Canada-United States Trade Center Occasional Paper No. 6

Series Editor: James W. Harrington, Jr.

Guest Editor: Laura Mangan

AGRICULTURAL SUBSIDIES UNDER THE CANADA-UNITED STATES TRADE AGREEMENT

Erna van Duren
Department of Agricultural Economics and Business
University of Guelph

U.S. AGRICULTURAL SUBSIDIES: MEASURES AND TRENDS

Harry Baumes
Chief, U.S. Agricultural Policy Branch
Agriculture and Trade Analysis Division
Economic Research Service
U.S. Department of Agriculture

March 1991

Original versions of these papers were presented at a symposium on Subsidies Under the Free Trade Agreement, sponsored by the Canada-U.S. Legal Studies Centre of UB's Law School. The views presented in these papers are those of the authors and are in no way policy statements of the Law School, the Canada-United States Trade Center or the State University of New York at Buffalo.

INTRODUCTION

James W. Harrington, Jr.
Associate Director,
Canada-United States Trade Center

The papers and notes that comprise this set of CUSTAC Occasional Papers (Numbers 6, 7, and 8) focus on the nature and effects of subsidies granted by US and Canadian governments to domestic producers. The papers originated as symposium presentations at the Canada-United States Legal Studies Centre, University at Buffalo Law School, in the spring of 1990. The purpose of the symposium, and of these papers, is to come to some understanding of the issues involved as the two countries attempt to decide what form of domestic subsidies are to be allowed in the two-year-old free trade area of Canada and the United States.

If anyone thought that the late-1988 signing of the Canada-United States Free Trade Agreement (FTA) settled the controversy about the rules and nature of the world's largest bilateral trade flow, the succeeding years have surely convinced him or her otherwise. Questions remain and grow: some questions, like the exact workings of the dispute-settlement process or the definition of allowable internal subsides, were clearly and deliberately left for further discussion. Other questions, like the role that subsidy negotiation will play in proposed Canada-U.S.-Mexico trade talks, were not so obvious in 1988. Certain mutual goals, such as the removal of agricultural subsides, were worded to recognize the salience of the Uruguay Round of GATT negotiations, which did not conclude in December 1990 as planned. The impact of the proposed trilateral discussions and the conclusion of the GATT round are still very unclear. Therefore, these Occasional Papers grapple with the first set of uncertainties -- how should the intent of the FTA's Chapter 19, "to develop more effective rules and disciplines concerning the use of government subsidies"[1] be implemented?

The United States has been especially slow to recognize the magnitude of its own direct and indirect subsides, and has been slow to measure domestic and foreign subsides systematically.[2] the papers by Harry Baumes and John Ragosta develop methodologies for systematic measurement of subsidies in the agricultural and natural-resource sectors, respectively. The papers by Erna Van Duren and Jeffrey Thomas introduce the nature of subsidies in these two sectors, and analyze the political and legal influence that the GATT negotiations could have on the bilateral negotiation called for by the FTA's Chapter 19. Van Duren's and Baumes's papers appears in Occasional Paper 6, while Thomas's and Ragosta's papers comprise Paper 7.

Subsidies to manufacturing industries and to disadvantaged regions are the topic of the three papers and two abstracts collected in Occasional Paper 8. The federal and subnational governments in the two countries choose, sometimes implicitly, among many different interests that can be protected

---

1 Canada-United States Free Trade Agreement, Article 1907, Section 1(a).

2 Morton, C.S. 1989. Subsidies Negotiations and the Politics of Trade. Canada-US Outlook 1 (1). Washington, DC: National Planning Association.

INTRODUCTION

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

by subsidies: from mobile, large corporations to more region-specific workers and small firms.[3] Bruce Fountain notes the wide range of points at which a government can assist the private procurement, production, or sale of manufactures. This range of potential actions complicates the task of subsidy measurement and assessment. Richard Diamond abstracts from his article, published elsewhere, which searches for the basic principle underlying U.S. use of countervailing duties. He finds no consistency among the stated basis (reducing economic distortion), the more likely basis (allowing U.S. producers the same returns as if there were no foreign subsidy), and the actual practice (response to industry complaint). This inconsistency complicates the practice and predictability of countervail.

Also in Occasional Paper 8, Jean Anderson reviews some subsidy and countervailing-duty concept whose bilateral interpretation will determine the potential for agreement. The proposals from Canada and the U.S. to the Uruguay Round yielded some insight into the two countries' interpretations. Leslie Delagran argues that regional subsidies available across sectors (more common in Canada) have few identifiable trade-distorting effects, and should not be subject to countervailing duty. The more *ad hoc* patchwork of U.S. local, regional, and state location incentives is even harder to measure, and may in practice be more sectorally focused. However, the domestically oriented nature of U.S. manufacturing obscures the trade distortion of these subsidies and incentives (while the import-substitution effects may be substantial but un-monitored[4]). The note by Anthony Marconi provides a glimpse of this patchwork, by reference to the set of incentives available in western New York State.

Laura Mangan of the Canada-U.S. Legal Studies Centre (and now of the Baldy Center for Law and Policy, also at the University at Buffalo) has done an excellent job of encouraging (and when necessary, cajoling) authors, and of editing papers. Thanks also to Research Assistant Alice Elder who was instrumental in organizing speakers for the symposium and initial editing of their papers and to Dawn Baksh who took on the unenviable task of transcribing the symposium proceedings. Jim McConnell and the Canada-U.S. Trade Center have encouraged and financed this venture, in part with the support of the Canadian Embassy and UB's Canadian-American Studies Committee.

Finally, I sincerely thank the authors for their efforts and their insights.

---

3 Morici, P. 1990, Industrial policy technology, and the Canada-U.S. Free Trade Agreement. Business in the Contemporary World 3(1): 101-110.

4 Grey, R. de C. 1981. Trade Policy in the 1980s: An Agenda for Canadian-U.S. Relations. Montreal: C.D. Howe Institute.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

AGRICULTURAL SUBSIDIES UNDER THE CANADA-UNITED STATES TRADE AGREEMENT

Erna van Duren
Department of Agricultural Economics and Business
University of Guelph

This paper examines agricultural subsidies under the Canada-U.S. Trade Agreement (CUSTA) by discussing the extent and nature of subsidization, the provisions in the agreement, and how the multilateral negotiations may affect the provisions relevant to agriculture for both countries. First, an examination of the agricultural chapter of the CUSTA and the other provisions that apply to agriculture, reveals that these provisions reflect Canadian and U.S. negotiating strategies, the GATT, and existing policy instruments. These, in turn, reflect differences in the two sizes of the countries; the U.S. accounts for a much larger proportion of world production and consumption than Canada for most agricultural products.

Second, CUSTA's provisions also reflect differences in existing GATT rights and obligations. In agriculture there are some important differences.

