

# Preface

This Portrait of the Canadian Agri-Food System provides a graphical compendium of the Canadian agri-food system. It also compares Canada's macro economic performance indicators with those of its main economic peers and other countries who are important in the world agri-food system, either as producers or consumers of agri-food commodities. The intent of the Portrait is to be an "easy to use" source of information for both senior management and department analysts whose interests vary widely. The Portrait provides a convenient starting point for developing annotated "decks" which have a specific and narrower focus.

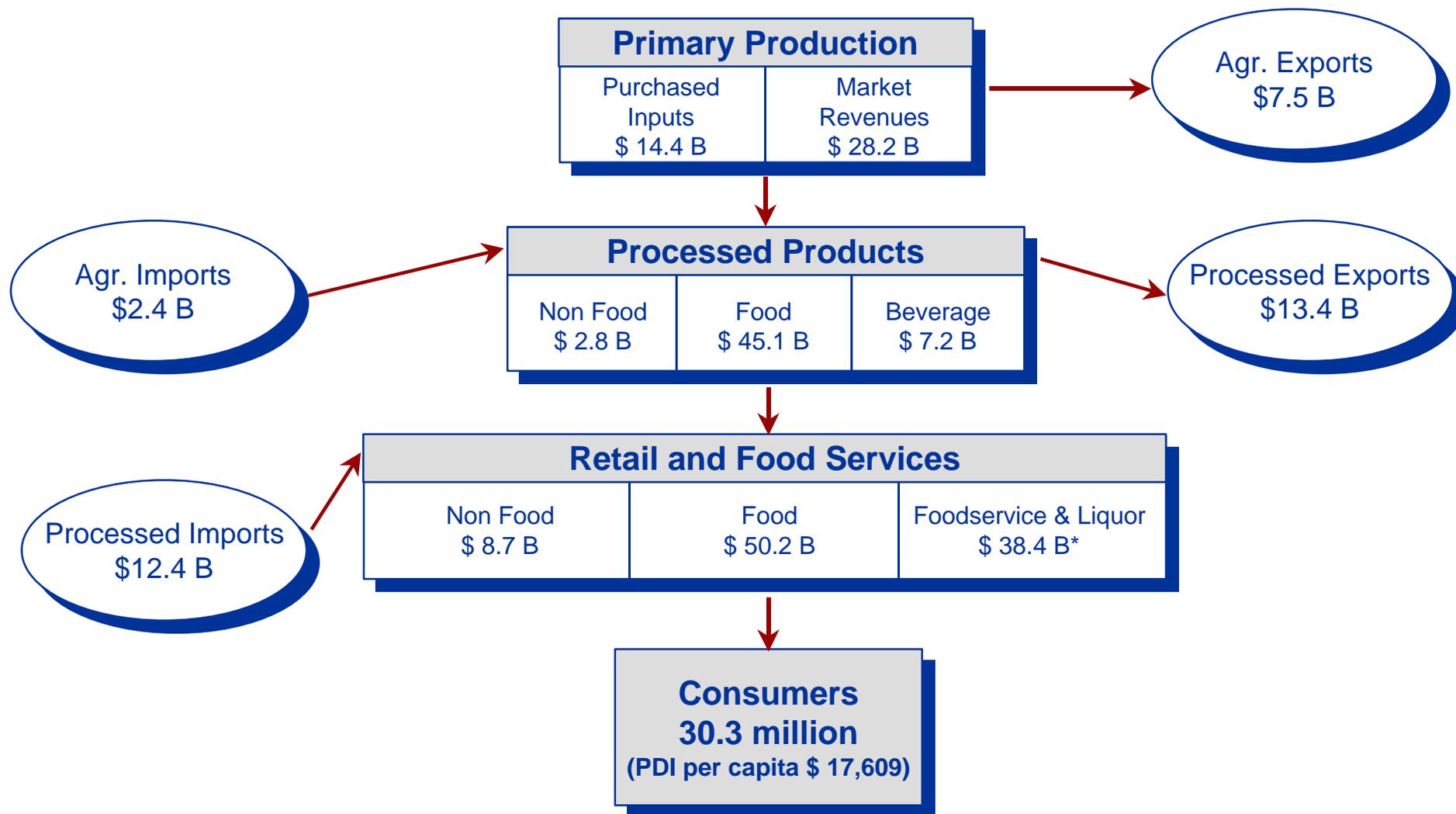
This June 1998 version of *A Portrait of the Canadian Agri-Food System* updates the information contained in the December 1996 version, and includes only those graphics where updated information is available. To further reduce the size of this mid-year revision of the Portrait, the provincial agri-food system overviews or provincial level details of the farm and agri-food processing sectors are not included. (This pattern for the mid-year update of the Portrait will be adhered to in the future as well). Please refer to the December 1997 version of the Portrait if you are interested in the provincial detail.

For further information about *A Portrait of the Canadian Agri-Food System*, please contact Jeff Corman at (613) 759-7415 or e-mail: [cormanj@em.agr.ca](mailto:cormanj@em.agr.ca).

# **Agri-Food System: Structure, Growth and Employment**

# Canada

## Agri-Food System Value of Gross Output, 1997

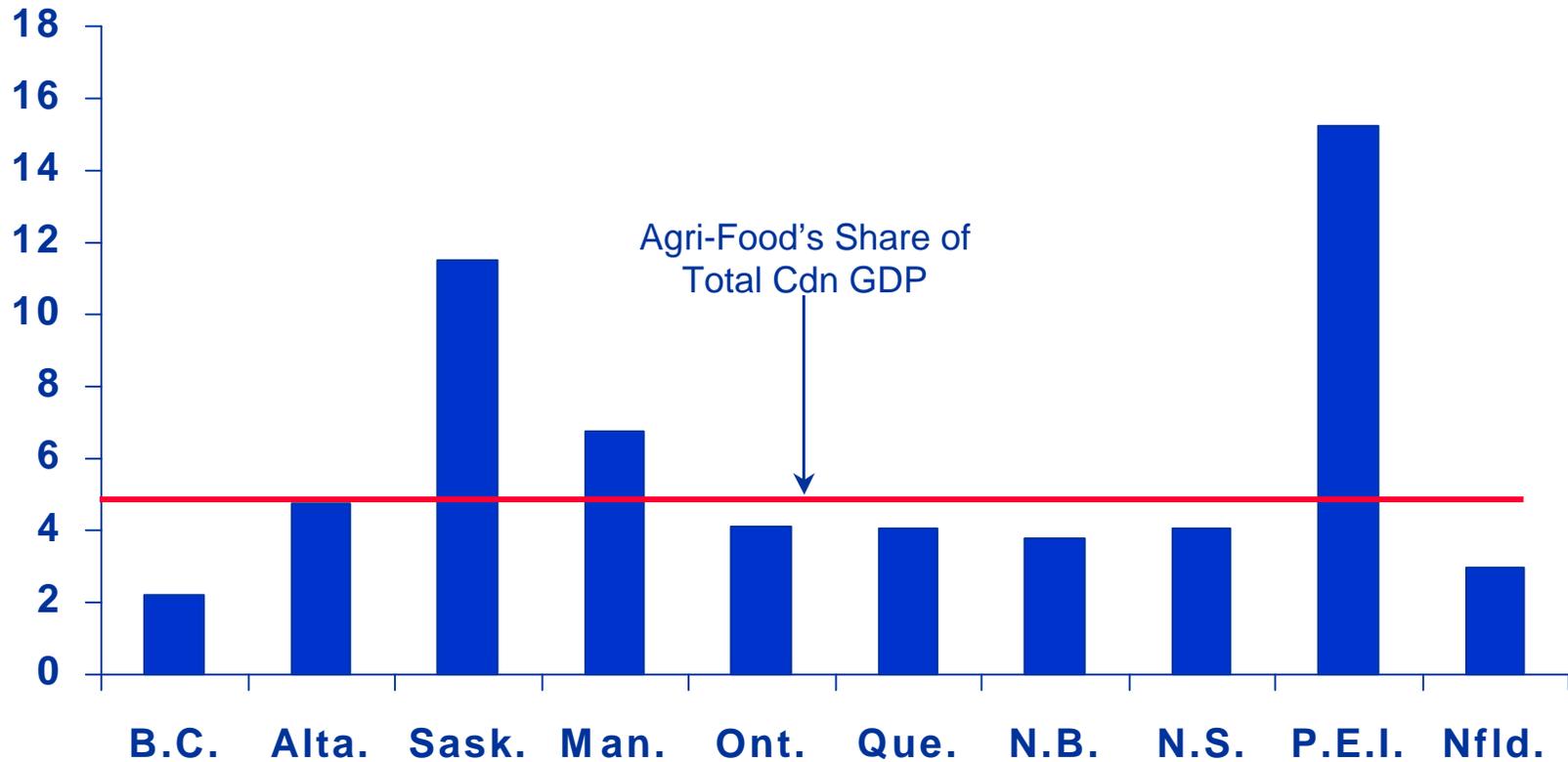


\*Note: 1996 data

Sources: Statistics Canada - Cansim, Agriculture Economic Statistics, Family Expenditures in Canada, AAFC - Farm Income, Financial Conditions and Government Assistance Data Book, Trade Database.

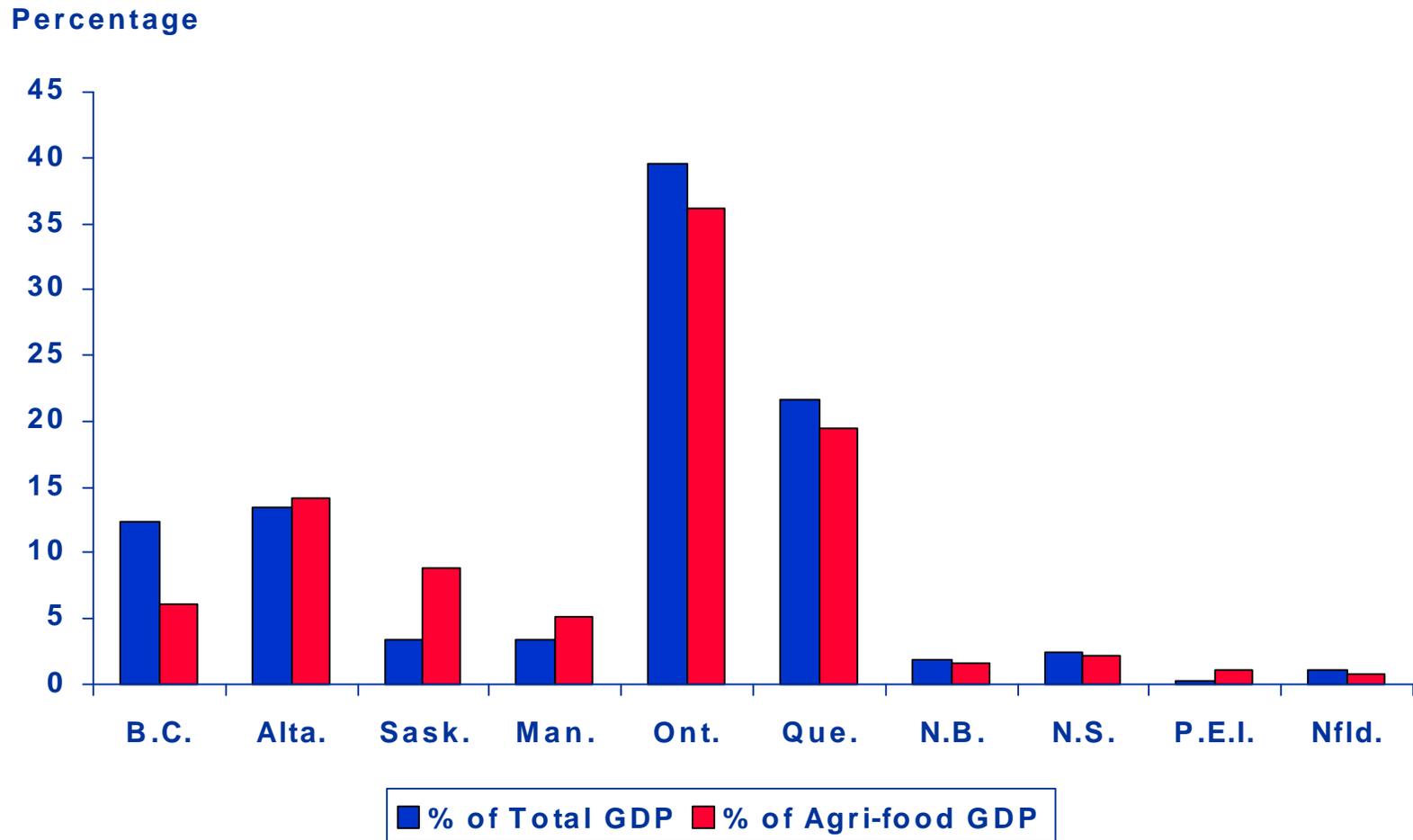
# Agri-Food Share of Provincial GDP, 1997

Percentage



Source: Statistics Canada, Cansim.

