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## FORCES SHAPING CANADA-US AGRICULTURAL TRADE

AFPC Policy Working Paper 99-4

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## Forces Shaping Canada-US Agricultural Trade

Since the North American Free Trade Agreement (NAFTA) first became effective on January 1, 1994, trade between Canada and the United States (US) has increased significantly. NAFTA was built upon a 1989 trade agreement between the US and Canada that eliminated or reduced many tariffs and other trade barriers between the two countries. Under NAFTA, tariffs were to be phased out immediately for some products, but gradually over periods of 5, 10, or 15 years for others. NAFTA has resulted in trade liberalization on most nonagricultural products, including motor vehicles, automotive parts, and computers.

After much debate, NAFTA was approved in 1993 by legislators in all three countries. Provisions of the Canada-US Trade Agreement (CUSTA) were subsumed under NAFTA. All tariffs affecting agricultural trade between Canada and the US, with a few important exceptions, were removed on January 1, 1998. These exceptions include the Canadian poultry and dairy industries-- both of which operate under supply management schemes.

The controversy over increased imports of wheat, barley, beef, and hogs from Canada surrounds the current debate regarding the extension of US fast track negotiating authority to the president. Questions have arisen as to whether US agriculture has benefitted from NAFTA and, therefore, whether further trade negotiation is in the national interest. Such questions affect the US posture in the upcoming round of the World Trade Organization (WTO) and the formation of a western hemisphere free trade agreement, often referred to as the Free Trade Agreement for the Americas (FTAA).

The purpose of this publication is to review the status of agriculture-related trade between the US and Canada. Trends in historical data are reviewed to determine how these US-Canadian

trade flows have changed over the past 5-10 years. ] It needs to be recognized that there are limitations to using an approach to trade policy analysis that separates the agricultural sector from the remainder of the economy and from broader trade policy issues.

### **Overall Balance of Trade with Canada**

Among the 29 member nations of the Organization for Economic Cooperation and Development (OECD), Canada ranks seventh in the amount of goods and services exported. OECD is made up of a group of like-minded countries that produce two-thirds of the world's commercially traded goods and services. Therefore, the ranking of seventh within OECD provides a good estimate of where Canada ranks in the world in terms of overall trade. Most of Canada's foreign trade is with the US. The United States typically buys approximately four-fifths of Canada's exports, and supplies more than two-thirds of its imports. The total value of Canada-US merchandise trade is greater than that which exists between any other two countries in the world.

The US agricultural economy is much larger than that of Canada; US\$29.6 billion in Canada versus US\$220 billion in the US. For instance, in the 1999-2000 fiscal year, the US will spend \$18 billion on farm programs while Canada will spend only \$2 billion for similar programs.

Overall, since the original bilateral trade agreement (CUSTA) between Canada and the US became effective in 1989, the value of total merchandise trade between the US and Canada has been steadily increasing. Figure 1 indicates that both imports and exports have increased partly as a result of the agreement. During this period, many other factors, such as exchange rates, economic growth, the cattle cycle, and government policies have also influenced US-

Canadian agricultural trade. It is especially difficult to separate the impacts of the agreement from those of other economic events. However, US imports from Canada exceed US exports by approximately US\$15 billion.

Agricultural trade between the two countries has also increased substantially (Figure 2). Over the period 1990-1995, US exports exceeded imports but from 1996 to 1998, US agricultural imports from Canada exceeded exports by US\$700 to \$800 million. This switch in the balance of agricultural trade has caused considerable consternation within US farm circles.

Agricultural trade is typically broken down into bulk commodity, intermediate goods, and value-added goods. From a world perspective, value-added goods are becoming relatively more important as consumer incomes rise. From 1993 to 1997, US bulk agricultural exports to Canada increased steadily from US\$370 million in 1993 to US\$530 million in 1997, and remained nearly constant thereafter (Figure 3). A comparison of Figure 3 and Figure 4 indicates that US bulk commodity imports from Canada over the same period were substantially higher than exports. From 1993 to 1994, US bulk imports from Canada rose from US\$570 million to US\$850 million in 1994, and has since varied in the \$0.75-\$1.0 billion range. The increased importation of bulk commodities, primarily wheat, has been a major irritant to US farmers because of its perceived direct impact on the level of US farm prices.

Intermediate farm products are commodities that have been through some processing, but which are not consumer products. Intermediate products include wheat flour, soybean meal, soybean oil, hides and skins, and many other similar goods. US exports of intermediate products steadily increased from US\$1.03 billion in 1993 to US\$1.39 billion in 1997, and have since been relatively constant (Figure 3). During the same period, US imports of intermediate products

from Canada steadily increased from US\$1.83 billion to US\$2.67 billion and then remained relatively constant (Figure 4). In 1998, intermediate goods imports declined to US\$2.64 billion.

Value-added goods are products that have been processed into ready-to-eat foods. They are also referred to as consumer-oriented products. Some examples include snack foods, breakfast cereals, and meats. From 1993 to 1998, US exports of value-added products to Canada increased the most of any of the three segments--from US\$3.9 billion in 1993 to US\$5.1 billion in 1998. Figure 4 indicates that value-added imports from Canada increased even more in 1998--from US\$2.21 billion in 1993 to US\$4.27 billion.

### **Grain and Oilseed Trade**

From a US perspective, the major trade irritants between the US and Canada have become grain and livestock. The volume and value of grain trade has increased significantly since 1989 (Figures 5 and 6). However, since NAFTA was implemented in 1994, US grain exports have been relatively constant while imports have increased.