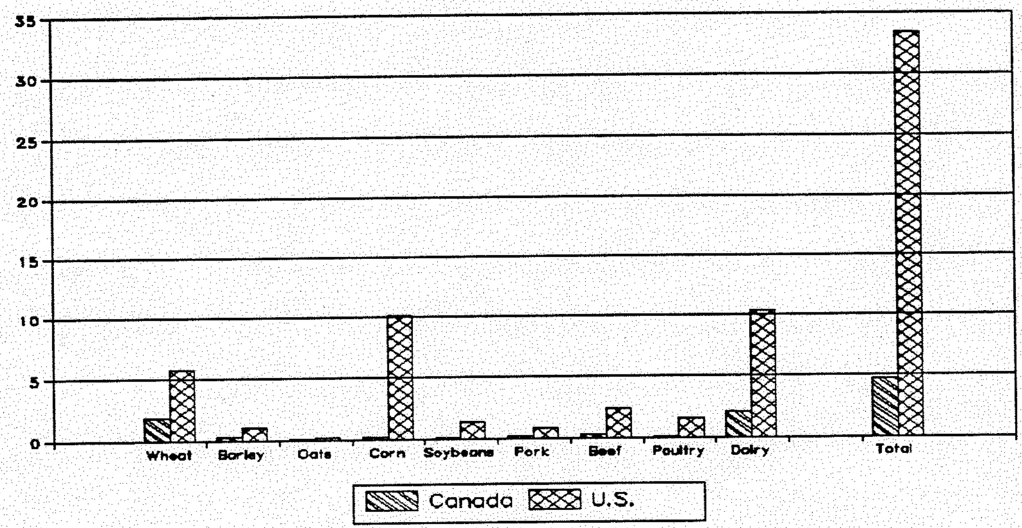
Third, to a certain extent, the provisions reflect differences in philosophy and public opinion regarding the role of government in the economy. For example, there are still a number of people in both Canada and the U.S. who believe that the U.S. is a country of "free traders", and that business decisions occur in the U.S. because they are good business decisions, whereas many people on both sides of the border think that not much happens in Canada without the benefit of a subsidy. However, examining the data reveals that is not the case at all. If government spending on defense is included, U.S. subsidies account for 2% of the revenue earned by U.S. industries, versus 1% in Canada. If defense is removed, the U.S. subsidy proportion declines to 0.5%. In any case, one can conclude that both countries subsidize their economies.

IS SUBSIDIZATION MORE PREVALENT IN THE AGRI-FOOD INDUSTRY?

The problem of subsidization is probably more apparent in agriculture than in any other sector. There are a number of reasons for this. First, agriculture has essentially been ignored by the GATT since World War II; and, second, governments have become very creative in finding ways to intervene in agriculture and have found it politically acceptable to do so for a variety of reasons. To get an indication of the transfers made to agriculture, Figure 1 graphs the total amount of transfers to agriculture in Canada and the U.S. for some of the larger sectors in terms of total expenditures. For example, Figure 1 illustrates that the U.S. spends about $6 billion on transfers to wheat producers and Canada over $3 billion (amounts in U.S. dollars throughout paper).

While Figure 1 illustrates the total level of the subsidization in all sectors, there are certain sectors that account for relatively more of the transfer. In the U.S., the dairy and corn sectors account for a relatively large proportion of the transfer, while in Canada the wheat and dairy sectors are most important.

Figure 1: Total Transfers to Agriculture in Canada and the U.S., Bil. $, 1986 (Total and Selected Sectors)



DEALING WITH AGRICULTURAL SUBSIDIES AT THE GATT

The data in Figure 1 raise some interesting questions. First, what types of instruments are included in these calculations of total transfers? Second, if transfers are expressed on a per unit basis, in order to get some indication of what kind of impacts these transfers are going to have on world production, trade and prices, what do they suggest?

Much effort has been spent at the GATT negotiations attempting to classify government support to agriculture. One approach is to classify programs according to the "stoplight" approach. Thus, some programs could be classified as "red", and would be prohibited; some would be classified as "green", and would be allowed without any countervailing action, and some would be left in the "amber light category", and would be dealt with under some type of dispute settlement mechanism. The types of subsidies that are available in agriculture can be classified into a number of categories: (a) export subsidies; (b) output subsidies which include programs such as price supports, direct payments, reduced market access, stabilization schemes and production quotas; (c) input subsidies, which include programs to reduce the costs of fuel, interest, credit, fertilization, irrigation and perhaps taxation policy; (d) marketing subsidies dealing with marketing, transportation, inspection and grading; and (e) long-term structural policies relating to infrastructure and research and development.

The manner in which these subsidies have been categorized has been integrated into the agricultural negotiations. In previous agricultural negotiations, a major problem has been that countries have refused to recognize the impact of their domestic policies on world markets. Only in this round of GATT negotiations has there been an awareness and acceptance that not only direct financial transfers but also other methods of intervening in agriculture could have a negative impact on world production, price and trade patterns.

IS THERE REASON TO BE CONCERNED?

In order to provide an indication of the level of government support to agriculture in the U.S. and Canada on a per unit basis and to get an impression for what kind of impact that support could have on trade several transfer and production relationships are graphed in Figure 2.

Figure 2 shows the amount of money the U.S. transfers to its selected sectors relative to Canada and shows the ratio of production in the U.S. relative to Canada. If the two bars are equal, it indicates that on a per unit basis the two countries spend about the same amount of money supporting that particular sector. If the transfer bar is higher, it shows the U.S. transfers more per unit, which suggests that, on a per unit basis, the U.S. has a more negative impact on world trade patterns and prices than Canada. For the six commodities listed along the axis of part (a) of Figure 2, i.e. wheat, barley, oats, and beef, the U.S. spends more than Canada per unit, and can therefore be said to be contributing more to the decline in international prices. In dairy and pork in which the production bar is higher, Canada is more of an offender. Part (b) contains the same analysis for soybeans, poultry and corn. For soybeans Canada subsidizes relatively more than the U.S. In poultry and corn, the U.S. is the greater offender.

The data behind Figure 2 also reveal some interesting relationships. In the corn sector for example, if one simply compares the amount of money transferred to that particular sector in Canada versus the U.S., the U.S. transfers 108 times as much money to its corn producers as Canada,. A ratio of 108 makes it much easier to understand why the corn producers in Ontario felt compelled to launch a countervail case against the U.S.

GOVERNMENT SUPPORT TO AGRICULTURE AND THE CUSTA

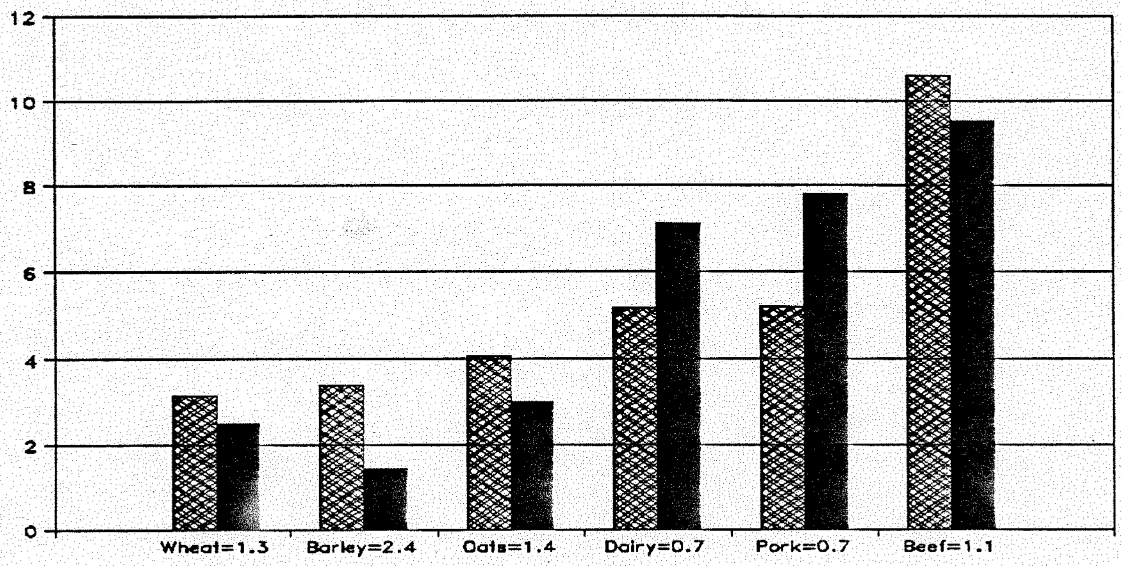
The nature of provisions in Canada-U.S. trade agreement that are relevant to agriculture are very broad. They are summarized in Table 1. Many sectors of agriculture are covered specifically and all are affected by CUSTA. There are provisions that deal with subsidies in the traditional sense (i.e. financial transfers to producers), with market access, with tariffs, and with technical regulations on food, safety, and health standards. Some of the provisions that are relevant to the agrifood industry appear unimportant if they are considered in a vacuum. This at least partly due the ongoing GATT negotiations on agriculture; both Canada and the U.S. wanted to settle certain agricultural issues in a multilateral forum. Thus, the remainder of this section focuses on these provisions, how they are treated in CUSTA, and lastly, how the GATT negotiations affect the potential impact of these provisions on the agrifood industry.