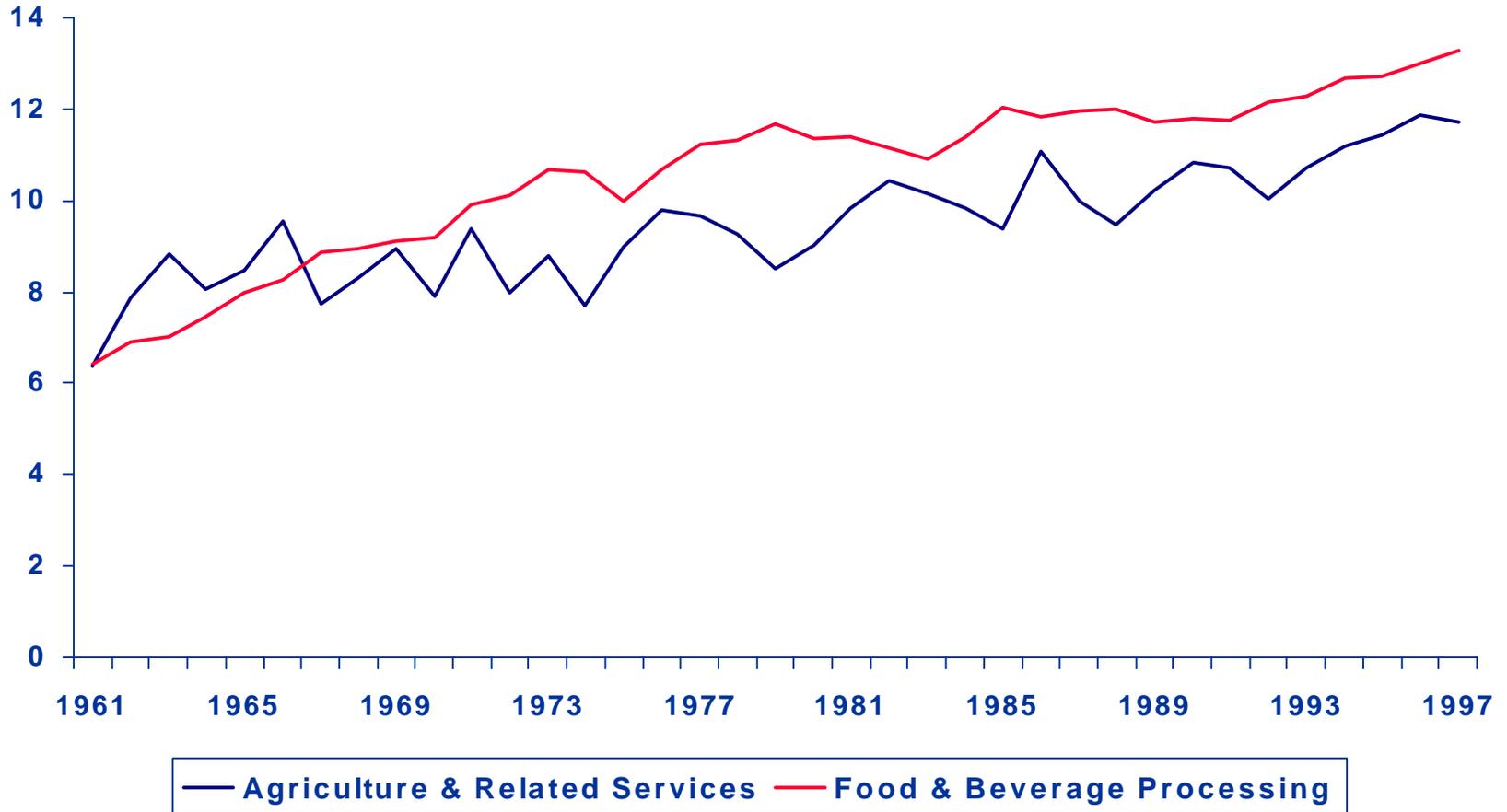
# Provincial Shares of Canadian Total GDP and Agri-Food GDP, 1997



Source: Statistics Canada, Cansim.

# Real GDP Growth

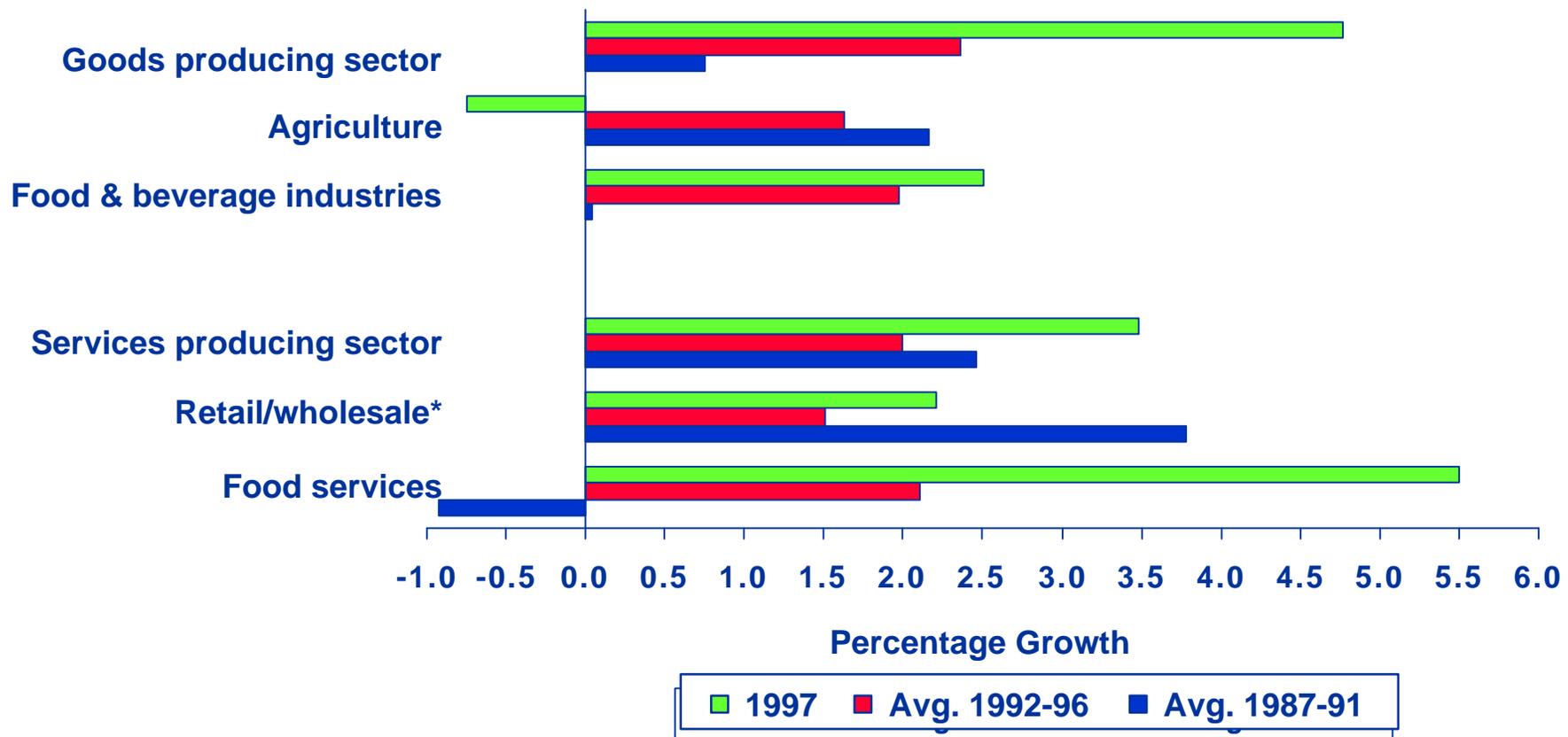
Billions of 1986 \$



Source: AAFC, Farm Income, Financial Conditions and Government Assistance Databook, February 1998.

# GDP Growth

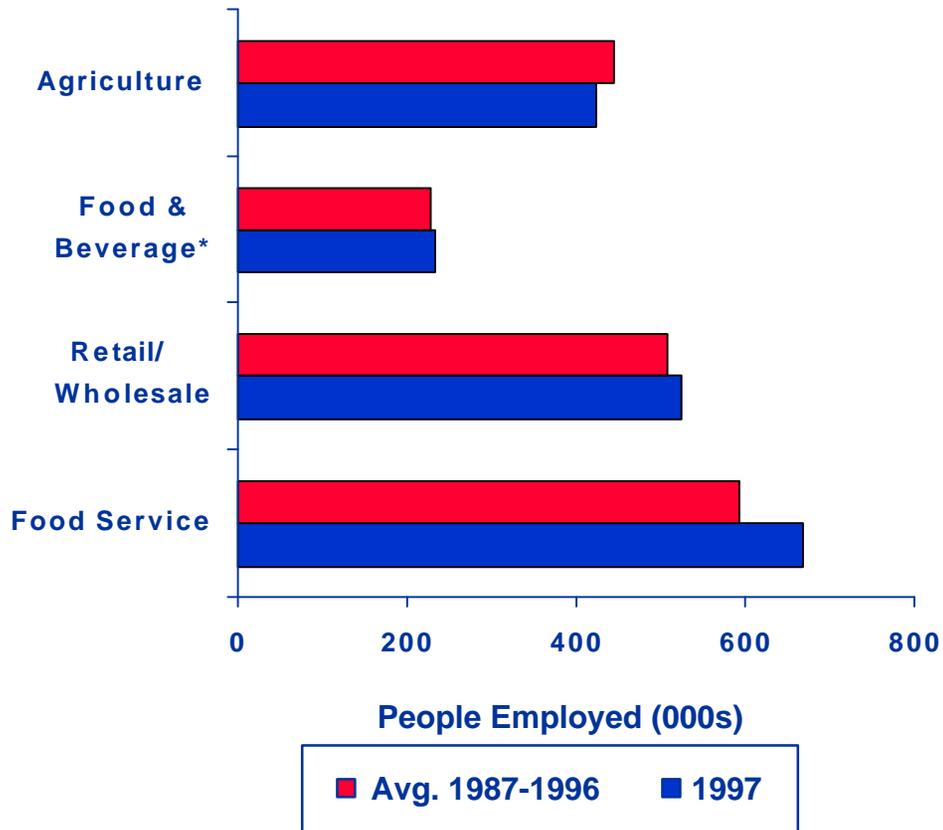
## Major Sectors of Agri-Food System Relative to Total Economy



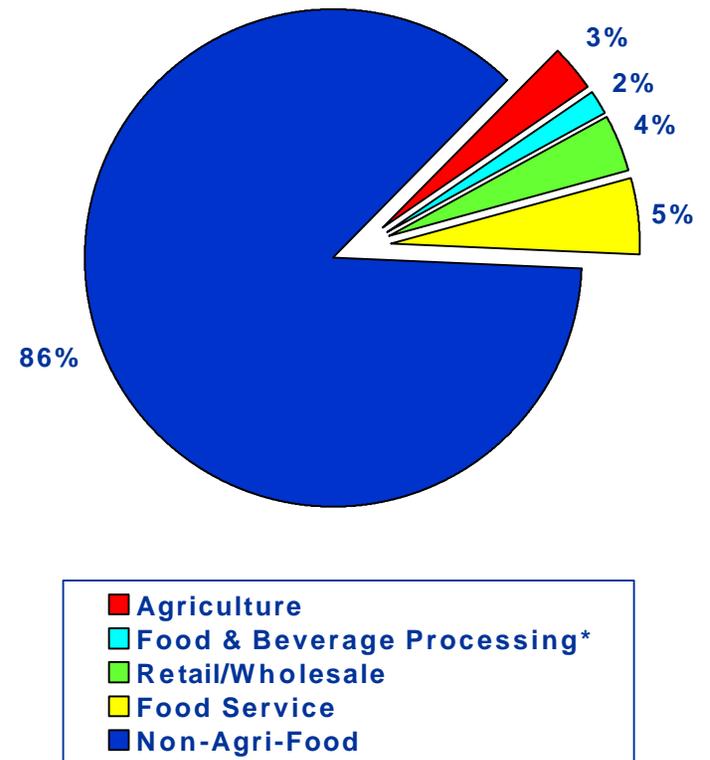
\*Note: No available 1997 data for the Retail/Wholesale sector - points shown are for 1996, Ave. 1991-95, and Ave. 1986-91.  
 Source: Statistics Canada, Cansim.

# Canada Agri-Food System Employment

Employment Growth



Employment Share 1997



\*Excludes fish processing.

Source: Statistics Canada, Labour Force Survey.

# Glossary of Terms

## **Agri-Food System**

Includes the primary agriculture sector, the food & beverage & non-food processing sector, the distribution sector and the food and beverage services sector.

## **Agri-Food (Provincial & National GDP comparisons)**

Includes agriculture and related service industries and food and beverage processing industries.

## **GDP (Gross Domestic Product)**

Total value of final goods and services produced within a nation's border during a year.