Some US buyers believe that Canadian grain is superior in quality to US grain. This may be one reason for the increase in imports since NAFTA was implemented. Wheat and barley imports increased from less than 500 MMT beginning about 1991. Contrary to the perception of many, the value of grain imports from Canada has remained below that of US exports to Canada (Figure 6). A primary contributing factor is that more value-added products from the US are being shipped to Canada.

However, there are substantial differences among commodities. While the US is a net exporter of corn and soybeans to Canada, it is a net importer of wheat, barley, and rapeseed (more commonly known as canola) from Canada. Wheat imports from Canada increased



steadily from 1991 through 1994 and then fell in 1995 and 1996. However, in 1997, this trend reversed, and imports climbed again, only to fall in 1998 (Figure 7). A new higher plateau for wheat imports in the 1.5-2.0 MMT range is suggested by Figure 7.

US barley imports showed a similar spike to wheat in 1994 (Figure 8). Most imported barley is of malting quality, for which Canada appears to have a comparative advantage. After a major shortage of malting quality barley in the northern states in response to the 1988 drought, US malsters began contracting Canadian production as a risk diversification tool.

Rapeseed (canola) imports, as seen in Figure 9, increased steadily through 1991. Although imports dropped in 1995, they recovered by 1996 and increased from 1996 to 1998. Canola oil consumption has increased markedly, in part, because of its perceived superior cooking and health qualities.

Canola imports were originally prohibited because of "generally recognized as safe" (GRAS) status. GRAS was created by the FDA as a measure to ensure a safe food supply by considering all substances as potentially dangerous unless scientifically proven otherwise. Since canola did not have GRAS status, it was not allowed into the US and, therefore, it did not pose any competition to soy and other oils. In essence, the US had created a nontariff trade barrier. In 1985, GRAS status was given to rapeseed. In late December of 1988, the FDA recognized the term "canola" as being synonymous with "rapeseed". Thus, canola imports were finally allowed to come into the US in 1988.

With the implementation of the FAIR Act, US farm prices have become more volatile. This means that farm incomes will also be more volatile. Price volatility also means changes in import and export patterns. This may not be as much of a problem in Canada because, in effect,

the Canadian Wheat Board (CWB) helps to stabilize producer returns.

Since 1994, the value of US imports of wheat, barley, and canola from Canada have experienced substantially different behavior than the volume of trade in these same commodities (Figure 10). The value of these imports rose steadily until 1994, after which farm prices became considerably more volatile.

### **Livestock Trade**

The value of live animal imports from Canada has also increased markedly since 1994 (Figure 11). The animals that make up these imports are primarily fed cattle and hogs.

US fed cattle imports have increased significantly since 1989, with minor drops in 1993, 1994, and again from 1997-1998 (Figure 12). The value of fed cattle imports (Figure 13) reflects the same general pattern as head numbers. Although 1993 cattle prices increased above 1992s prices, the value of imported cattle was held near the 1992 level. Lower fed cattle prices in 1996 kept values from increasing by as large a percent as did live cattle numbers. Swine imports have experienced a sharp acceleration since 1994 (Figure 14), although many of these are feeder pigs. Figure 15 shows that the value of swine imports also climbed until 1997, but in 1998, the value of swine imports dropped with the decline in pork prices. Recent monthly data from early 1999 indicates a decline in swine imports due to an increase in Canadian plant capacity and herd liquidation.

The US and Canada also trade meat. From 1987 to 1991, the value of US beef exports rose steadily (Figure 16), and then declined. Beef imports from Canada became substantially higher than US beef exports to Canada in 1996, and this margin widened through 1998. The value of pork imports from Canada has substantially exceeded US exports to Canada since 1985

(Figure 17). From 1987 to 1997, US pork exports to Canada steadily increased. However, while pork imports from Canada have remained significantly higher than exports, imports have fluctuated more than exports. The result of increased live cattle and beef trade, particularly live cattle, has been increased beef trade tension between the US and Canada. The increase in US imports of fed cattle reflects the rise of Canada as a major beef feeder. Future reductions in fed cattle imports and increases of Canadian beef exports will reflect expansion of the Canadian beef packing industry.

It is anecdotally argued that the US produces, on average, a better quality beef than Canada (i.e. more choice) while Canada produces a more consistent product. This may be attributable to more uniform use of Continental breeds throughout Canada. The US has a wider range of climate and has more Brahma-related breeds and, therefore, may have more quality variability. Cattle prices have been low over the past several years, with a sharp decline from 1994-1996 due to increased beef production.

It can be argued that the current US pricing system does not provide any incentive to improve cattle quality as the Canadian system might. However, that is changing. Grid pricing, with a schedule of discounts and premiums from a base, is becoming more widespread. Aside from complications over what the base should be, the wide range of cattle types produced and the amount of flexibility of the prospective grids may cause a significant amount of time to pass before there is widespread quality change. It should also be noted that there is a disparity between important profit factors between the cow/calf, feedlot, and packing sectors. The most important profit factor for the cow/calf sector is a live calf at sale. Feedlots value gain and feed conversion. These factors do not align themselves perfectly between industry segments.



Poultry and dairy were not addressed in this discussion because of Canadian production controls. Therefore, Canadian imports are highly restricted. US dairy products are likewise protected from foreign competition, albeit to a lesser degree than in Canada.

### **Reasons for Changing Trade Relationships**

The increase in Canadian exports to the US has been a major concern to farmers. They feel that as a result of the increased imports, US farm prices are lower, causing farm incomes to decline substantially. With the increased volume of imports, there are more goods on the market. This means that there are more goods from which buyers may choose, which tends to depress prices.