Export Subsidies: CUSTA bans export subsidies on agriculture on bilateral trade. This is not all that important because Canada does not use export subsidies on agrifood products destined directly for the U.S. market and vice-versa. However, there is a more important provision for export subsidies. CUSTA states that Canada and the U.S. must account for each other's interests in third country markets. In the wheat sector that is very important. Many Canadians feel that they are competing with the U.S. treasury. At the same time some Americans wonder how the Canadian Wheat Board prices wheat in selected markets and whether there are subsidies involved.

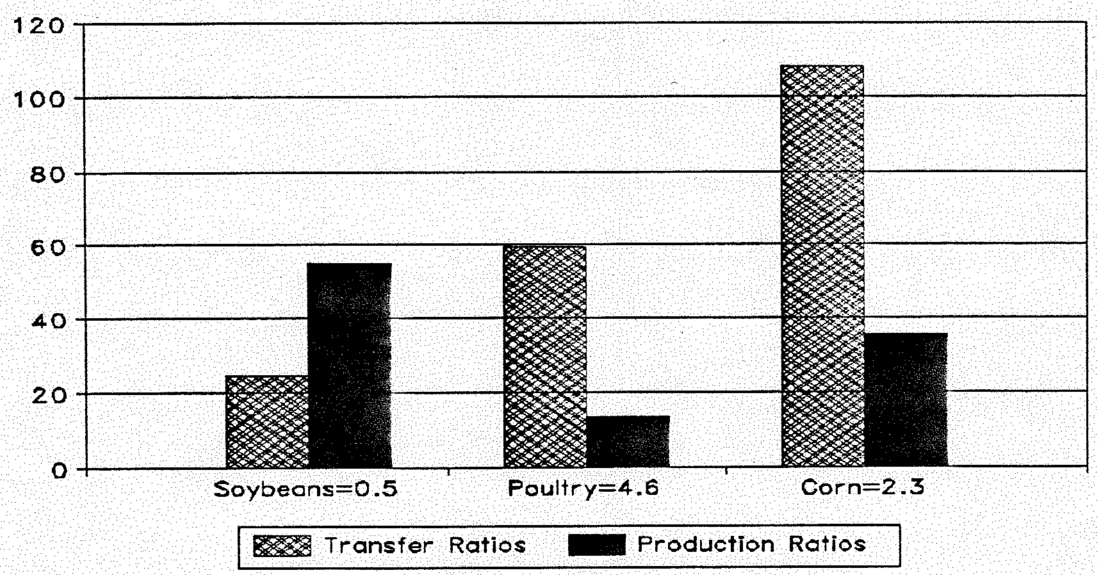
The Canadian-U.S. problem with export subsidies is part of a much larger problem: the European Community (E.C.) is very actively involved in competitive export subsidization. Thus, the export subsidy provision largely reflects Canada's and the U.S.' desire to settle this issue within

Figure 2: Production and Transfer Ratios for Selected Products, 1986

(a)



(b)



a multilateral forum. Only in a multilateral forum can a solution that has any kind of positive impact on the world market be negotiated.

Canada agreed to eliminate its Western Grain Transportation Act (WGTA), as it applies to preferential rates on agricultural products that are shipped to the U.S. through West Coast ports. Apparently, part of the reason that Canada did this was that they accepted the U.S. argument that because the program was not generally available it would have the potential to distort trade. In Canada, there are increasing numbers of people who feel that the Army Corps of Engineers' involvement in dredging and maintaining the Mississippi is just as much an inducement to U.S. trade as is the WGTA in Canada. These same people often feel that Canada should not have given up the WGTA so easily and should have used it as a bargaining ploy in the multilateral negotiations.

Domestic Subsidies: On domestic subsidies, CUSTA states that Canada and the U.S. have agreed to work together to eliminate trade distorting domestic production subsidies in the GATT.

Public Entity Pricing: In CUSTA both countries have agreed that it will be illegal for a public entity to sell its products below acquisition cost. This provision is quite interesting because, in the past, if a public entity was perceived to be selling below cost of production, the relevant industry would have had to launch an unfair trade action case; which would require proving there was injury. The public entity pricing provision removes the injury requirement. This raises a question of sovereignty: if Country A's actions do not injure Country B, why should country B have anything to say about it?

Market Access: Canada and the U.S. have agreed to work together in the GATT negotiations on improving market access and they have also made a commitment to improve bilateral access. Again, access is an international problem. For example, in Japan, the problem in agriculture is not domestic production subsidies or export subsidies, it is getting access to the Japanese market.

Grains and Oilseeds: For grains and oilseeds, Canada has agreed to remove its import licenses on each barley, oats and wheat when government support in the U.S. and Canada for the relevant grain is equalized. However, imports will still require an end-use certificate indicating that the product will be used for feed or processing or some other end use. Canada has already removed its import licenses for oats, but they remain in effect for barley and wheat. Some observers of Canada's agrifood industry expect this to be very beneficial for Canada. They feel that Canada's grain policies have interfered with market signals in the prairie provinces for half a century, and that this has reduced the competitiveness of the western Canadian livestock industry, and has made it more difficult for grain processors to compete in world markets.

Beef and Veal: In the beef sector, Canada and the U.S. agreed to exempt each other from their respective Meat Import Laws. This provision will benefit Canada. In the past, the threat of the U.S. imposing or invoking the meat import law against Canada reduced the amount of investment that meat packers were willing to make, and also contributed to smaller scale plants in Canada. This provision makes plants such as Cargill's in High River, Alberta more likely; larger plants that can effectively serve a much larger portion of the North American market.

Poultry and Eggs: The provisions for poultry and eggs reflect the fact that Canada has a supply management system for these commodities, and that Canada operates it under Article 11-2 of the GATT. Under this system, Canada imposes import quotas equal to a certain proportion of production in the previous year, but in the past if a processor could demonstrate that a certain type of product was not available in Canada within a certain time period it was technically possible to get

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

supplementary import quota. Basically, Canada agreed to increase the actual import quotas to the amount that was actually being imported in the years before CUSTA was negotiated. Again, Canada wants to deal with these issues at the GATT.