## **PDI (Personal Disposable Income)**

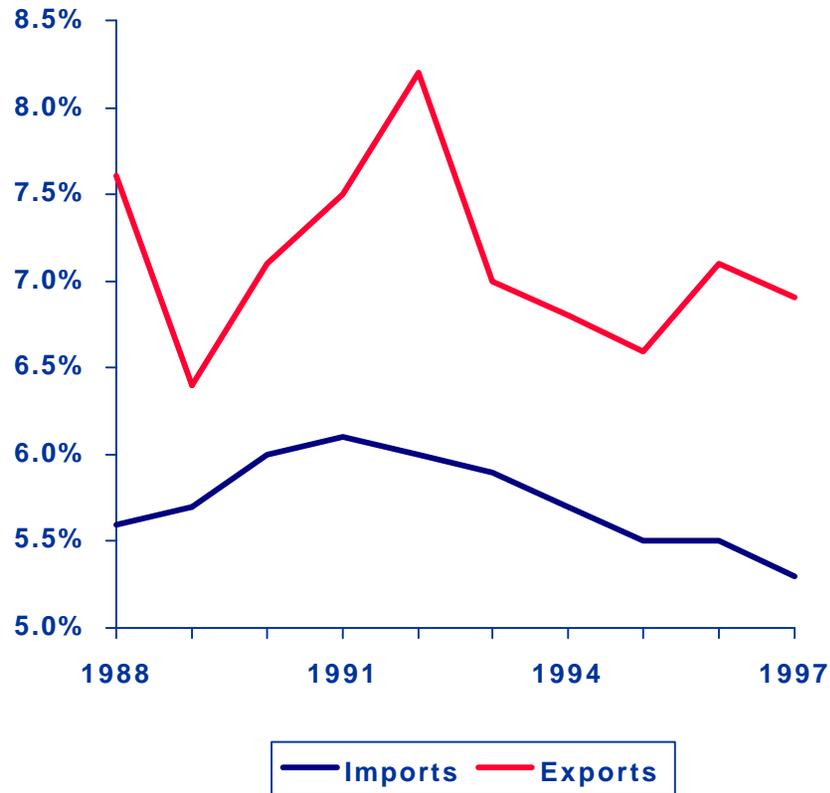
Personal income minus personal taxes. Disposable income is either spent on the consumption of goods and services or saved.

# Canadian Agri-Food Trade

# Canadian Agri-Food Share of Total Trade

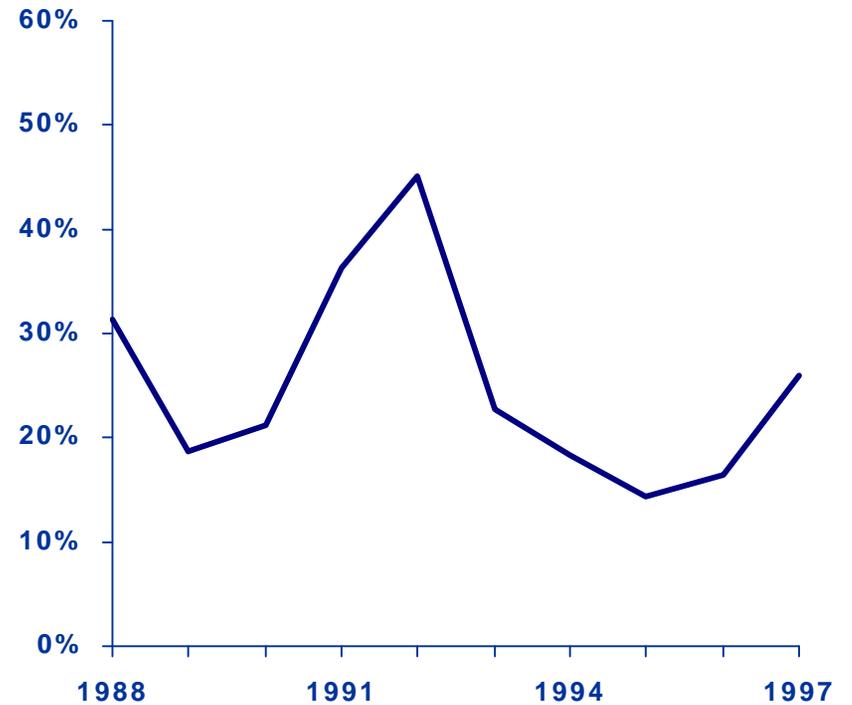
## Imports and Exports

Percentage of Total Canadian Merchandise Trade



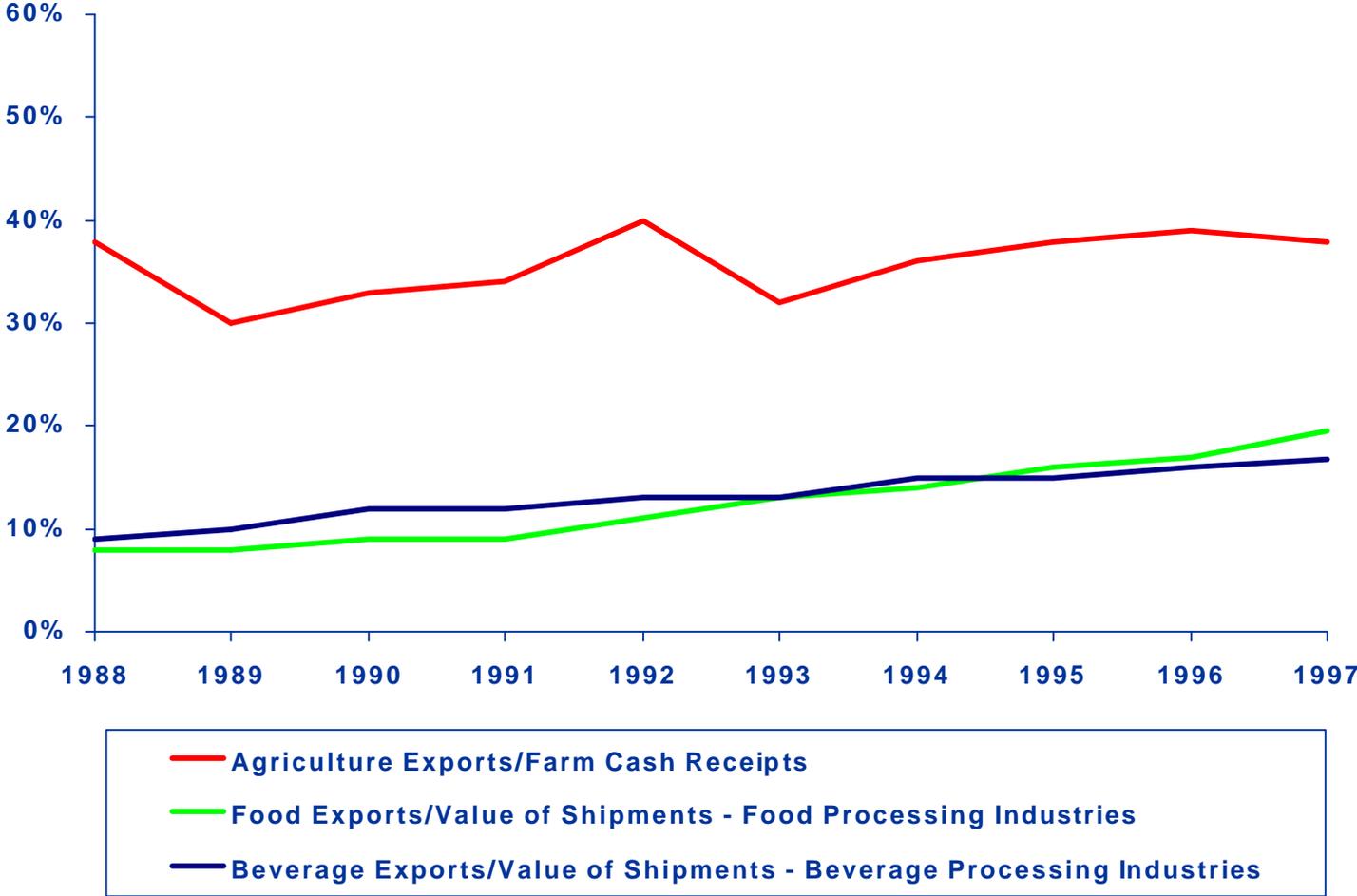
## Trade Balance

Percentage of Total Canadian Merchandise Trade Balance



Source: Statistics Canada, Cansim.

# Export Intensity



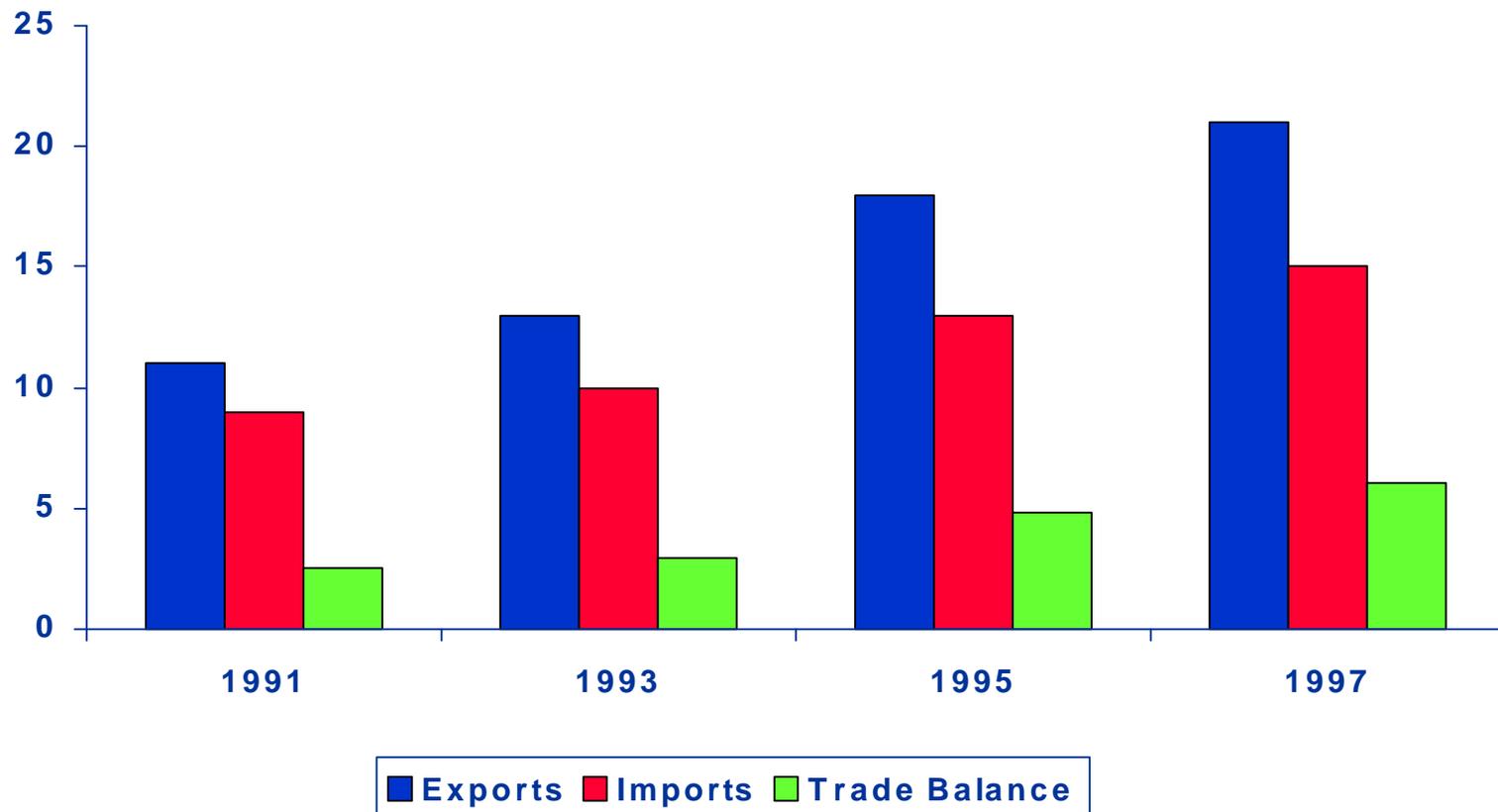
Source: AAFC Trade Database.

