US dollar. As a result, the price for 1CWRS13.5 has generally trended down. Compared to its value in the base year (2001-2002), the appreciation of the Canadian dollar is estimated to have lowered Canadian export prices by $12 per tonne (/t) for 2002-2003, $41/t for 2003-2004, $60/t for 2004-2005 and $81/t for 2005-2006.

Canola is the major oilseed crop Canada exports, both in seed and as processed products. The export price for No. 1 Canada I/S Vancouver has decreased since 2001-2002, due to the significant appreciation of the Canadian dollar and other factors. Compared to its value in the 2001-2002, the appreciation of the Canadian dollar is estimated to have lowered canola export prices by $20/t in 2002-2003, $67/t in 2003-2004, $82/t in 2004-2005 and $99/t in 2005-2006.

Domestic Prices
G&O prices in Canada generally follow international prices very closely. In addition to the heavy dependence on exports of the Canadian G&O industry, the Canadian domestic market is highly integrated with the world market through the US market where US prices serve as the basis for the rest of the world. Specifically, the Canadian domestic price for wheat is based on the futures price on the Minneapolis Grain Exchange (MGE). Corn, soybeans and oats are generally priced against the futures prices at the Chicago Board of Trade (CBoT). Canola and feed barley prices are determined at the Winnipeg Commodity Exchange and influenced by CBoT soyoil and corn prices, respectively.

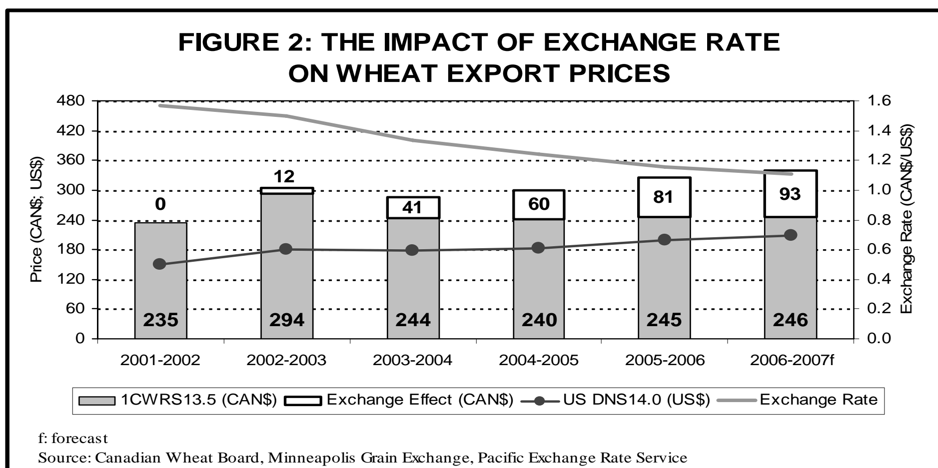


FIGURE 2: THE IMPACT OF EXCHANGE RATE ON WHEAT EXPORT PRICES

f: forecast
Source: Canadian Wheat Board, Minneapolis Grain Exchange, Pacific Exchange Rate Service

When the Canadian dollar appreciates, world G&O prices in Canadian dollars decrease accordingly, depressing not only Canada's export prices but also domestic prices. Furthermore, the appreciation of the Canadian dollar makes imports less expensive than domestic supplies, further pressuring Canadian domestic prices.

Corn prices at Chatham elevator and ***feed barley*** prices at Lethbridge are highly correlated with CBoT corn prices. The appreciation of the Canadian dollar has substantially lowered the landed price of US corn, in both eastern and western Canada. This has contributed to increased corn imports from the US, and lower Canadian domestic prices for corn and feed barley.

Lower import and domestic G&O prices have reduced producer prices significantly. However, the livestock and the G&O processing sectors have benefited from lower G&O prices. For G&O farmers, the appreciation of the Canadian dollar by itself has the effect of lowering production costs, as a result of lower import and domestic prices for some agricultural inputs. However, this effect has been more than offset by the higher energy prices. In addition, for multinational companies, a strong Canadian dollar means higher wages, salaries and other costs for their Canadian operations compared to their US operations.

Export Volumes
Economic theory suggest that the quantity of exports should be inversely related to changes in the exchange rate. The appreciation of the Canadian dollar would then be associated with lower export volumes because Canadian exporters would find it more difficult to compete with other exporting countries.

As indicated in Figure 3, Canadian G&O exports had grown significantly since the 1970s and reached the highest level in the mid-1990s. The exchange rate was one of the major factors underlying this growth, explaining about 50% of the changes in export volumes. Canadian G&O exports have trended down, from 34 Mt in 1994-1995 to 27 Mt in 2005-2006. However, the data fail to support a significant impact of exchange rate on export volume for this period. During the period of 1994-1995 to 2001-2002, while the Canadian dollar depreciated by 35% against the US dollar, Canadian G&O exports decreased by over 30%, rather than increased as economic theory predicts. Since 2002-2003, while the Canadian dollar appreciated by 26%, exports have increased by 17%. Adverse weather conditions caused a substantial decrease in domestic G&O production in 2001-2002 and 2002-2003, and domestic feed use trended higher in recent years, reducing exportable supplies.