Sugar: The U.S. agreed not to introduce or maintain quantitative import restrictions on products with 10% or less sugar from Canada. Again this reflects the fact that the U.S. wants to give this up in multilateral negotiations which is going to have a substantial impact on bilateral trade.

Tariffs: Tariffs on many products will be phased out over equal increments; completely on January 1 1989, over 5 years or over 10 years. There is a special snapback provision for horticultural products. In Canada, because the harvesting season lags behinds the U.S.', imports of horticultural products have faced a higher tariff during this period. In CUSTA, Canada and the U.S. agreed that once per year, either on a national or regional basis for a maximum of 180 days, the tariff can be snapped back to a higher level, that is based on a most favoured nation concept. If the import price is below 90% of the five year average monthly import price for five consecutive days, then the snapback can occur. Industry sources estimate that this would probably only occur about 3 or 4% of the time. What is most interesting about the snapback is that, in Canada at least, we apparently do not have the data base to implement the snapback. In both Canada and the U.S. the pre-CUSTA tariff structure discouraged value-added exports from both countries, so as these tariffs are phased out, we will be able to obtain an indication of the relative competitive strengths of various food processing industries in Canada and the U.S.

Technical Regulation: Technical regulation is one of the areas where the Canada-U.S. Trade Agreement is ahead of progress at the GATT negotiations. A commitment to not use technical regulations for protectionist purposes has been made, and it has been agreed that Canada and the U.S. are going to harmonize their rules either on some existing Canadian or U.S. standard, on an international standard, or perhaps on a new standard. The approach that is being used appears to be sensible. The two countries have set up a series of sector and issue-oriented working groups to work out the details, and all indications are that these working groups are making considerable progress. Some of the CUSTA provisions could serve as a model for GATT negotiations.

GATT Rights and Obligations: By far the most interesting of CUSTA's provisions that are relevant to agriculture are those that deal with GATT rights and obligations. For example, in the dairy industry, Canada operates its domestic support system under Article 11-2(c) of the GATT. Canada operates a supply management system, and, therefore controls production to a certain level in order to support a given price. In contrast the U.S. obtained a waiver from the GATT in 1955, which means the two countries are competing under different rules. Canada has to control its production in order to support the price, whereas the U.S. does not. The GATT waiver also makes it possible for the U.S. to maintain import restrictions on products such as yogurt and ice cream outside of GATT rules, whereas a GATT panel determined very recently that Canada cannot impose these restrictions. The issue could be settled bilaterally, but, again, it's very much a part of the attempt to reach an agreement on supply management, waivers and other exemptions from general GATT rules under the GATT negotiations.

Another interesting issue is the ongoing dispute in the pork industry. CUSTA does not specifically mention the pork dispute because it is about subsidies and countervailing duties. Thus, initially the case must be heard under U.S. law and then it can be appealed to the binational panel, established in Chapter 19 of CUSTA, as well as a GATT panel. The biggest complaint that Canada, as well as the E.C has with U.S. countervailing duty law is as follows: If the U.S. Trade Administration

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

(USITA) rules that imports are subsidized, then the U.S. International Trade Commission (USITC) only needs to determine that those subsidized imports contribute to material injury. That is the standard that is used under U.S. law, and this, in the Canadian and European view, is inconsistent with the provisions laid out in the GATT Subsidies Code. It is also inconsistent with Canada's implementation of the GATT Subsidies Code, the Special Import Measures Act. The standard of the GATT Subsidies Code and the standard used under the Canadian Special Import Measures Act is as follows: "Does the subsidy cause material injury?" This is a much higher standard involving considerably more correct, and unfortunately more complicated, economic analysis. Most fundamentally, contribution to material injury is much easier to prove than cause, and explains why the U.S. brings 88% of all countervailing duty cases in the world while Canada only brings 4% and Australia only brings 5% of the case and the remainder of the countries in the world account for the remaining 3% percent of countervailing duty cases.

FUTURE OF CUSTA

Once the current round of GATT negotiations are complete, the effect of CUSTA's provisions that are of relevance to agriculture could change substantially. Although there will be little or no change for the provisions relating to tariffs, or market access, the agreement that is ultimately reached on Article XI(2)(c) and for waivers may make a substantial difference for Canada's ability to operate its supply management programs and the U.S.'s ability to operate its price support programs as they currently do. A GATT agreement could see the import quotas being converted to tariff rate quotas as part of an eventual step to a complete conversion to tariffs which can be more easily negotiated. For technical regulations, the suggestions of the working groups will generally be implemented.

For dispute settlement, the results obtained by the GATT group dealing with countervailing duty and anti-dumping laws may be sufficient to replace the countervailing duty provisions in CUSTA. These provisions could include raising the proportion of producers that must have filed a complaint in order to establish standing, but to be effective they must require higher standards for economic evidence. For example, in the pork case, the USITC paid more attention to a statement made by the President of the Pork Producers in Canada saying that the stabilization program for hogs in Canada eliminated the Canadian hog cycle, than it paid to the substantial body of econometric analysis showing the opposite. Currently, U.S. law allows the USITC to use this approach, but it raises a crucial question, "If better information is available, how can the USITA and USITC be forced to use it?"

U.S. AGRICULTURAL SUBSIDIES: MEASURES AND TRENDS

Harry Baumes
Chief, U.S. Agricultural Policy Branch
Agriculture and Trade Analysis Division
Economic Research Service
U.S. Department of Agriculture

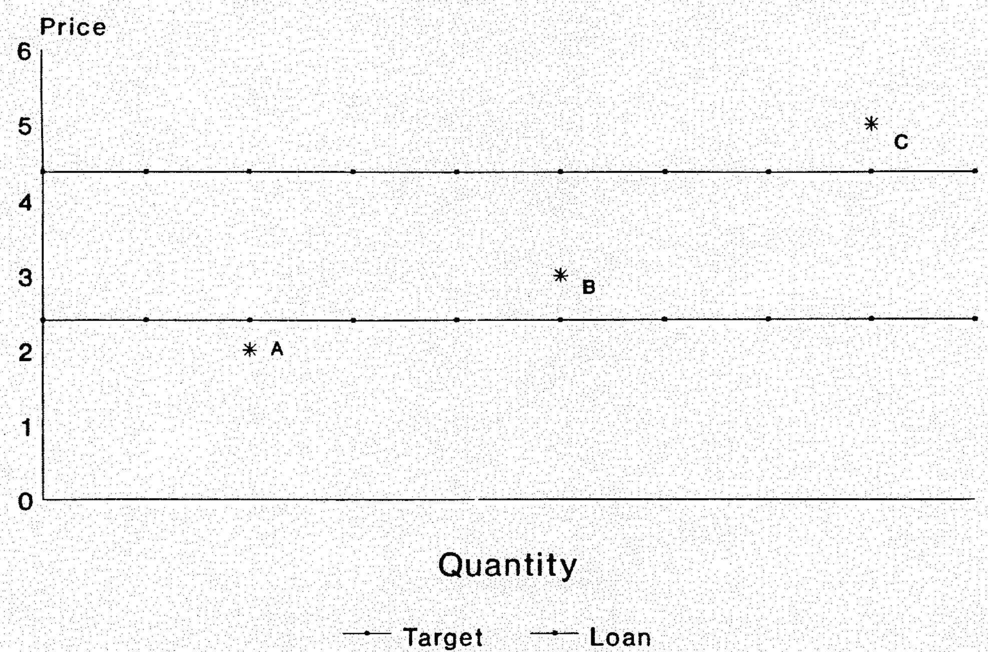
My presentation is organized into the following parts. First, I would like to provide some background on U.S. agricultural supports, particularly as they relate to what we call direct payments and how the farm programs operate and how important those supports or subsidies are to the U.S. farm sector. Secondly, I would like to talk briefly about aggregate measures of those supports which Professor van Duren referred to, and provide some brief comments on trade between the U.S. and Canada and, thirdly, I will look at a more specific comparison of the supports between the two countries.