Under NAFTA, restrictions on imports were removed on several categories, including agriculture. As a result, commodities may now be freely traded across the border. Yet, there are several reasons that imports have increased since NAFTA was implemented. Therefore, tariff and nontariff trade barrier elimination between the two countries has been just one contributor to the increase in imports.

Exchange rates between the US dollar and Canadian dollar also play a major role in trade. Over the past decade, the US dollar has been stronger than the Canadian dollar, as seen in Figures 18 and 19. While there have been a couple of years in which the Canadian dollar has gained strength relative to the US dollar, such as 1995 and 1996, the trend since 1992 has been one where the US dollar has continued to gain strength over the Canadian dollar.

The rising strength of the US dollar compared to that of the Canadian dollar poses problems for US farmers. When the US dollar strengthens in relation to the Canadian dollar, imports from Canada become less expensive for US processors to buy, hence encouraging

imports of Canadian goods into the US. Therefore, the strong US dollar has reduced US exports to Canada and increased US imports from Canada. The rising strength of the US dollar poses a problem for Canadians as well. When the US dollar strengthens, purchases of farm inputs in the US become more expensive for Canadians.

The relative strengths of the two currencies are especially important in the case of Canada and the US because the two countries share a common border, leading to a significant amount of trade. US farmers experience reduced exports because their commodities will be relatively more expensive in Canada, while US processors and food retailers have an incentive to import Canadian farm commodities as raw materials.

In the past, the US used the Export Enhancement Program (EEP) to make exports more attractive to the rest of the world. EEP has been used to lower the price of US exports through means such as commodity bonuses or cash payments. Since the use of EEP is restricted by the World Trade Organization (WTO), the US has been restrained from using EEP. If EEP had been used to make US wheat more competitive in the world market, it could have the unanticipated consequence of attracting even more Canadian imports into the US.

Feed prices are much lower in Canada than in the US. In part, this is because of the elimination of the Western Grain Transportation Act (WGTA) which, prior to 1995, provided a transport subsidy for moving Canadian grain to export markets. While US farmers, agribusinesses, and their trade liberalization negotiators favored the elimination of the WGTA, it tended to bottle-up grain in the Prairie Provinces of Alberta, Manitoba, and Saskatchewan. The result was relatively lower feed prices which made it much cheaper for them to feed livestock, such as cattle and hogs, than US farmers. Therefore, farmers in Canada raise the cattle and hogs

and then export them to the US both in the form of live animals and as processed meat. This benefits US cattlemen located near the border as feeders go into Canadian feedlots. However, there is also more demand for livestock products coming out of Canada. This policy adjustment has removed a major trade distortion in the market and has allowed the market to operate more efficiently, but it also has adversely affected US cattle feeders.

Another reason that feed prices are cheaper in Canada is that Canada may have a comparative advantage in the production of some wheat and barley. For example, the Prairie Provinces are one of the largest wheat-growing areas of the world with an average annual production of more than one-fifth of the world's supply. Canadian barley is also an important feed grain.

Canadian hog prices have been substantially lower than US hog prices. Therefore, there has been a great incentive for Canadian hog producers to sell in the US. Some of this difference is reflected in inefficiencies in the Canadian processing plants. Increased efficiency could increase prices in Canada and could impact future pork trade. When looking only at agricultural trade between these two countries, in essence, the US has become a net importer and Canada a net exporter. This is particularly the case for bulk and intermediate commodities.

### **Role of the Canadian Wheat Board**

The Canadian Wheat Board (CWB) plays a very important role in wheat and barley sales in Canada. The CWB is a state trader which means that Canadian farmers must market their wheat and barley through the CWB. As a state trader, they could have a significant advantage in marketing grain in the export market over US farmers. However, this does not appear to be the case. Two recent studies concluded that often there was no farm price advantage in marketing



through the CWB. The evidence indicates that, in fact, in most cases, US farmers received the same or a higher price than their Canadian counterparts. When the CWB does get a higher price, there is not a substantial difference.

The average price received by US farmers and the farmgate price in Canada provides a good basis for comparison of prices in the US and Canada. The US price for this analysis is an average price received by producers in North Dakota. This price is comparable to the Canadian farmgate price. The farmgate price is determined by taking the final payment from the CWB to Canadian producers and subtracting freight, country elevation fees, and dockage charges. The farmgate price is then converted into US dollars using an average exchange rate for the year.

Figures 20-22 indicate the same farmgate price trends as found in the aforementioned studies. The price received by producers in Canada for their wheat was lower than that received by producers in the US in all but one year (Figure 20). This occurred over the 1995-1996 period. The same trend appears for both the feed and malting barley.

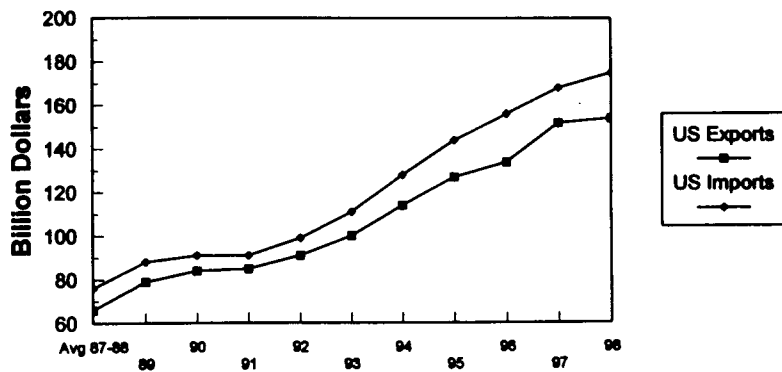
The Canadian price for feed barley tops the US price only in 1995-1996 (Figure 21). Malting barley is somewhat different. From 1992-1995, the US price remained higher than the Canadian price (Figure 22). However, after 1995, the Canadian price remained significantly higher than the US price. It is important to note that there is one month difference between the Canadian marketing year and the US marketing year. The Canadian year goes from August 1 to July 31 whereas the US year begins July 1 and ends June 30.