**Graph 2-2**

Graph 2-3

## Canadian Agri-Food Trade

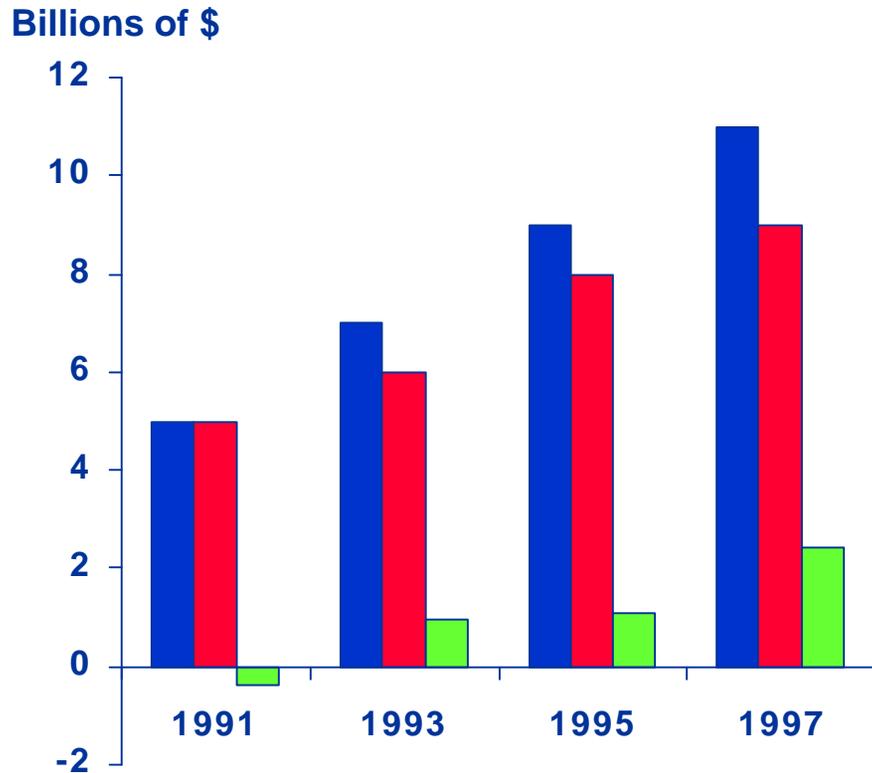
Billions of \$



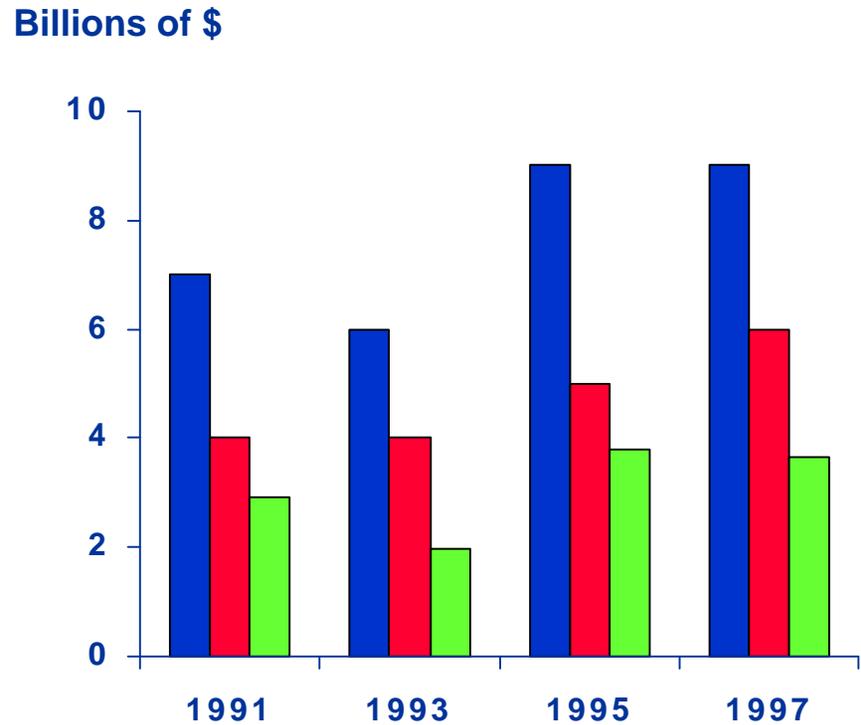
Source: AAFC Trade Database.

# Canadian Agri-Food Trade

## Trade with the US



## Trade with the Remainder of the World

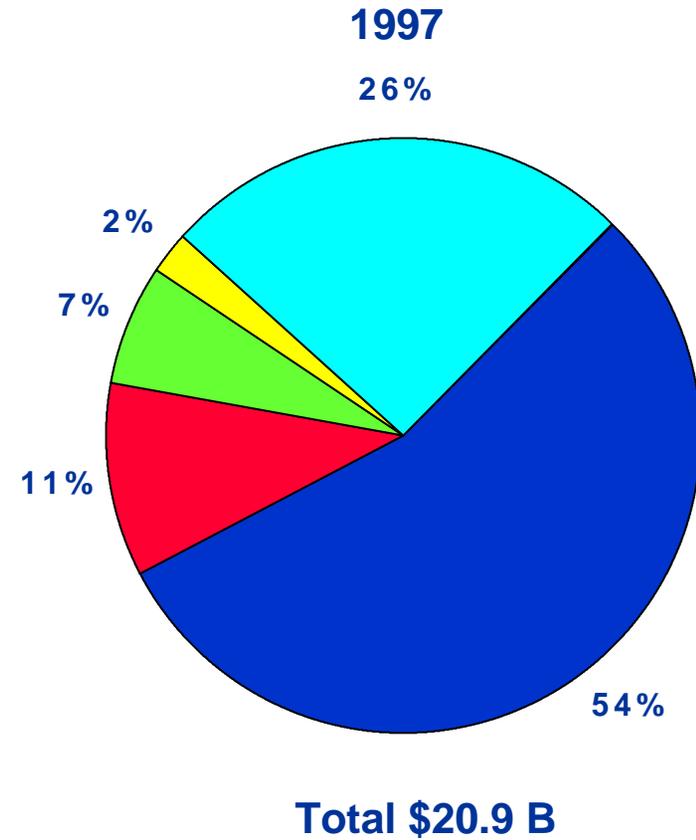
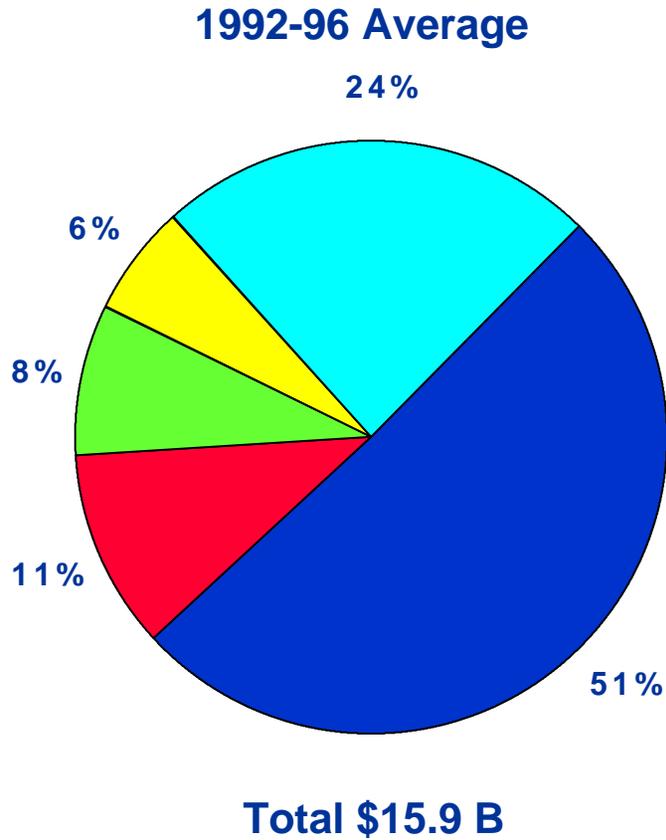


■ Exports ■ Imports ■ Trade Balance

Source: AAFC Trade Database.

**Graph 2-5**

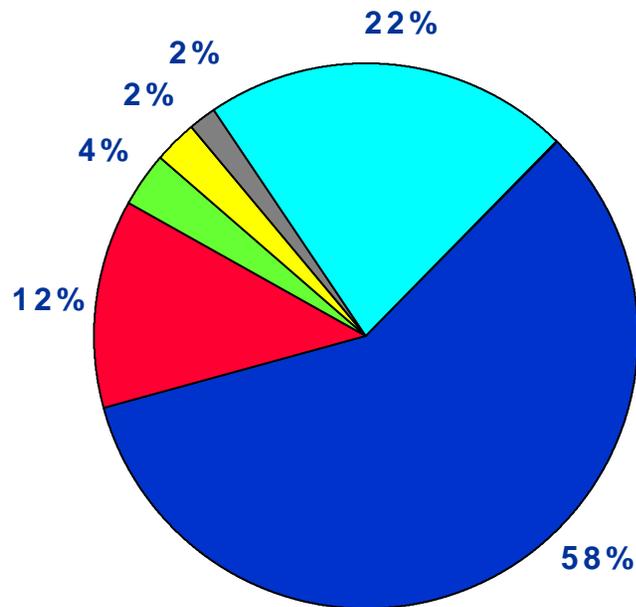
# Canadian Agri-Food Exports by Destination



Source: AAFC Trade Database.

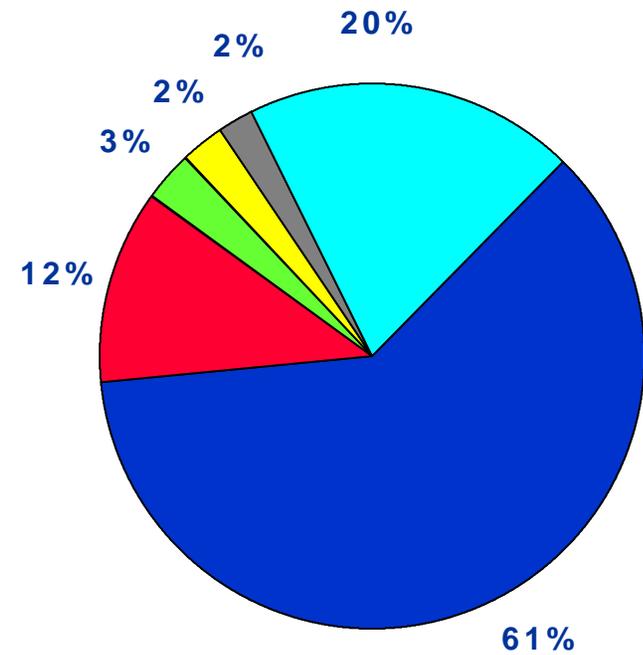
# Canadian Agri-Food Imports by Country of Origin

1992-96 Average



Total \$11.5 B

1997



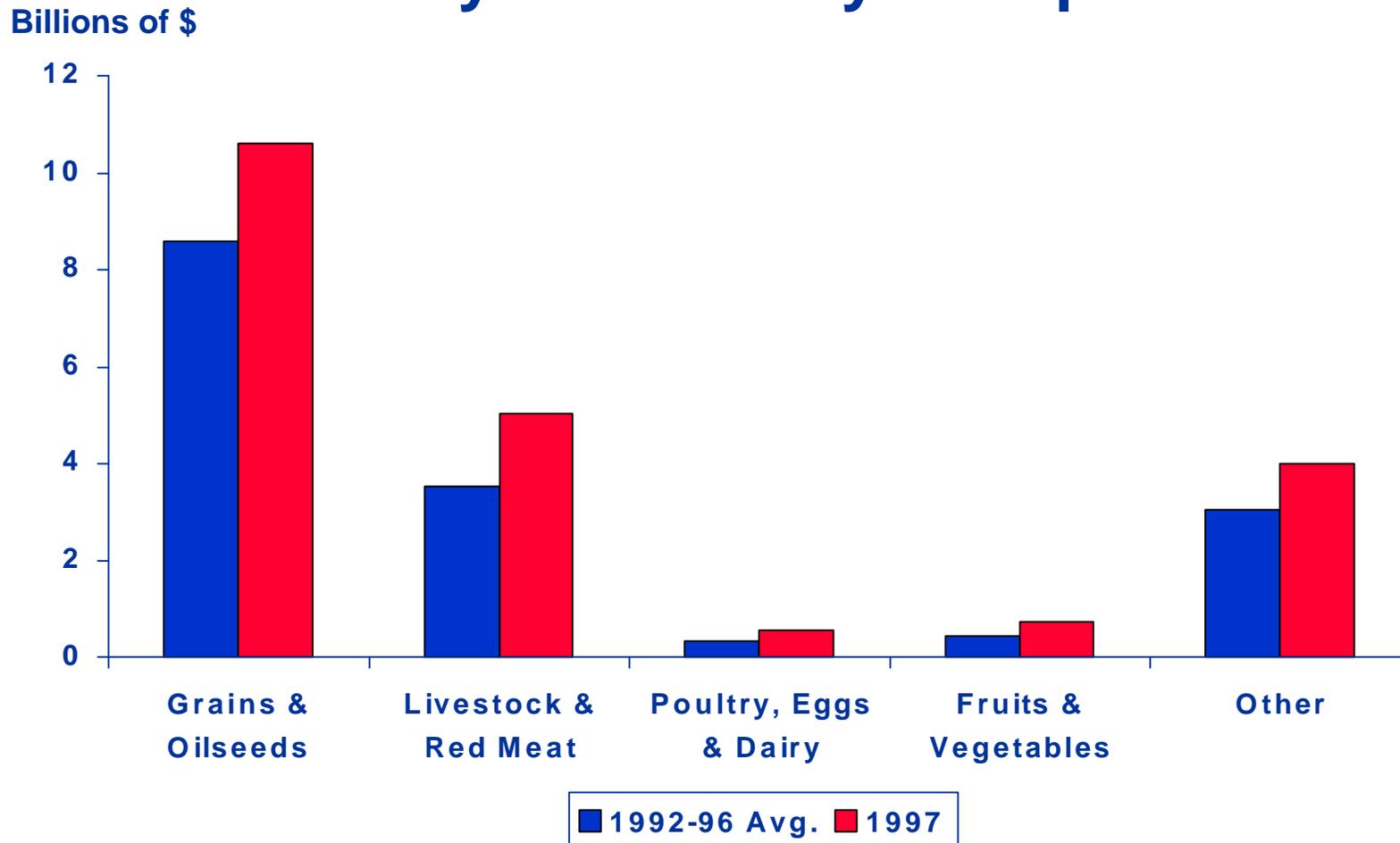
Total \$14.9 B



Source: AAFC Trade Database.