BACKGROUND

To begin, I would like to look at the United States price and income support program. As an economist, I have to use a graph, but for those of you who have seen other economists make presentations, this is a unique graph in that the lines do not intersect.

Two major components of our support programs are called "the price and income support programs." For price support, farmers who participate in government programs have the benefit of procuring or securing loans from the government using their crops as collateral.

Table 1: Price and Income Support Program



Source: U.S. Department of Agriculture

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

It happens that for 1986 the lower line is $2.40/bu, and that was the loan rate for wheat producers in 1986. The way the loan program operates is that farmers who participate in the program have the option to secure a loan from the government, at the loan rate, using his/her crop as collateral. This is a non-recourse loan in that the government has no recourse in how the farmer chooses to satisfy his/her loan obligation. Farmers can either repay the loan to the government plus interest, or they may default on the loan and turn their commodity over to the government and therefore forego any interest charges on having use of the money for a nine-month period. Many commodities in the U.S. have a support system or the loan support possibility, including feed grains, cotton, soybeans, oilseeds, rice, wool, mohair, tobacco, and peanuts.

The upper line is what's called the "target price," and in 1986 that was $4.38/bu for wheat. That represents part of the income support mechanisms in the U.S. programs. The government will transfer to participants the difference between the target price and the larger of the loan rate or market price. For wheat, if a farmer participates in the program he can secure loans from the government for $2.40/bu in this case. Now if the market price falls to, for example, Point A, something less than $2.40, he can then default on that loan to the government and receive what is essentially a sales price of $2.40 for his wheat. The government will then transfer to him the difference between the target price and the loan rate. In 1986, $4.38 minus $2.40 is $1.92. This transfer is called the deficiency payment rate. Say it is about $2.00, and since 1986 that differential between the loan rate and the target price has remained about $2.00. So at Point A when the market price is below the loan rate, the prudent farmer would default on his loan and turn his wheat over to the government which is what happened in 1986. The government was the residual buyer of wheat and corn and other products. If the market price is at Point B, the government will only transfer a maximum amount to the farmer of the target price minus B in this case. So in this case a farmer would sell his wheat at the price Point B, which in this example is a little over $3.00 and then he'd receive an income transfer of about $1.38. Now at Point C, the market price is very high and above the target price. There would be no income transfer. The farmer would just sell his commodity on the open market at about $5.00 in this example, though it has been a while since wheat was at $5.00. That is essentially how this program operates, and that's a major component of U.S. programs in terms of agricultural support.

SUPPLY CONTROL

There is a cost to participate in these programs. When Jeff Thomas was talking to me earlier he referred to the Canadian supply management programs, and I said we do have supply management in the U.S. -- it's just a different type.

To participate in programs and be eligible for benefits of this nature, farmers, particularly since 1981, have voluntarily set aside or idled some acreage. A natural question that arises after you look at these types of programs is how much is expended on them? The Commodity Credit Corporation (CCC) is the "operations officer" of the programs. Net outlays by the CCC represent how much it costs to operate the programs (see graph). Net outlays do represent how much it cost to operate the programs. It does not represent what is transferred to the farmers directly, but you see that pretty much from 1980 through 1986 when net outlays peaked at $26 billion, that's when the farm sector was relatively weak, and since 1986 the cost of the programs have fallen. Part of that reflects drought, and part of it just reflects improved economic conditions in the world. But, presently, the cost of our commodity programs for price and income supports are somewhere in the neighborhood of $11, $12, $13 billion dollars, and, according to the President's initial budget for fiscal 1990-91, these outlays are estimated at about $10.2 billion.

[illegible]

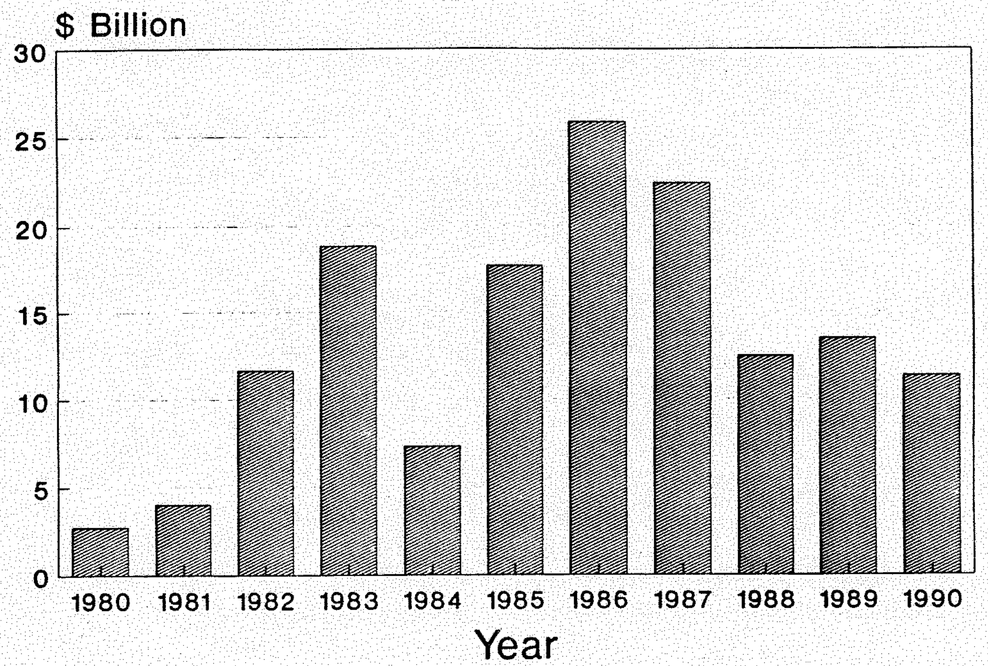
[illegible]

[illegible]

[illegible]