Overall, US producers are getting the same or higher prices for their commodities than their Canadian counterparts. For Canadian producers, the CWB acts as a price stabilizer rather than as a partial enhancer. Yet, the payment to Canadian farms of an average pool price produces

periodic incentives for Canadian farmers in marketing their commodities in the US, complicating US farmers' problems of low prices. It is likely, therefore, that other market and nonmarket factors, such as oversupply of grain in the Prairie Provinces of Canada, are more important determinants of exports of Canadian wheat to the US than collective actions by the CWB.

Figure 1

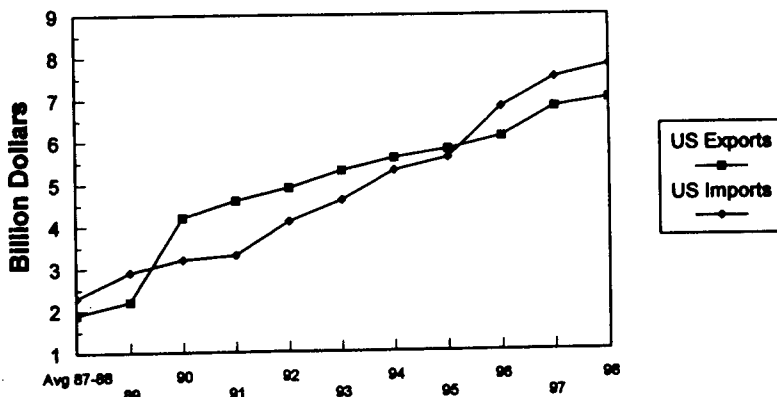
**Value of US/Canadian Total Merchandise Trade,  
1987-1988 Average - 1997**



Source: FATUS

Figure 2

**Value of US/Canadian Agricultural Trade**



Source: FATUS



Figure 3

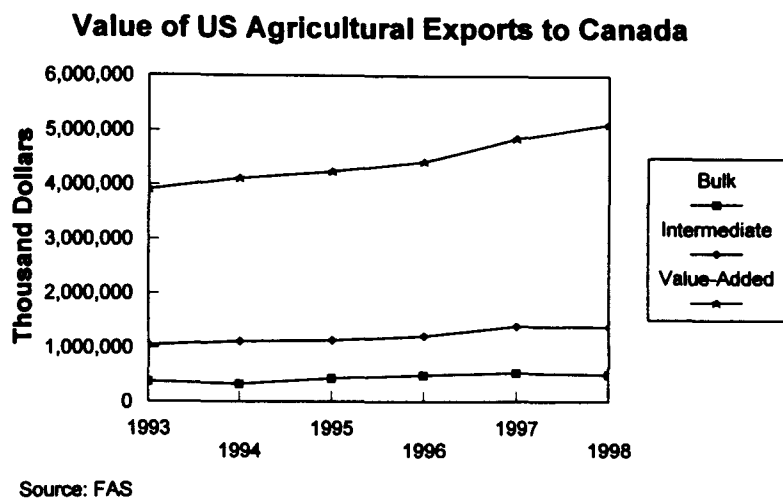


Figure 4

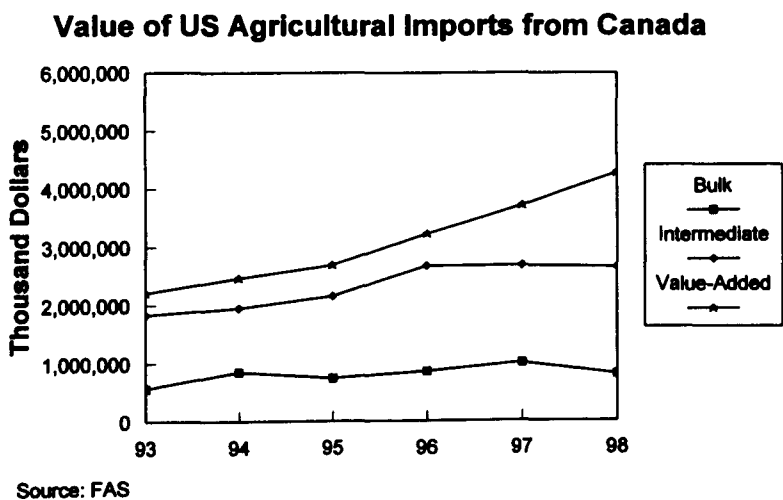
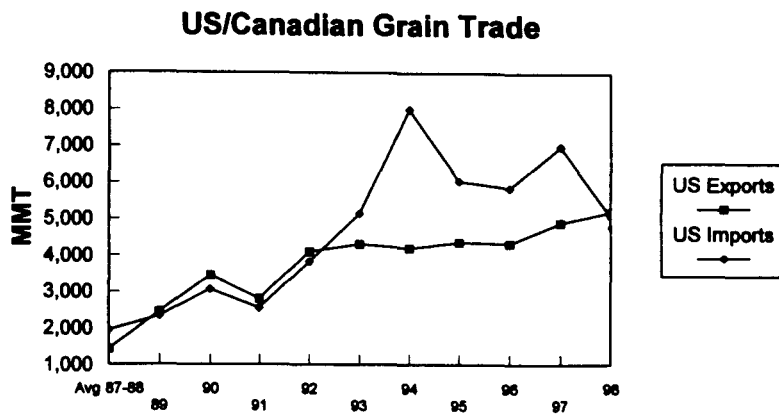