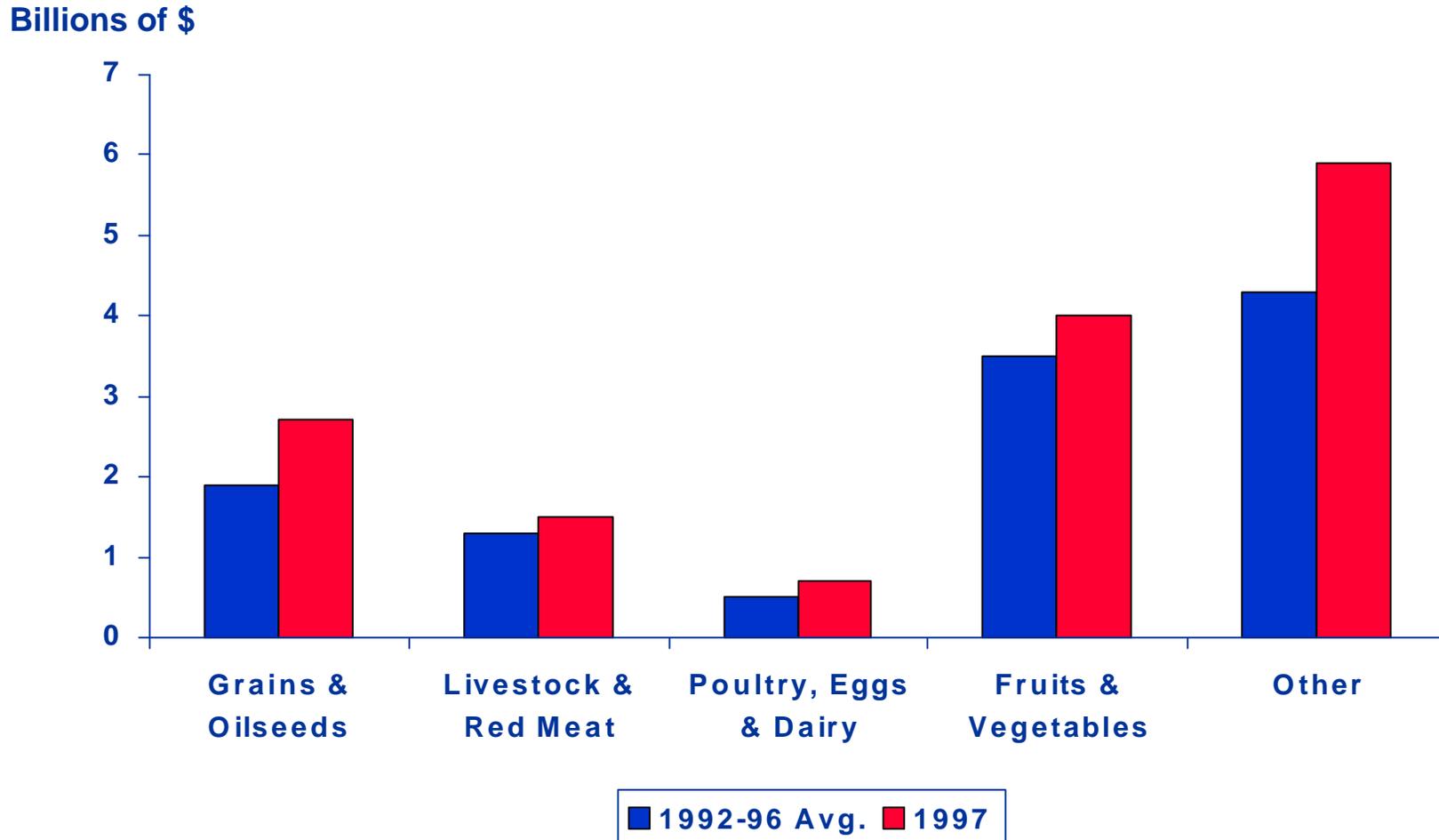
**Graph 2-7**

# Canadian Agri-Food Exports by Commodity Group



Source: AAFC Trade Database.

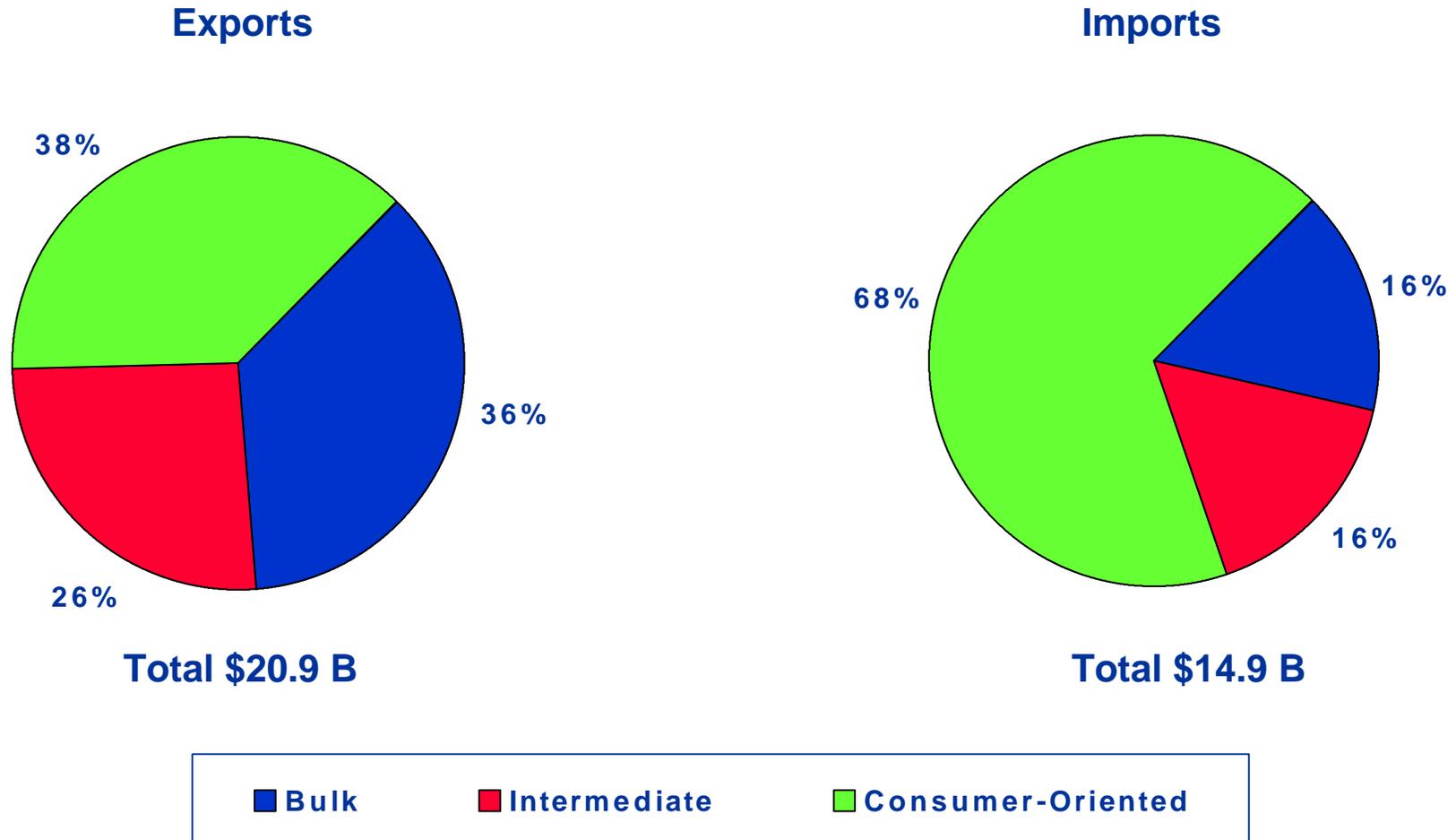
# Canadian Agri-Food Imports by Commodity Group



Source: AAFC Trade Database.

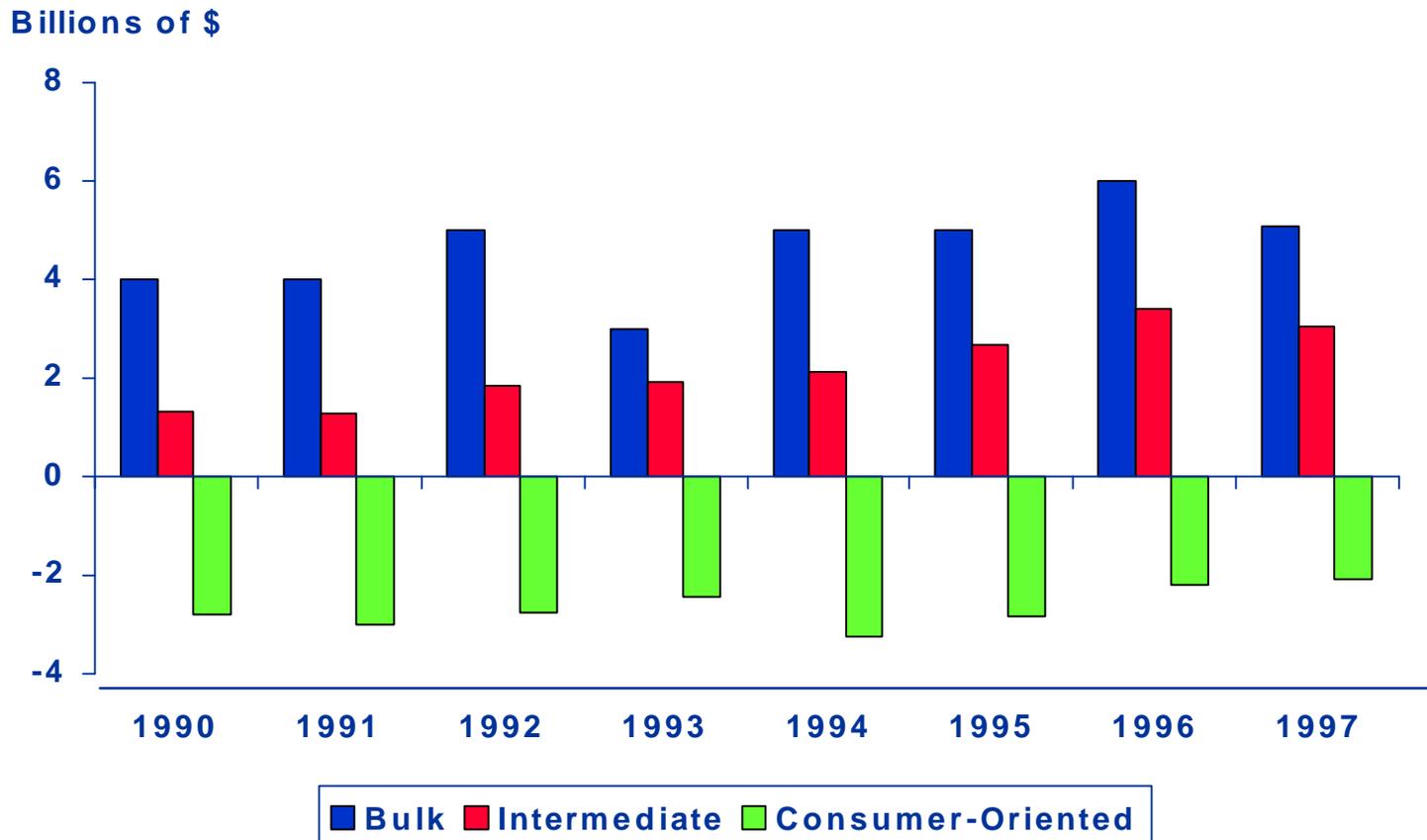
**Graph 2-9**

# Canadian Agri-Food Trade by Degree of Processing, 1997



Source: AAFC Trade Database.

# Canadian Agri-Food Trade Balance by Degree of Processing, 1997



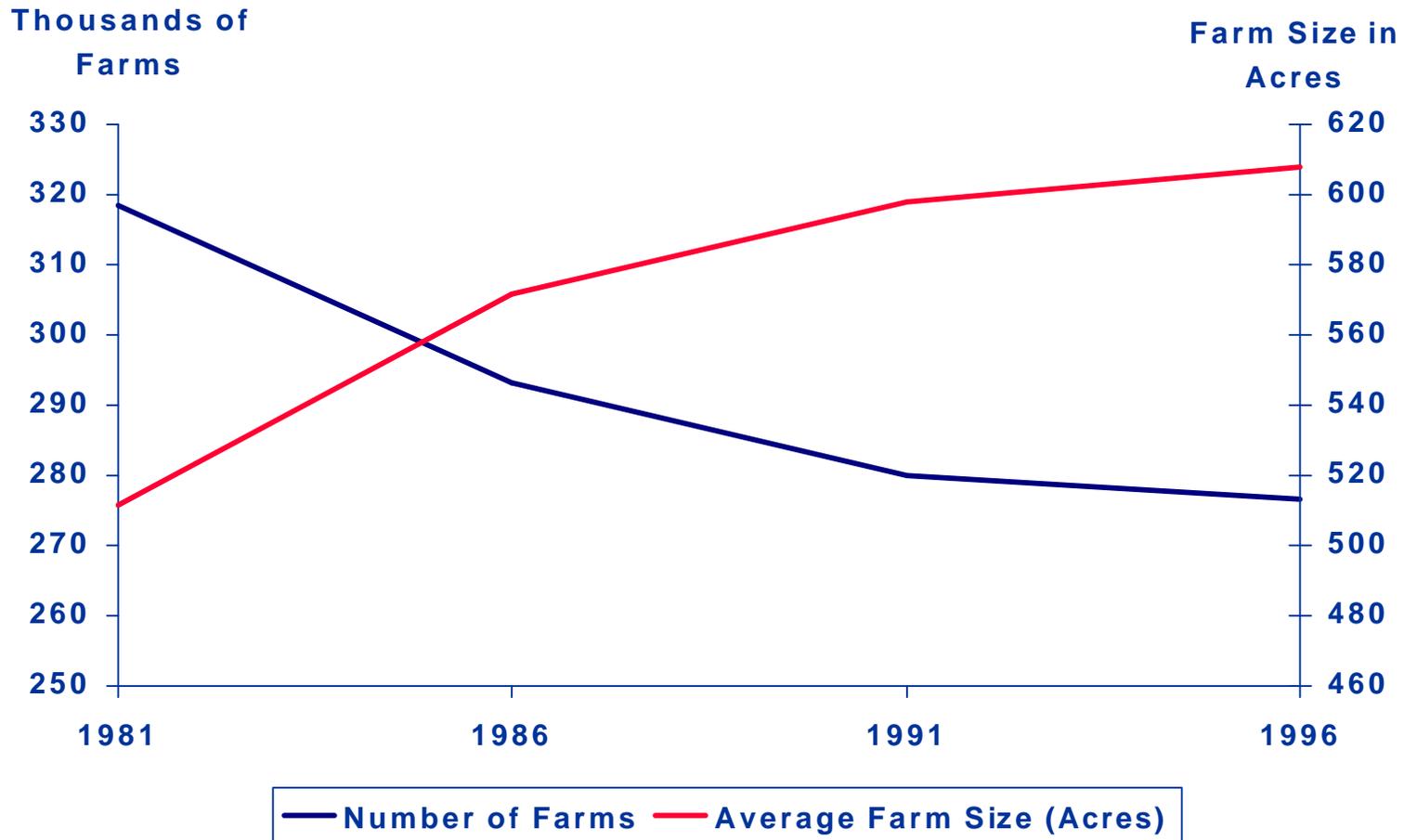
Source: AAFC Trade Database.