There are several possible explanations as to why Canada's export volumes do not reflect how much the Canadian dollar has strengthened during the period in question. First, while export prices decline significantly for Canada, the shift from exports to domestic sales is limited. For Canada, since the domestic market is small, relative to exports, domestic demand is generally inelastic, particularly for the short-term, and domestic prices follow international prices closely.

Second, since world G&O prices are quoted in US dollars, much of the potential impact of the appreciation has been absorbed by Canada in terms of lower export prices in Canadian dollars. For importing countries, the strengthening of the Canadian dollar does not necessarily make imports from Canada more expensive than from alternative sources.

Third, other major currencies have also appreciated against the US dollar, limiting other exporters' potential advantage in competitiveness over Canada. Lastly, currencies for some of the major G&O importing countries also appreciated against the US dollar, making imports cheaper in their own currencies and raising import demand.

Export Competition
In the world G&O market, Canada competes with traditional exporters such as the US, Australia, the EU and Argentina, as well as newly emerged exporters such as Brazil, Russia and Ukraine.

Depending on the extent to which major currencies appreciate against the US dollar, G&O *export prices*, in local currencies, are expected to have decreased the most for Australia, followed by Canada, the EU, Brazil and Russia. The US was little affected in terms of export prices, while Argentina was better off. The impact of exchange rates on export market shares among the major exporters should follow similar order.

With respect to the impact of recent changes in exchange rates on *market shares*, empirical data show mixed results. Compared to the period of 2001-2002 and 2002-2003, the market share for the period of 2003-2004 to 2005-2006 has decreased by 3.4 percentage points for the EU, increased by 1.8 points for Brazil, one point for the US and 0.6 points for Ukraine. These changes are generally consistent with changes in the value of their currencies, relative to the US dollar.

However, the market share has increased by one percentage point for Canada, 0.7 points for Australia, 0.2 point for Argentina and 0.1 point for Russia, which are inconsistent with changes in exchange rates. The fluctuation in exportable supplies, low elasticity for domestic demand and depressed domestic prices could constrain the ability for major exporters to respond to exchange rate changes, particularly for the short term.

Imports
Canada plays a much smaller role in the world G&O import market than in the export market. In the past five years, G&O imports averaged 3.8 Mt, of which 74% were corn and 12% were soybeans. While having been an exporter and an importer simultaneously in the corn and soybean markets, Canada has generally been a net exporter of soybeans but has become a net importer of corn since 1991-1992.

The Canada/US exchange rate has a moderate impact on the *quantity* of Canadian G&O imports. The appreciation of the Canadian dollar reduces the landed price of imports, mainly from the US, by a proportionate amount in Canadian dollars. In the case of corn, the strong growth in import demand and the fluctuation of domestic feed grain supplies also play major roles.

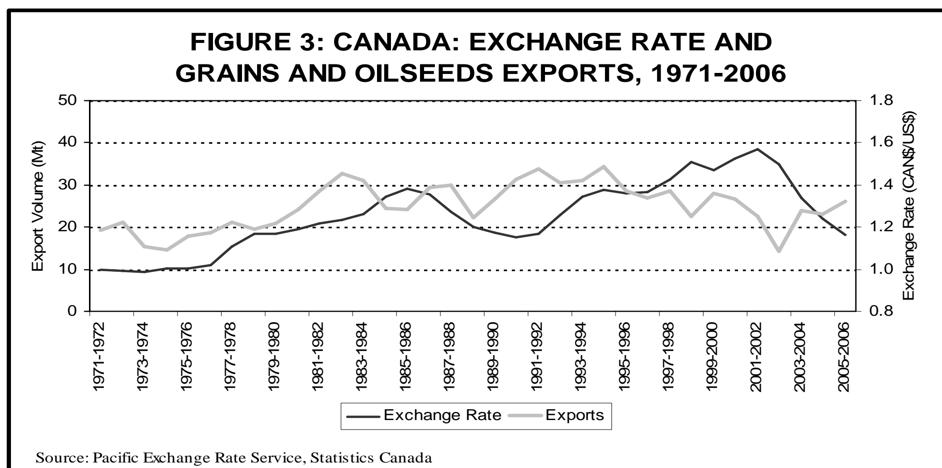


FIGURE 3: CANADA: EXCHANGE RATE AND GRAINS AND OILSEEDS EXPORTS, 1971-2006

Source: Pacific Exchange Rate Service, Statistics Canada

In eastern Canada, the price of corn is based on CBoT futures, with a premium or discount, depending on local supply and demand situations. Figure 4 illustrates the impact on Canadian corn *import prices* of the appreciation of the Canadian dollar. While CBoT corn prices increased by 24%, from US$84/t in 2001-2002 to US$104/t in 2003-2004, Chatham corn prices increased by only 3%, from $133/t to $137/t. Compared to 2003-2004, CBoT corn prices decreased by 16% to US$87/t for 2005-2006 to date, while Chatham prices dropped by 29% to $97/t. Compared to the base year, the appreciation of the Canadian dollar depressed Chatham corn prices by $8/t for 2002-2003, $24/t for 2003-2004, $28/t for 2004-2005 and $36/t for 2005-2006 to date, assuming no change in the basis.