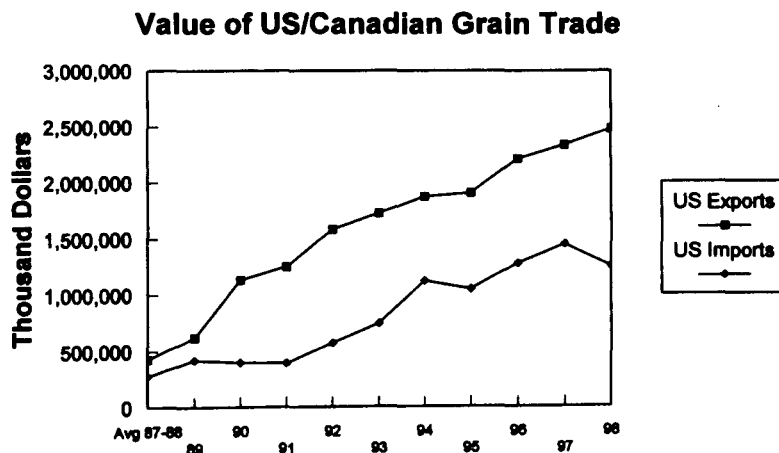
Figure 5



Source: FATUS

Note: 1998 has been excluded from "Other Grains" due to missing data. It will be included in the value of grain trade.