# Glossary of Terms

<b>Trade Balance</b>	Exports less imports
<b>Other Commodity Group</b>	Includes potatoes & products, seeds for sowing, maple products, sugar & products, raw tobacco, vegetable fibres, plantation crops, floriculture & nursery products, essential oils, other agri-food products, alcoholic beverages, other beverages excluding juices, manufactured tobacco products, undenatured ethyl alcohol >80% vol.
<b>Export Intensity</b>	The value of agri-food exports as a percentage of total value received from the production of the agri-food products.

# **Agriculture Sector: Structure and Performance**

# Number and Size of Farms

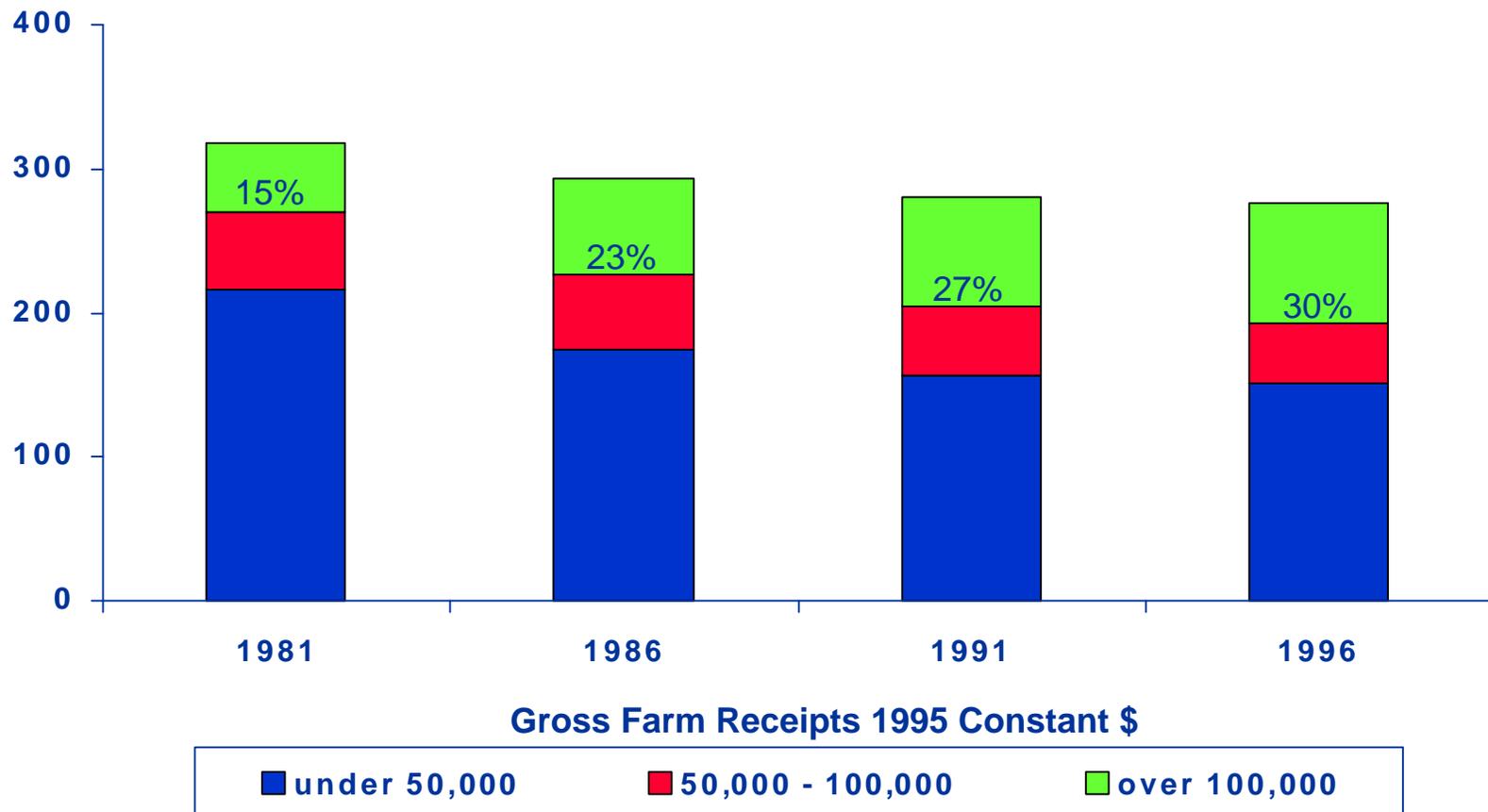


Source: Statistics Canada, Historical Overview of Canadian Agriculture.

Graph 3-1

# Number of Farms by Revenue Class

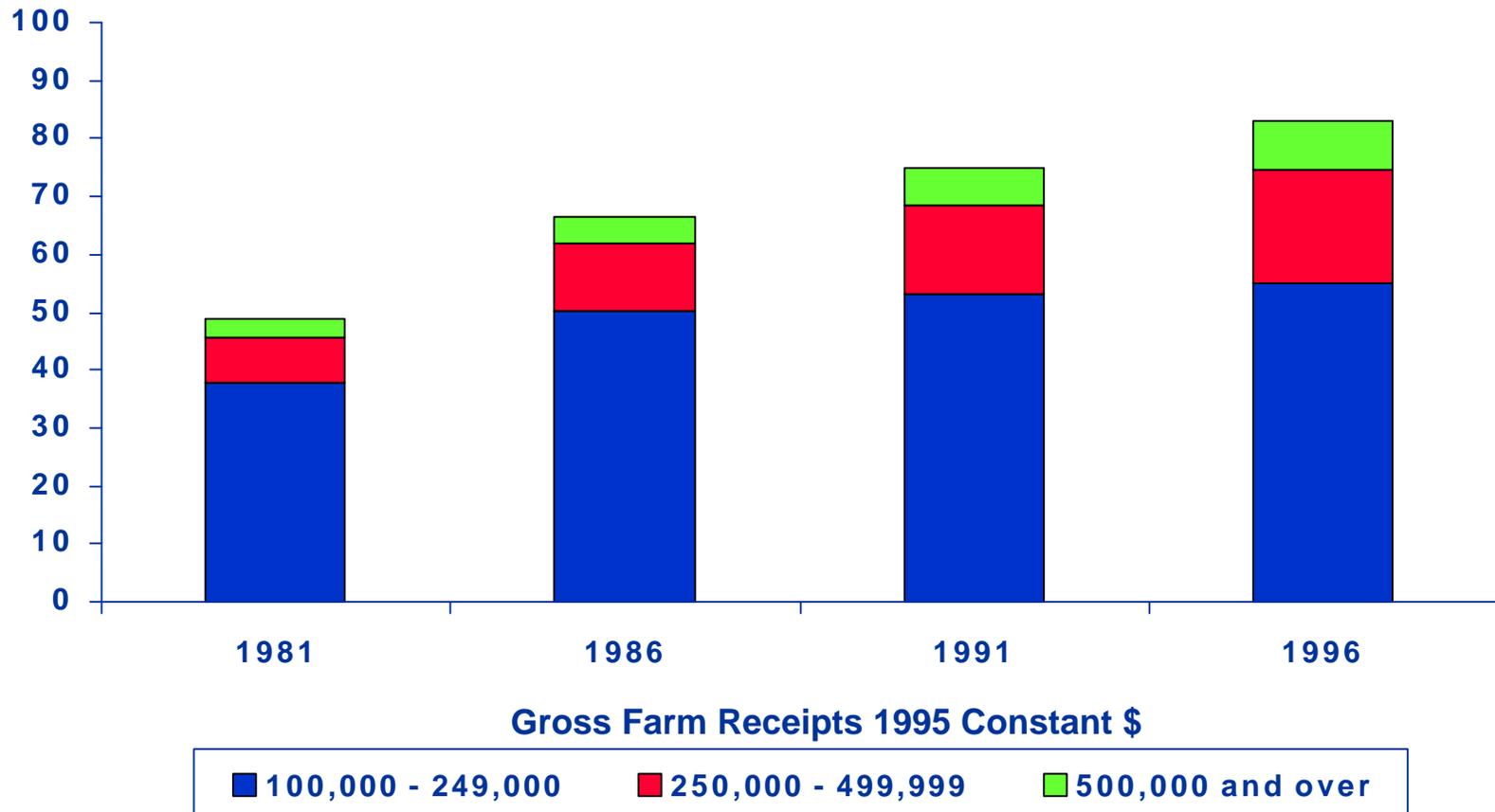
Thousands of  
Farms



Source: Statistics Canada, Historical Overview of Canadian Agriculture.

# Number of Large Farms by Revenue Class

Thousands of  
Farms

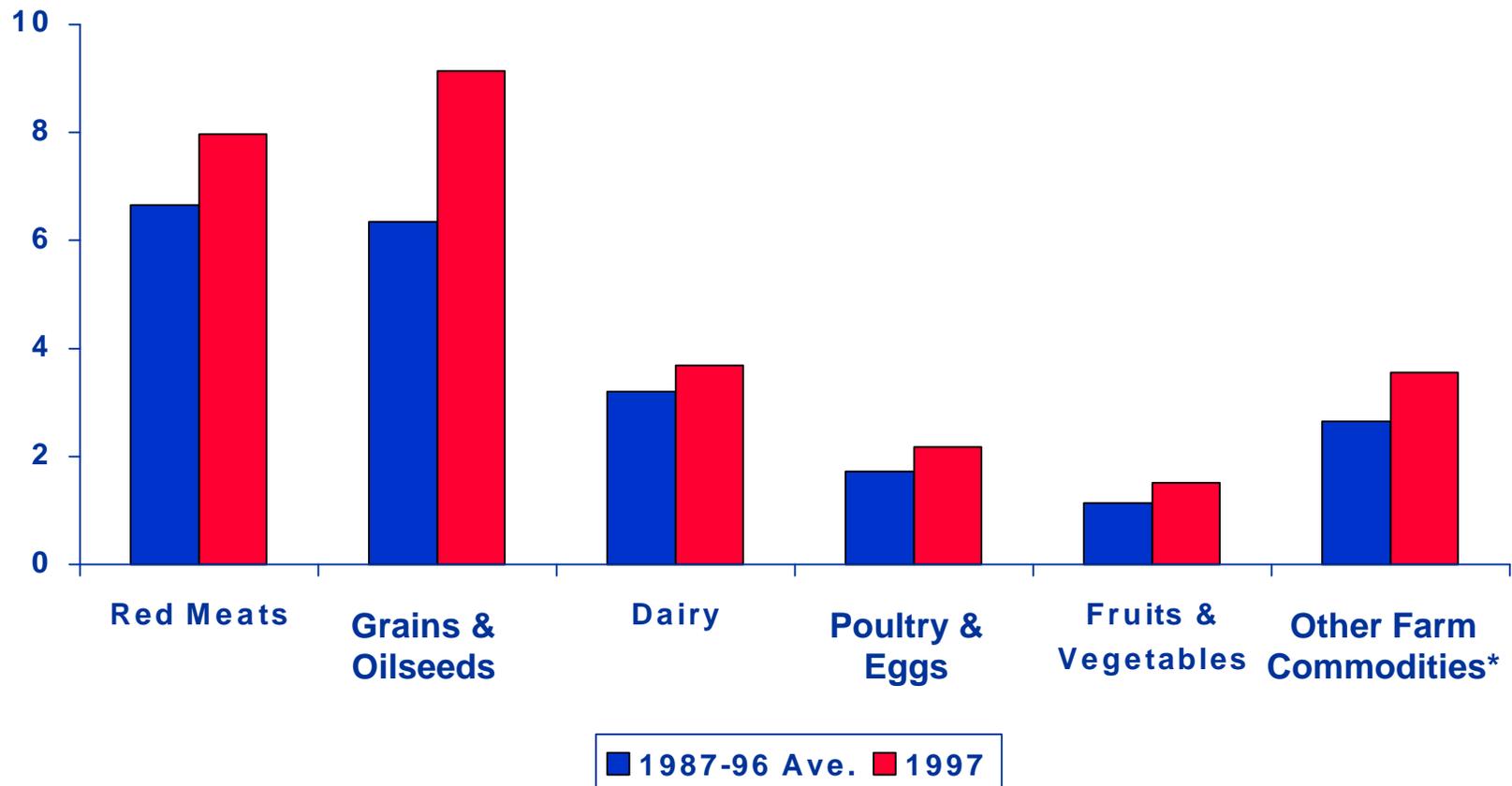


Source: Statistics Canada, Historical Overview of Canadian Agriculture.