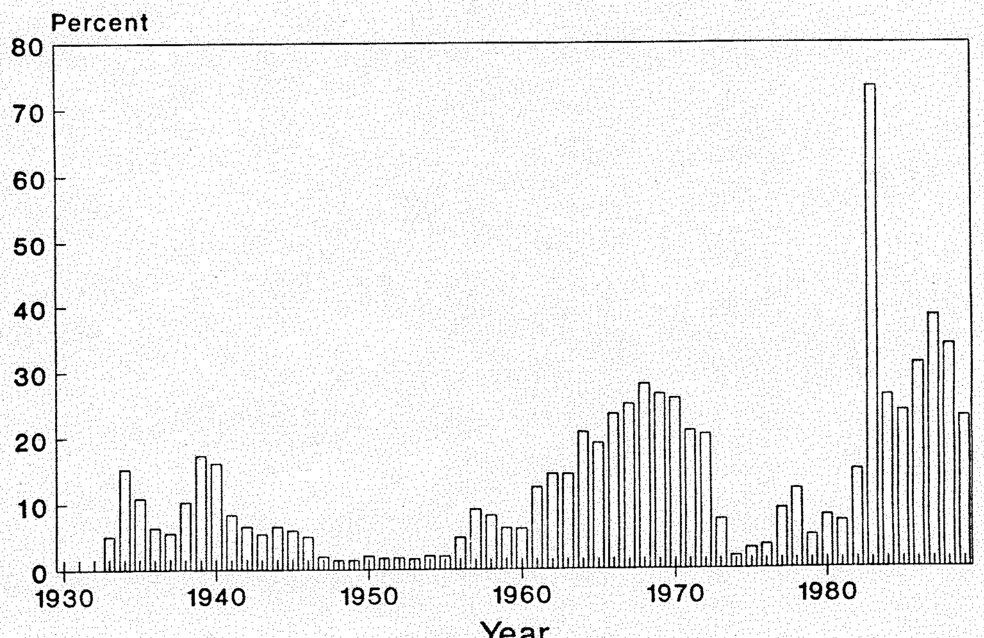
[illegible]

Table 2: CCC Net Outlays



Source: U.S. Department of Agriculture

Table 3: Direct Payment as a Percent of Net Farm Income



Source: U.S. Department of Agriculture

Direct payments are a major portion of these net outlays -- those are payments made directly to the farmers. Such deficiency payments, diversion payments, during termination payments include the amount of money going for loans which is also included in here. And the reason that it's net is that some years the CCC takes in loans and other years those loans are redeemed or products are released from CCC inventories. A question that naturally arises is how important to farmers are these direct payments? I am going to try to give you some historical perspective here. The graph above represents direct payments as a percent of net farm income. You can see that in the early 1930s (1933 is when we started making payments directly to farmers) supports were running usually less than 10%, probably closer to 5%. Then in the 1940s and early 1950s, World War II and the Korean War helped to move agricultural products globally, the need to support agriculture was relatively small. Prices were relatively high due to strong demand. For example, Europe could not produce enough food to feed itself in World War II. In the 1960s, the cost of our programs began to rise, and, in the 1970s, planned economies came back into the market to create a strong demand; prices improved; cost of programs declined; and then we have the late '70's and certainly the '80's when supports have increased dramatically. In 1983 we had a major acreage set-a-side aside program where we idled more than 70 million acres of land in the United States, and farm income was very low. Our exports were down and our prices were very low. The U.S. just was not moving product in the international markets. Farm income fell to about $12 billion dollars compared to current levels of about $38 billion, so that ratio of direct payments relative to income expanded to almost 80%. However, since 1986 the trend in support is down in terms of direct payments and their contribution to net farm income.

SUPPORT TO AGRICULTURE

Professor van Duren referred to the producer subsidy equivalent (PSE), and I'm going to focus some of my discussion on that now. The producer subsidy equivalent (PSE) is a measure of compensation -- it's based on how much compensation would be required if programs were to be removed in order that the farmers would be as well off as when programs existed.

Table 4: Producer Subsidy Equivalent

THE AMOUNT OF COMPENSATION REQUIRED TO BE PAID TO PRODUCERS THAT WOULD BE NECESSARY TO MAINTAIN INCOME IF GOVERNMENT SUPPORT IS REMOVED

Source: U.S. Department of Agriculture

This measure can be looked at in two ways: one in terms of actual dollars spent and another in terms of a percent measures. So the relative level of support for a commodity or total agricultural base can be compared. The percent measure is support for the commodity or agriculture market to the value of the commodity or overall value of agriculture.

COMPONENTS OF AGRICULTURAL SUPPORT

We have discussed price and income supports and direct payments. Professor van Duren had more detail information relating to the components of the PSE, but basically supports can be broken down into five measures or five general areas:

1. Price support: policies that tend to enhance or raise domestic prices or insulate domestic markets somehow. This is where we would put our export enhancement program or subsidize exports to compete particularly with the Europeans. Tariffs would also fall in this category. We had a dairy termination program in the early 1980s and dairy cattle were liquidated. To prevent market prices from falling for the beef sector, the government wound up making purchases of beef. This type of program would be included in this category.

2. Direct income support: deficiency, disaster, and diversion payments. We've had two disaster bills in 1988 and 1989 which in total represent about $5 billion being transferred to the agricultural sector. We have diversion payments where farmers are actually paid to divert land or idle land as opposed to voluntarily idling it. And this direct income support for purposes of the PSE measures is where loan forfeitures would come into play.

3. Input subsidies component. Several of our programs provide relatively low cost loans to farmers or make them available to farmers, and that is a type of input subsidy would enter in. Loan rates for the basic commodity loan are below market rates if farmers had to go to secure a commercial loan.
   We had a program where we offered loans to build storage, and they were at below market rates. Those types of subsidies or supports would be included in this measure. Also, in some of the National Forest areas, farmers are allowed to graze for certain fees. These fees are below pasture rental rates. The Federal Crop Insurance Program is a subsidized insurance program.

   If an area's declared a disaster area, farmers or producers in that area are eligible to receive certain benefits through the CCC of basically a 50% income or a cost reduction in the purchase of feeds through the Commodity Credit Corporation. Another subsidy would be based on the fact that federal excise taxes on gasolines and diesel fuels which farmers are essentially exempted from.

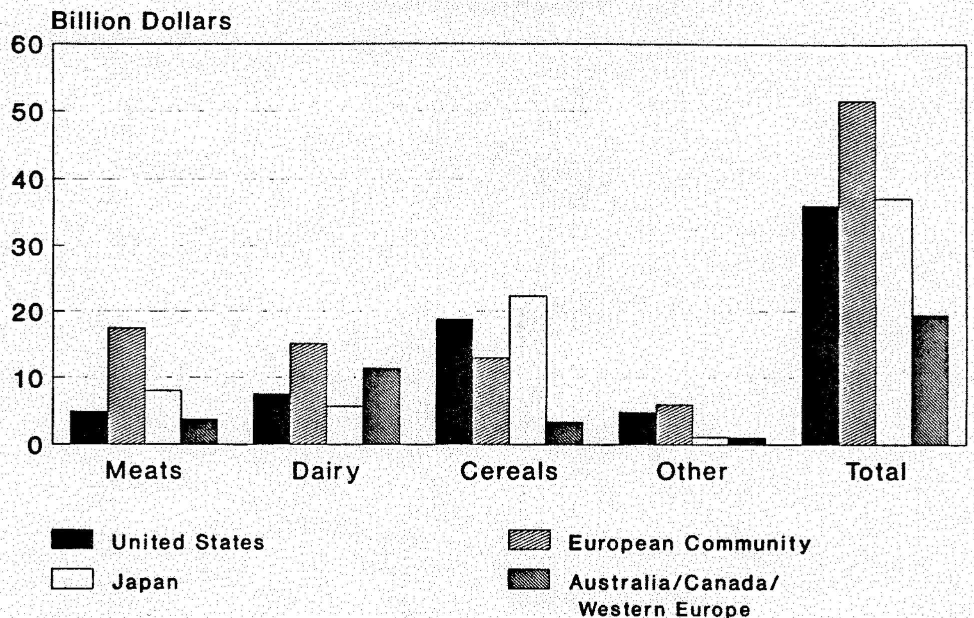
4. & 5. Marketing subsidies and long-term programs. These are relatively small components of the overall measure, but include research by the land grant universities, the extension services, and expenditures made on these program areas.