Figure 6



Source: FATUS

Figure 7

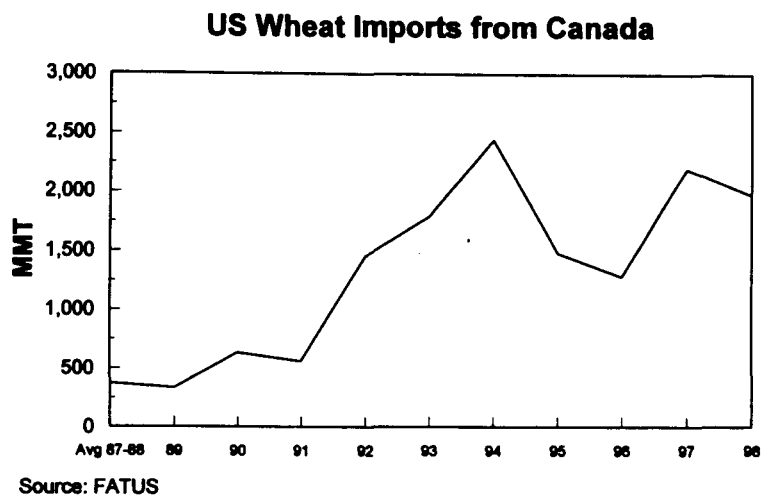


Figure 8

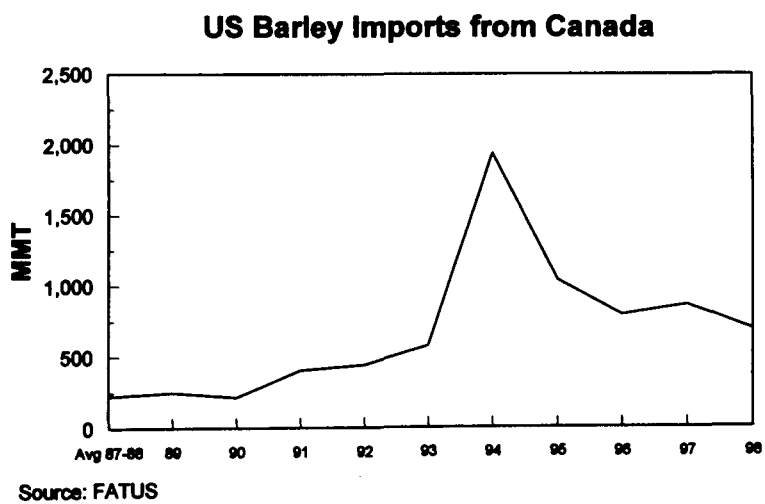


Figure 9

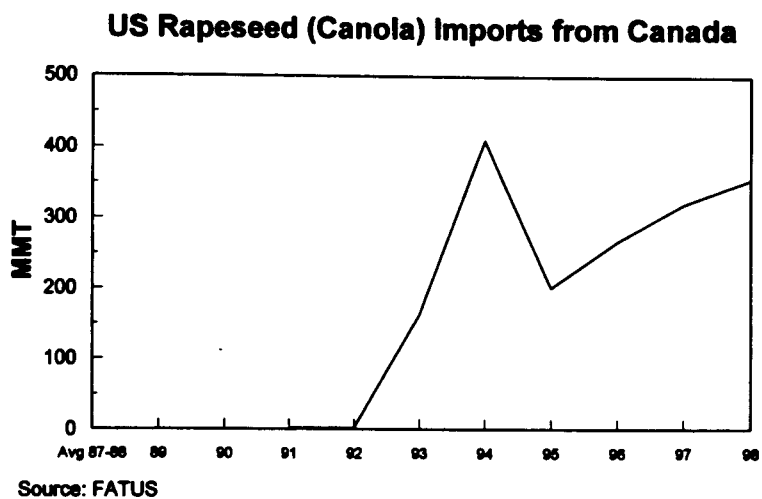
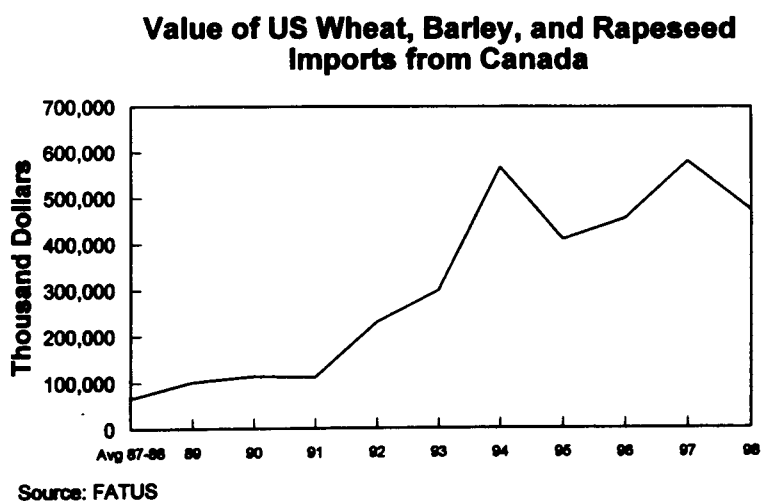
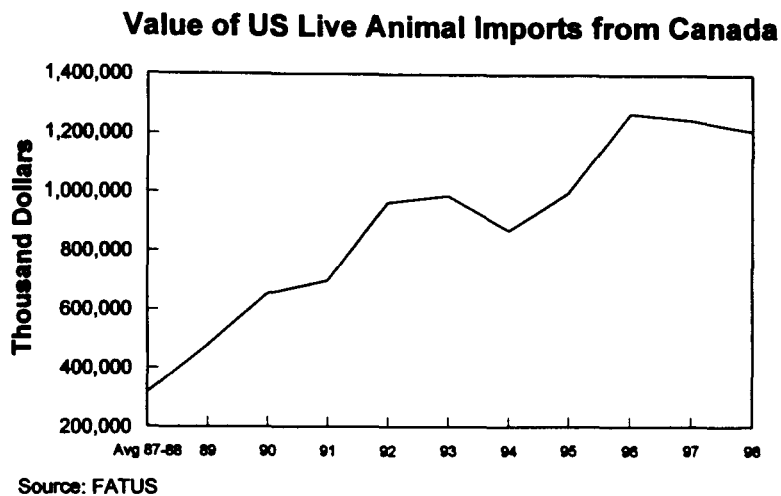


Figure 10



**Figure 11**



**Figure 12**

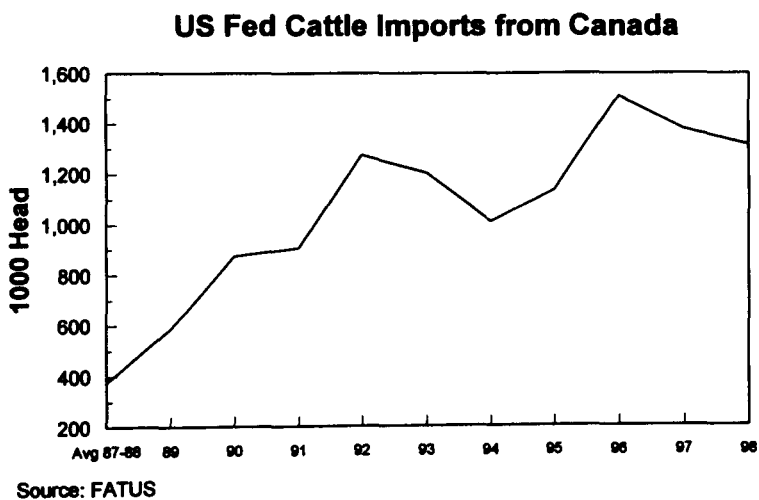
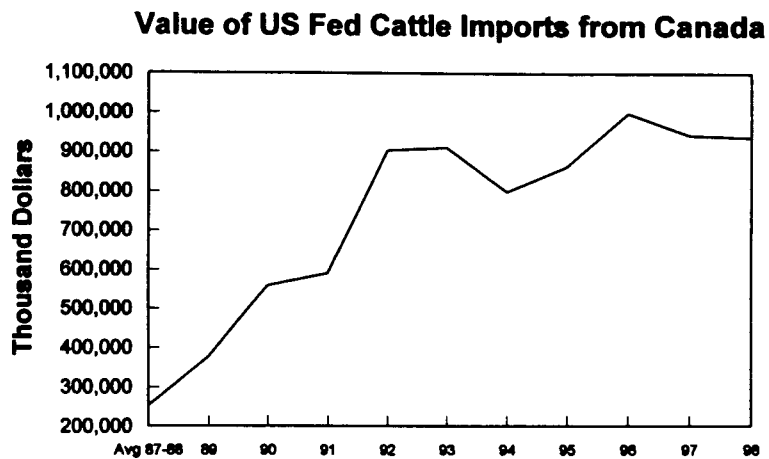
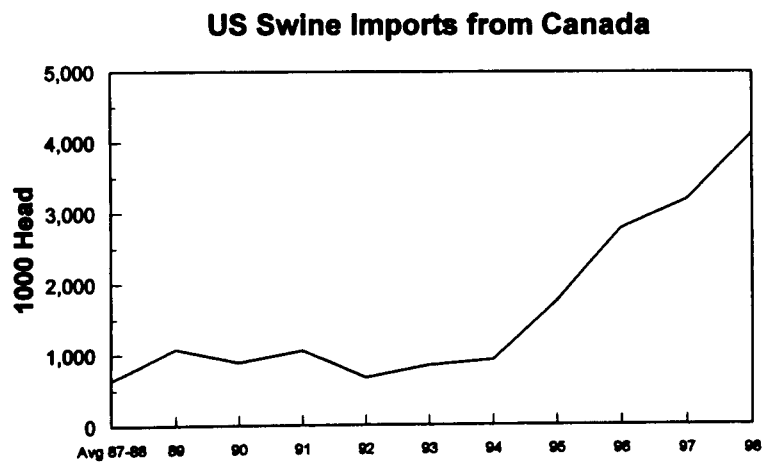