# Canada

## Farm Cash Market Receipts by Commodity Group

Billions of \$

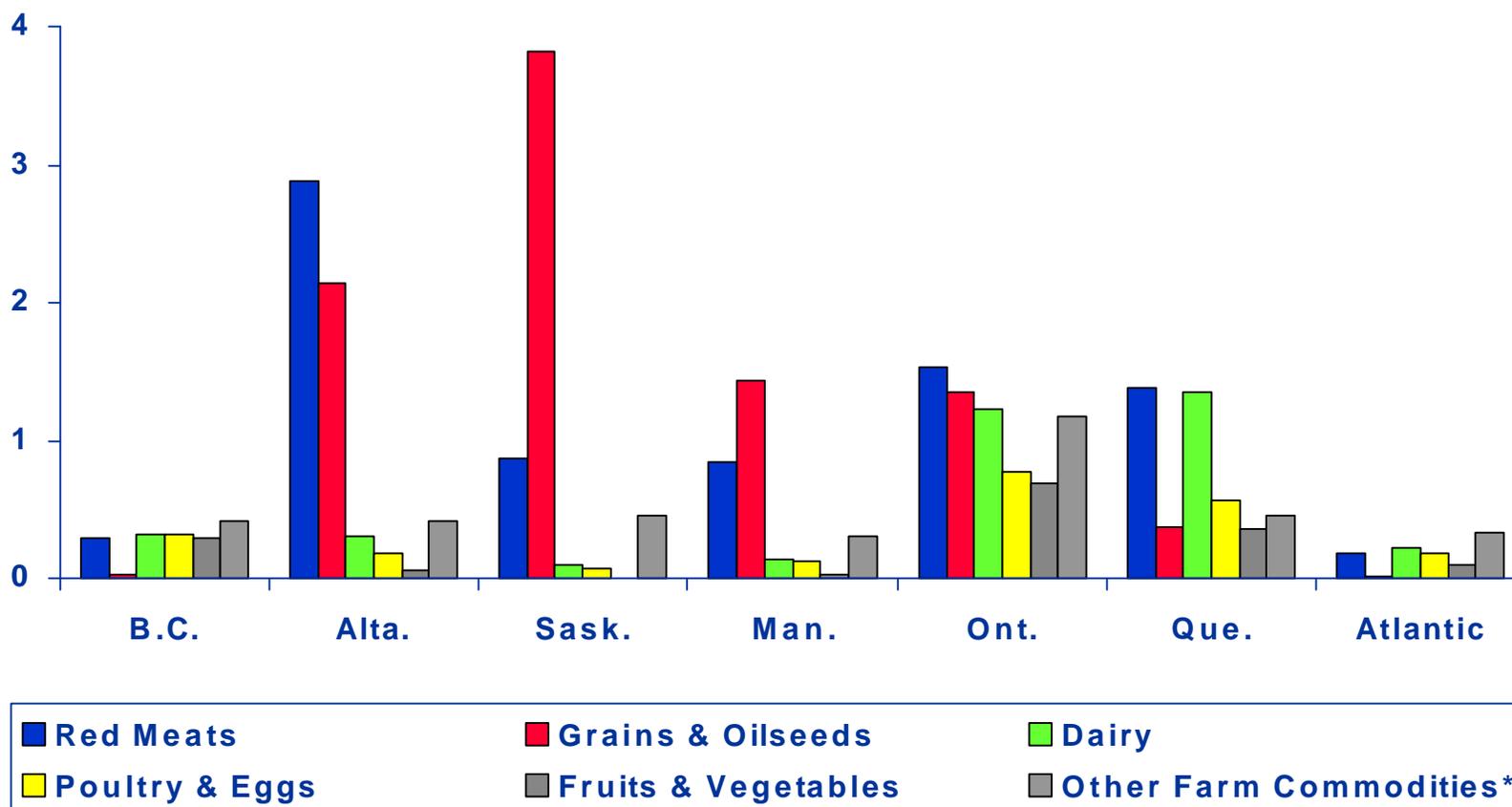


\*Includes: Potatoes, Special Crops, Forage, etc.

Source: AAFC Farm Income, Financial Conditions and Government Assistance Databook, February 1998.

# Farm Cash Market Receipts by Commodity Group & Province, 1997

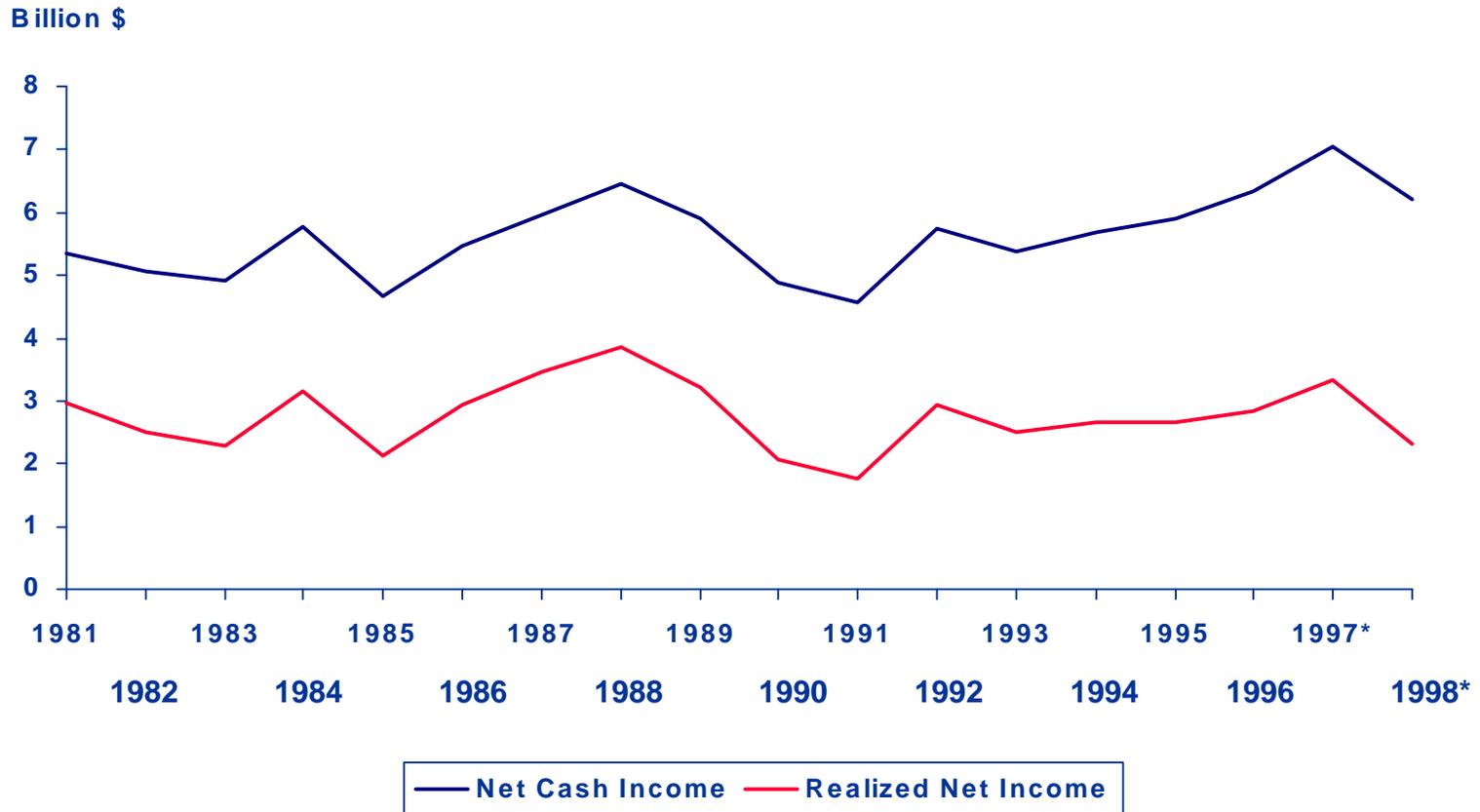
Billions of \$



\*Includes: Potatoes, Special Crops, Forage, etc.

Source: AAFC Farm Income, Financial Conditions and Government Assistance Databook, February 1998.

# Canadian Net Farm Income



\*Policy Branch, for 1997 and 1998 forecast data.

Source: Agriculture and Agri-Food Canada, Statistics Canada for historical data.

# Glossary of Terms

## **Gross Farm Receipts**

Gross farm receipts are compiled from census forms sent to all farms every five years. They include cash income from the sale of agricultural commodities as well as direct program payments to the agriculture sector.

## **Farm Cash Market Receipts**

Farm cash market receipts are compiled from a sample of annual taxfiler data. They include cash income from the sale of agricultural commodities, but exclude direct program payments.

## **Land in crops**

Includes field crops, vegetables, fruits & nursery crops. Since 1981, it has also included sod.

## **Other Farm Commodities**

Includes sugar beets, potatoes, floriculture & nursery, tobacco, ginseng, mustard seed, sunflower seed, lentils, canary seed, dry beans, dry peas, forage & grass seed, hay & clover, maple products, forest products, misc. crops, wool, honey, fur, misc. livestock.

## **Farm Type**

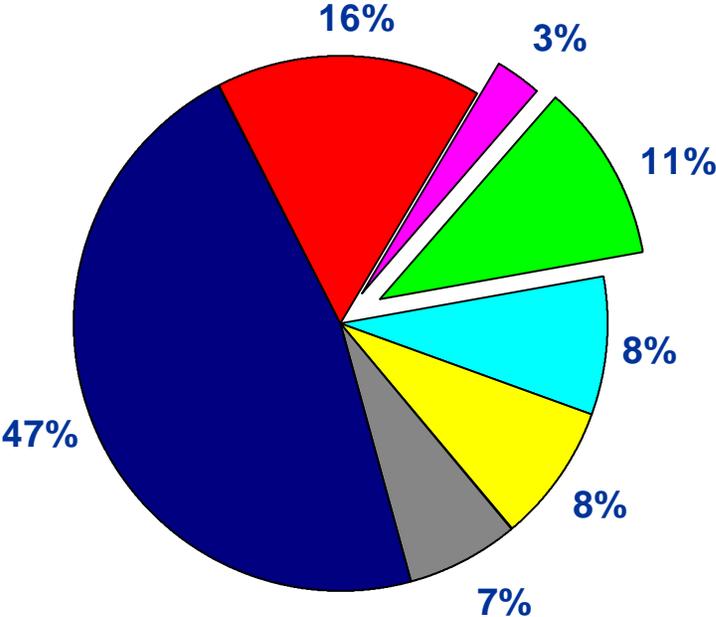
Commodity which accounts for 51% of the total farm cash receipts.

## **Farm Income**

Net Cash Income: Market Receipts + Government Payments - Operating Expenses  
Net Realized Income: (Net Cash Income + Income-in-kind) - depreciation.

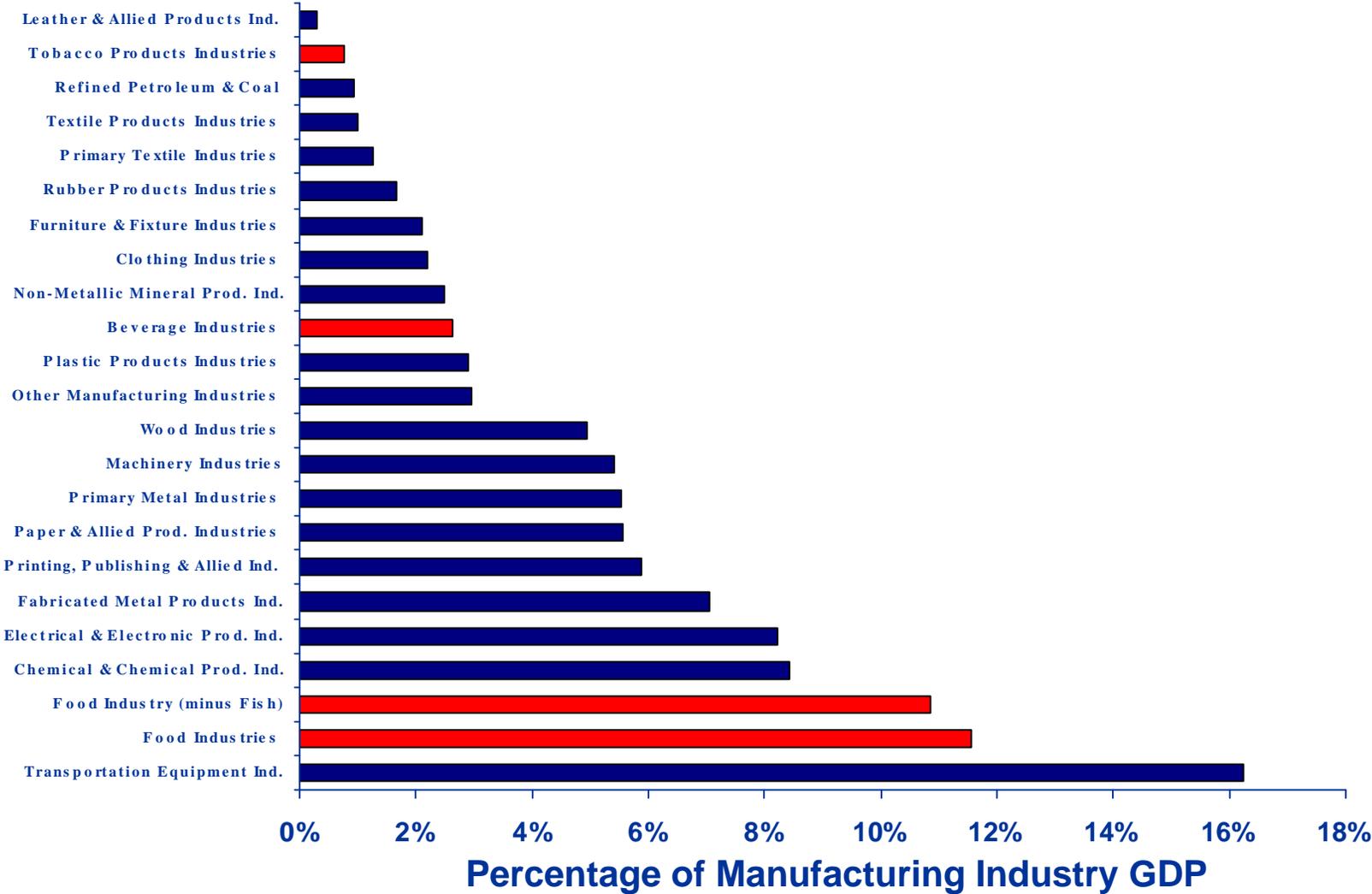
# **Agri-Food Processing Sector: Structure and Performance**