We have attempted to allocate those out to different commodities, and, as Professor van Duren said and Jeff Thomas confirmed, these subsidies are significant. There are many different types of support to consider, and what we're trying to do is be as comprehensive as possible in doing so.

COMPARISON OF SUPPORTS GIVEN BY CANADA & THE U.S.

Professor van Duren showed you her measure of total support, I'd like to show you mine for 1986. Here I am trying to give some perspective with respect to the rest of the world also as well as Canada and the United States.

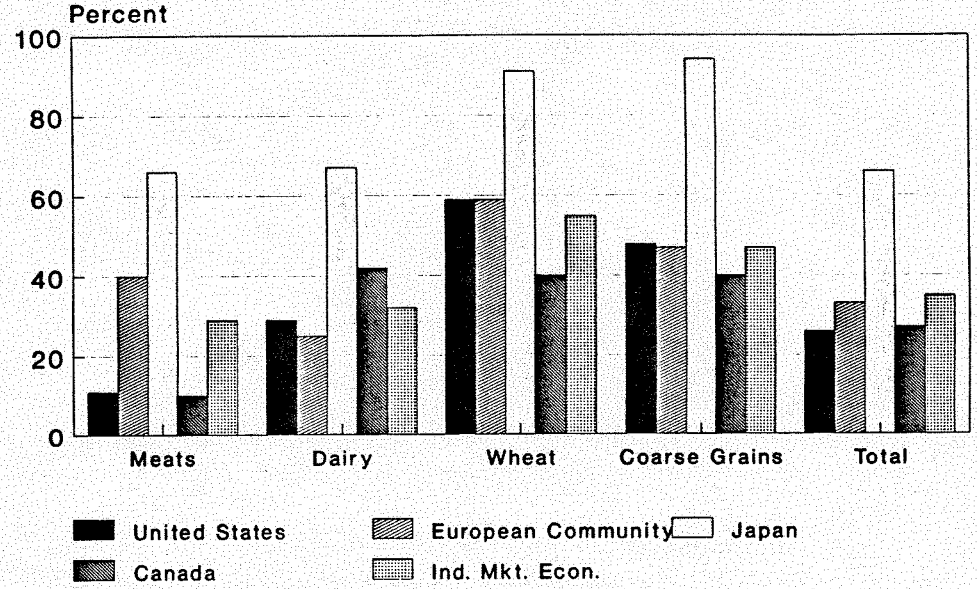
Table 5:
Producer Subsidy Equivalents for Selected Commodities 1986



Source: U.S. Department of Agriculture

The last bar in the sequence of four bars is Canada's total support aggregated here with New Zealand, Australia and Western Europe. What we can see is in the meats area is that the U.S. supports are less than $5 billion compared to the EC support, which is closer to $17 billion. For Canada, Australia, Western Europe and New Zealand combined, the figure is closer to $2-3 billion. But you see in the dairy areas, the total amount expended by the group of four (Australia/Canada/Western Europe/New Zealand) is over $10 billion compared to the U.S. which is about $8 billion. And here again you see the EC coming on even stronger with supports of about $15 billion. If you were to look at the total category, total supports as we calculate them in 1986 spent on agriculture by these seven countries/groups was about $138 billion. The EC, Japan, and the U.S. account for nearly 85% of those expenditures or levels of support. Canada, Australia, other Western Europe, and New Zealand account for only about $20 billion in supports. Like Professor van Duren, will put these measures on a relative basis, and you can look at the producer subsidy equivalent as a percent (see Table 7 below). The level of support expended versus the relative value of that support to the value of the crop or product (including that support) presents a different picture. This is a little different in that I've broken Canada out separately here. You can see in the meat category that Japan is by far the worst offender in terms of supports provided to their producers. Then the EC comes in second at about 40%, then the U.S. and Canada at about 10%.

Table 6:
Producer Subsidy Equivalents for
Selected Commodities 1986 (as a percent)



Source: U.S. Department of Agriculture

Looking at dairy now, the U.S. is at about 30% support versus Canada at over 40% in 1986. Again, note that Japan is very high also -- over 60%.

If we look at wheat, the U.S. tends to support wheat producers a little more so than Canada -- with wheat supports of almost 60% compared to about 40%. But here again the EC is about 60% comparable to the U.S. and Japan is even worse. Coarse grains, again about 50% for the U.S. versus 40% for Canada, the U.S. about comparable to the average relative to these industrialized market economies. If you aggregate across all of agriculture here -- at least the commodities that we're looking at -- Japan is by far the worst offender. Their aggregate producer support measures about 63% versus the U.S. at about 33%, the EC comes in at about 38%, and Canada is actually a little bit higher than the U.S. in this example. And relative to the average, both Canada and the U.S. for these countries is below the average.

Trying to keep some of these aggregate measures of support in mind, let's look at trade between Canada and the U.S. In terms of absolute levels, agricultural exports by the U.S. to Canada is somewhere in the $2 1/2 to $3 billion range. Imports by the U.S. from Canada are $2 billion to $2 1/2 billion. Total trade is somewhere between $25 to $30 billion, so agriculture really represents a relatively small component of the total, but it's certainly an emotional part of the Trade Agreement.

But here if we look at U.S. exports, horticultural crops are by far the largest component representing 40% of our exports, and that's more a result of climatic conditions, I think. It's just too cold in Canada to grow some of the fresh fruits and vegetables that we produce in the United States. Animal products is about 20%, and we do have some trade in grains and oilseeds.

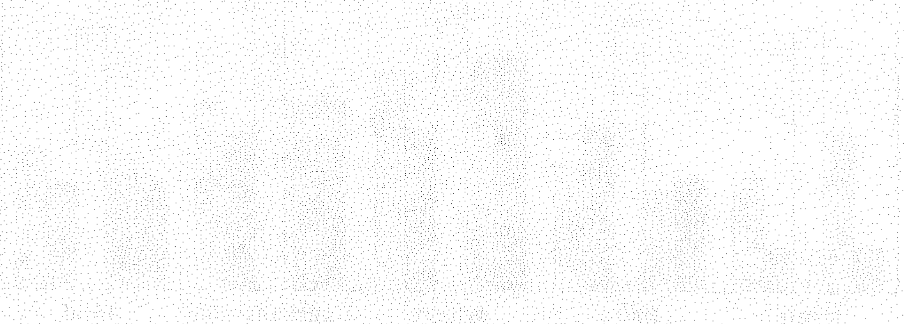
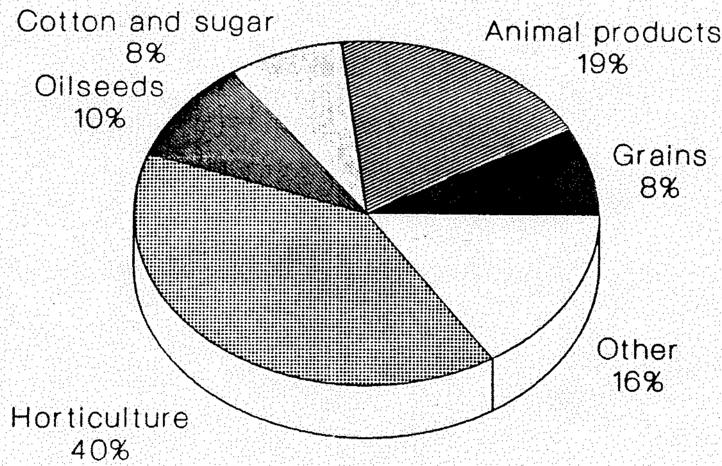