Figure 13



Source: FATUS

Figure 14



Source: FATUS



Figure 15

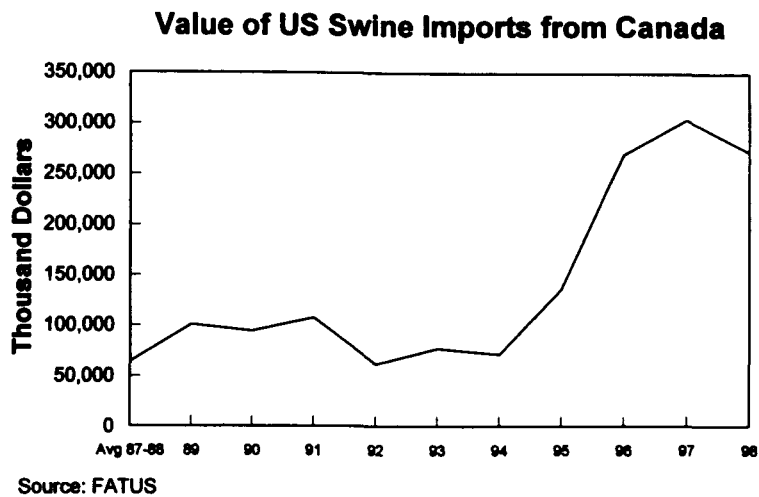


Figure 16

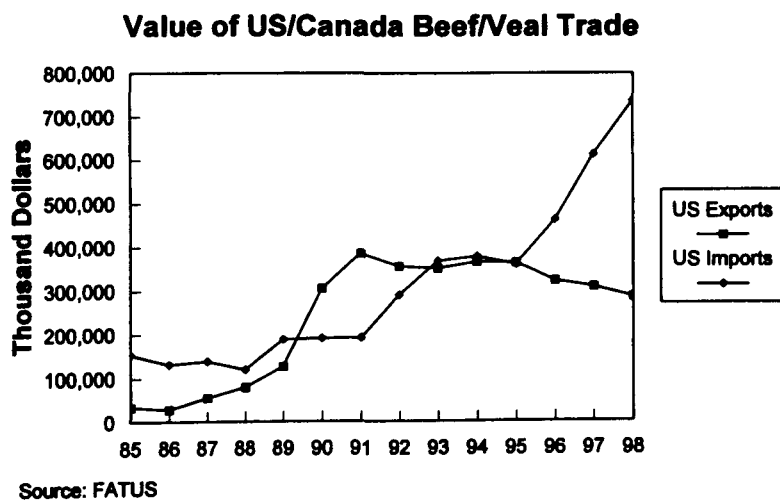
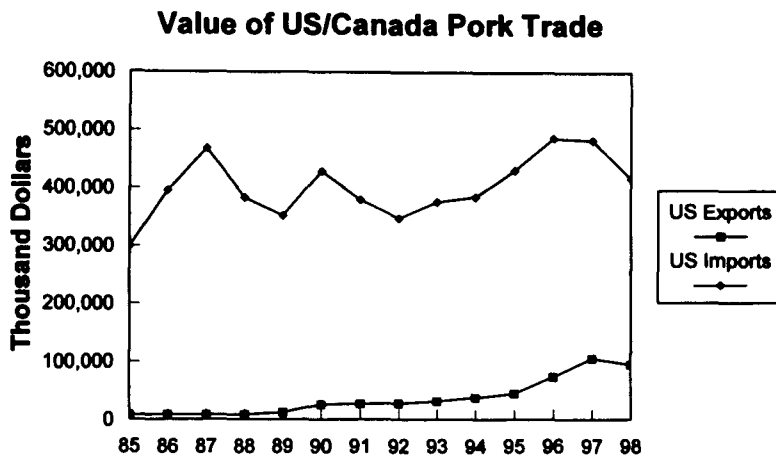
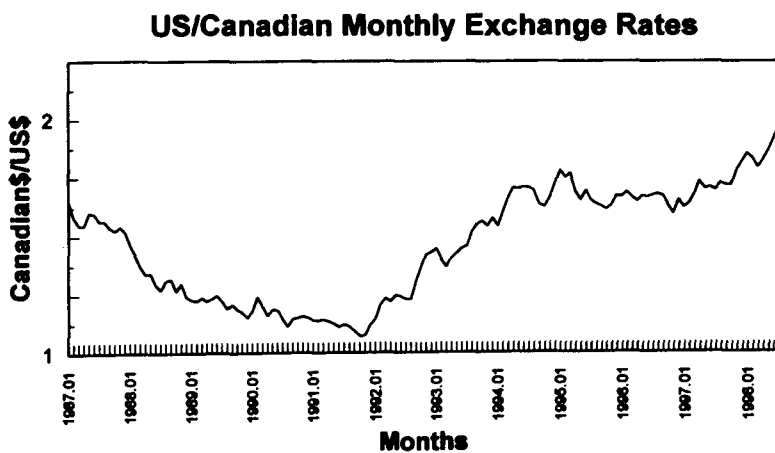