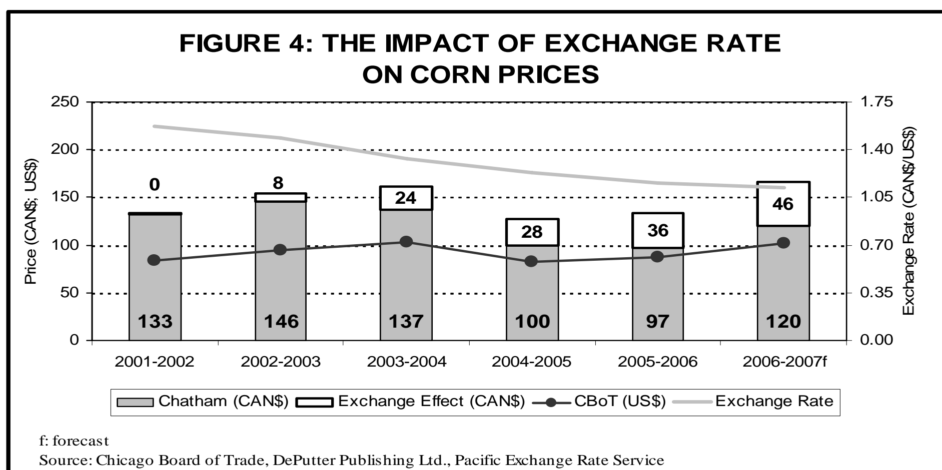
OUTLOOK FOR 2006-2007

Market Fundamentals for the Canadian Dollar

The market fundamentals for the Canadian dollar remain solid, and any possible pullback in its value is expected to be modest. The continuing strength in the Canadian dollar is supported by the following three factors:

First, the US dollar has not depreciated nearly enough to start to reverse its current account deficit and there appears to be little inclination for the US government to take effective measures to address its fiscal deficit. Second, the surplus on Canada's trade in goods and services is expected to remain high and the decline in the deficit on portfolio investment is likely to continue. Third, prices for energy and other commodities are expected to remain supportive of the Canadian dollar.

FIGURE 4: THE IMPACT OF EXCHANGE RATE ON CORN PRICES



f: forecast
Source: Chicago Board of Trade, DePutter Publishing Ltd., Pacific Exchange Rate Service

Impact for 2006-2007

For 2006-2007, the exchange rate is forecast to appreciate slightly, from CAN$1.16/US$ for 2005-2006 to CAN$1.13/US$ for 2006-2007, as shown in Table 1. This is based on the average of the projections made by the five major Canadian banks – Royal Bank of Canada (RBC), Canadian Imperial Bank of Commerce (CIBC), Scotiabank, Bank of Montreal (BMO) and Toronto Dominion (TD) Bank - over the period of Quarter III of 2006 to Quarter II of 2007.

For 2006-2007, Canadian G&O prices are forecast at $246/t for 1CWRS13.5 wheat (FOB St. Lawrence), $120/t for No.2 CE corn (I/S Chatham), $130/t for No. 1 Feed Barley (I/S Lethbridge) and $310/t for No. 1 canola (I/S Vancouver). If the US/Canada currency exchange rate had stayed at the 2001-2002 level of CAN$1.57/US$, the price for 2006-2007 would have been $93/t higher for wheat, $46/t for corn, $50/t higher for barley and $125/t higher for canola.

TABLE 1: LATEST EXCHANGE RATE FORECASTS BY MAJOR CANADIAN BANKS

Bank	2006 Quarter* 3	2006 Quarter* 4	2007 Quarter* 1	2007 Quarter* 2	Crop Year 2005-2006	Crop Year 2006-2007
	……….......CAN dollars per US dollar……………					
BMO (Aug. 4)	1.120	1.105	1.085	1.090	1.163	1.100
CIBC (Jul. 31)	1.090	1.125	1.145	1.140	1.163	1.125
RBC (Aug. 4)	1.150	1.170	1.190	1.210	1.163	1.180
Scotiabank (Aug. 10)	1.130	1.110	1.110	1.100	1.163	1.063
TD Bank (Jul. 14)	1.124	1.149	1.163	1.176	1.163	1.153
Simple Average	**1.123**	**1.132**	**1.139**	**1.143**	**1.163**	**1.134**
Olympic Average	**1.125**	**1.128**	**1.139**	**1.139**	**1.163**	**1.133**

* end of quarter
Source: BMO, CIBC, RBC, Scotiabank, TD Bank

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