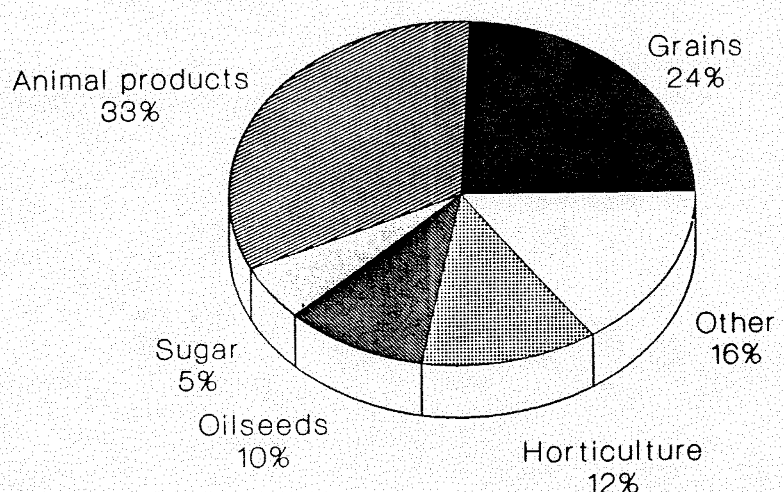
Table 7: U.S. Agricultural Exports to Canada 1987



Source: U.S. Department of Agriculture

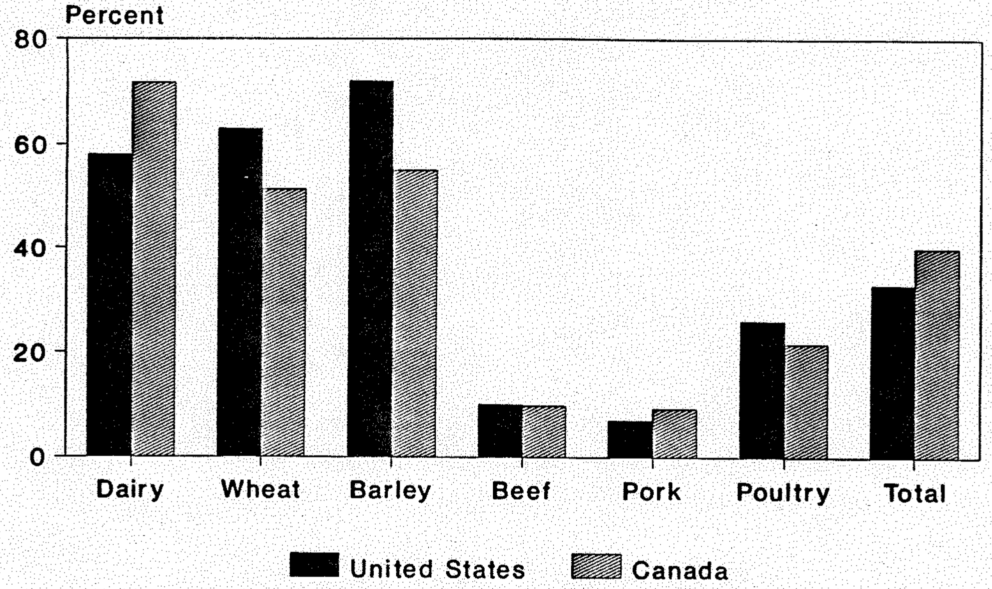
On the import side, here we see in relative terms a larger share of animal products account for the value of U.S. imports. This is live animals -- pork, beef -- grains, some wheats, barley, and the oil seeds and you see that horticultural crops are considerably less. But again if you keep things in perspective, $2 to $2 1/2 billion is what we're talking about with the Free Trade Agreement. There are certainly opportunities for the total value of trade to grow and perhaps for some shifting in the composition of trade.

Table 8: U.S. Agricultural Imports from Canada 1988



Source: U.S. Department of Agriculture

Table 9: U.S. and Canada
1987 PSE's For Selected Commodities



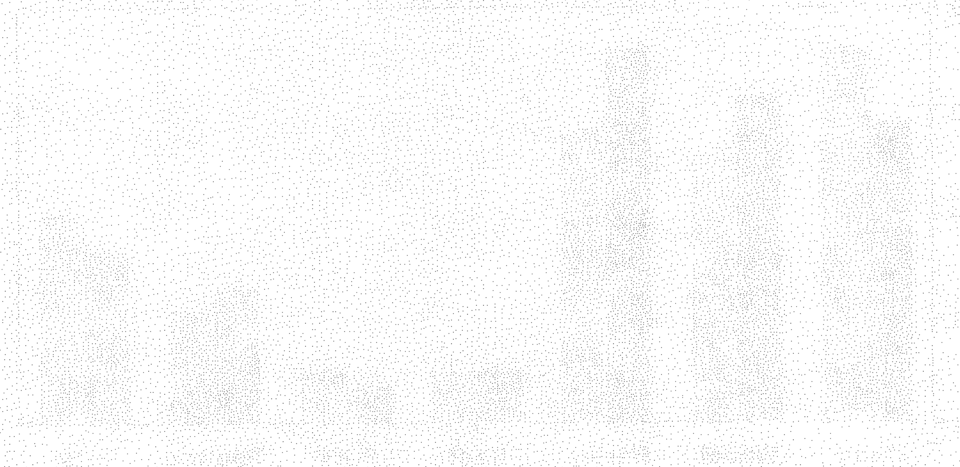
Source: U.S. Department of Agriculture

If we make a more direct comparison with this graph, which I think is comparable to Dr. van Duren's, we see that in the dairy area Canada supports their dairy producers at a higher rate than the U.S. does and these figures are updated to 1987. In the wheat area and the barley area, the U.S. supports are greater. With beef, the U.S. and Canada are about comparable. For pork, there is a little higher relative subsidization in Canada. Subsidization of poultry is a little higher in the U.S. Now a large part of our poultry measure comes from our use of the Export Enhancement Program, where we directly subsidize our exports, so in terms of the Free Trade Agreement that might be a more important perspective as we reduce some of these barriers or eliminate some of these distortions that policies cause. But overall, in 1987 terms, the level of support is a little higher in Canada than the U.S.

CONCLUSION

In concluding, Professor van Duren was right in stating that the Free Trade Agreement and any major progress made at the GATT negotiations will necessarily have to be consistent. The current round of the GATT negotiations are scheduled to conclude in December 1990, so we will probably see a proliferation of information coming out soon. Consistency will more likely be achieved along the lines of the multilateral trade negotiations than some possible modifications to the bilateral agreement. Another important point to consider is that supports, particularly in the U.S., are tending to come down, certainly from the 1986 levels. The administration introduced its 1990 Farm Bill proposal in the first part of February of this year. It essentially continues the philosophy of the Food Security Act of 1985 in pushing for greater market orientation, elimination removal of trade distorting policies, and that's pretty much going to continue to be the norm of the Bush Administration. Efforts will perhaps continue more aggressively from a bilateral standpoint to reduce barriers to trade and market distortions, particularly if the Uruguay Round is not successful.

[illegible]



[illegible]

[illegible]

[illegible]

[illegible]

[illegible]