Figure 17



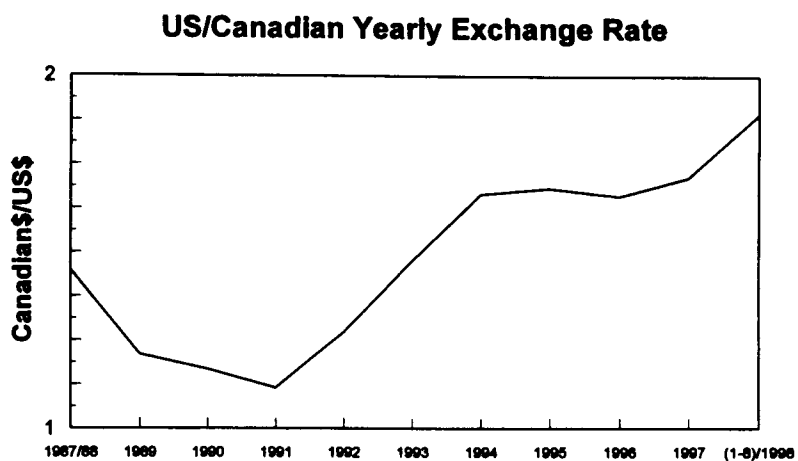
Source: FATUS

Figure 18



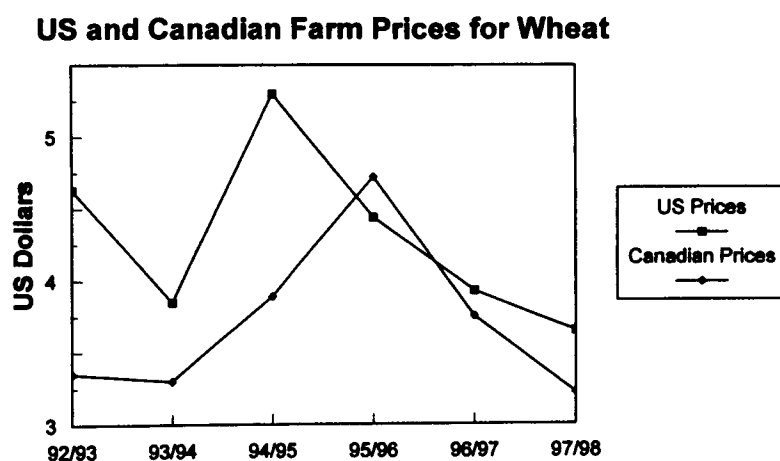
Source: FRED Database, Federal Reserve Bank of St. Louis

Figure 19



Source: FRED Database, Federal Reserve Bank of St. Louis

Figure 20



Source: North Dakota NASS and CWB

Figure 21

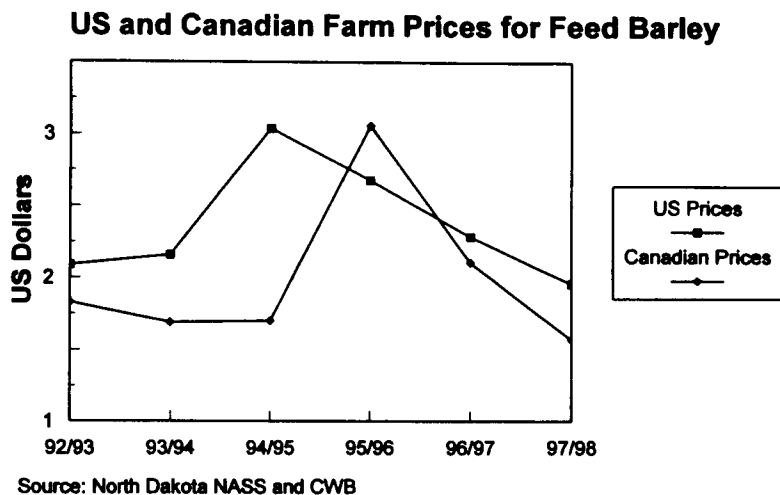
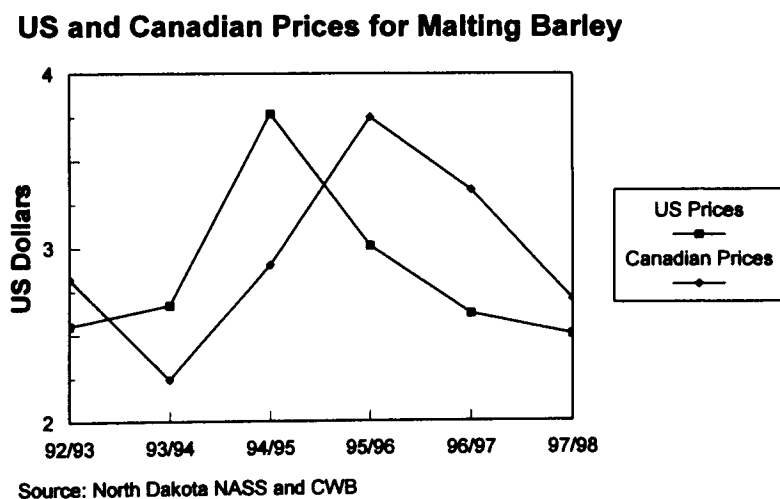


Figure 22



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