# Manufacturing Industries GDP Share, 1997



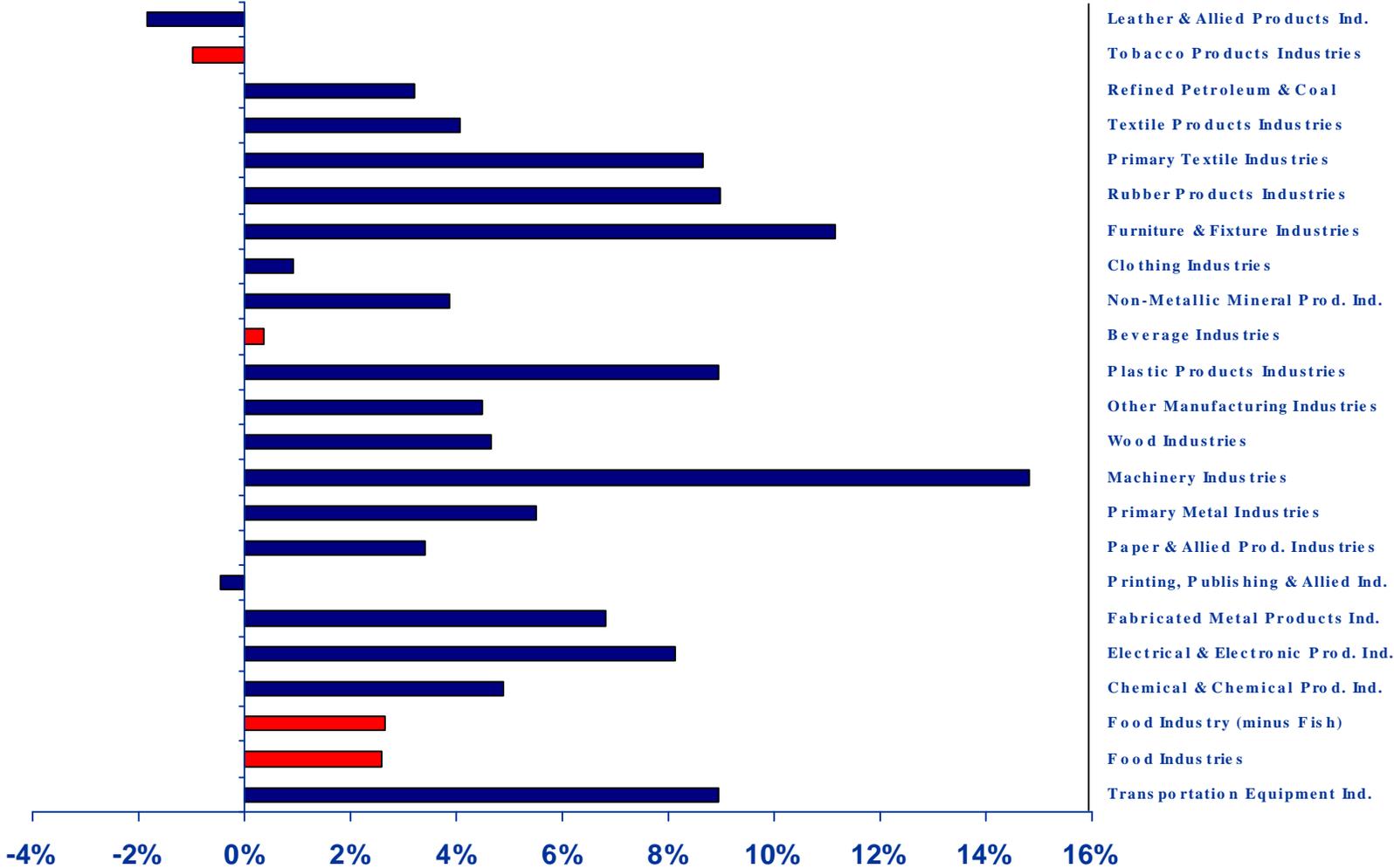
Source: Statistics Canada, Cansim.

# Major Industries in Canada, 1997



Source: Statistics Canada, Cansim.

# Major Industries in Canada, 1992-97

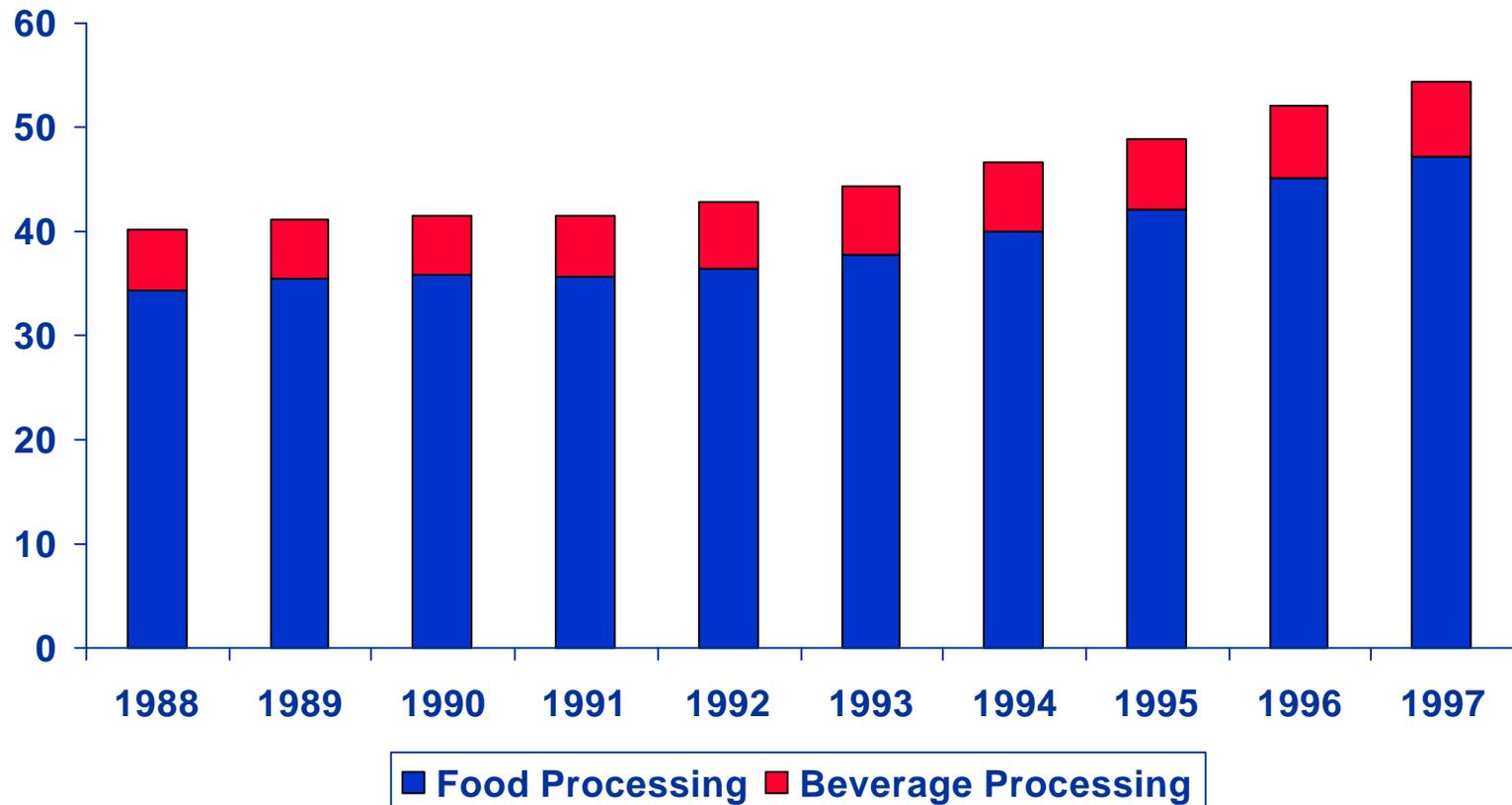


Annual Average GDP Growth Rate

Source: Statistics Canada, Cansim.

# Canada Value of Shipments

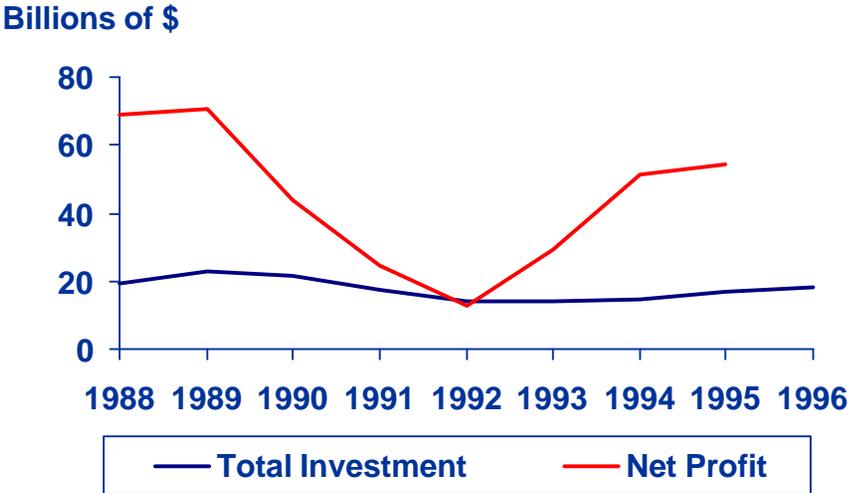
Billions of 1986 \$



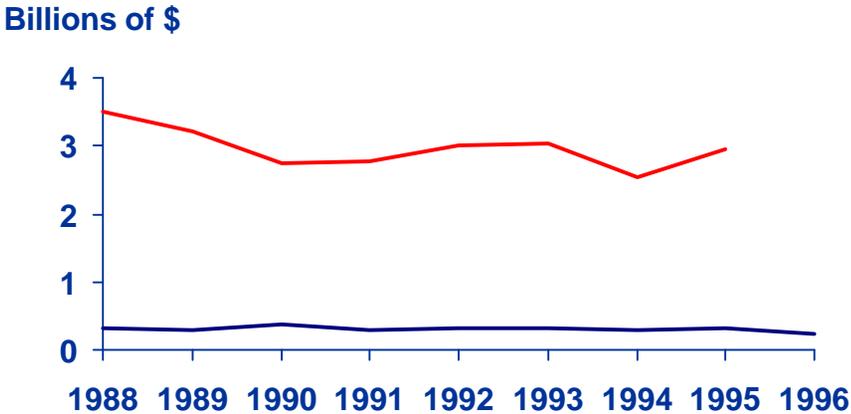
Source: Statistics Canada, Cansim.

# Investment and Net Profit

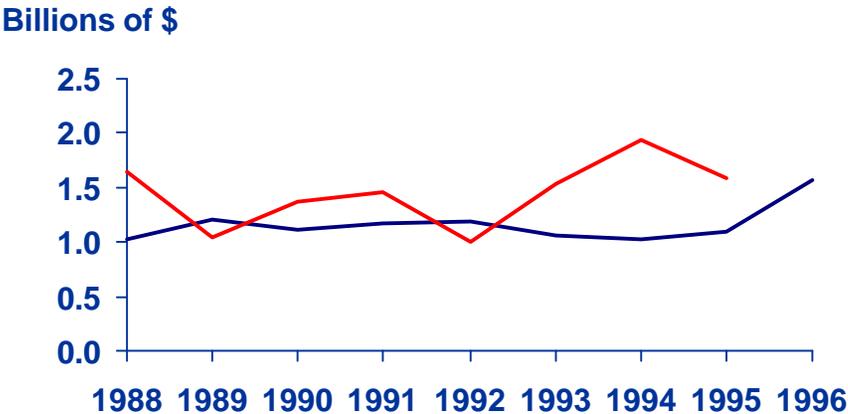
## Total Manufacturing



## Beverage Processing

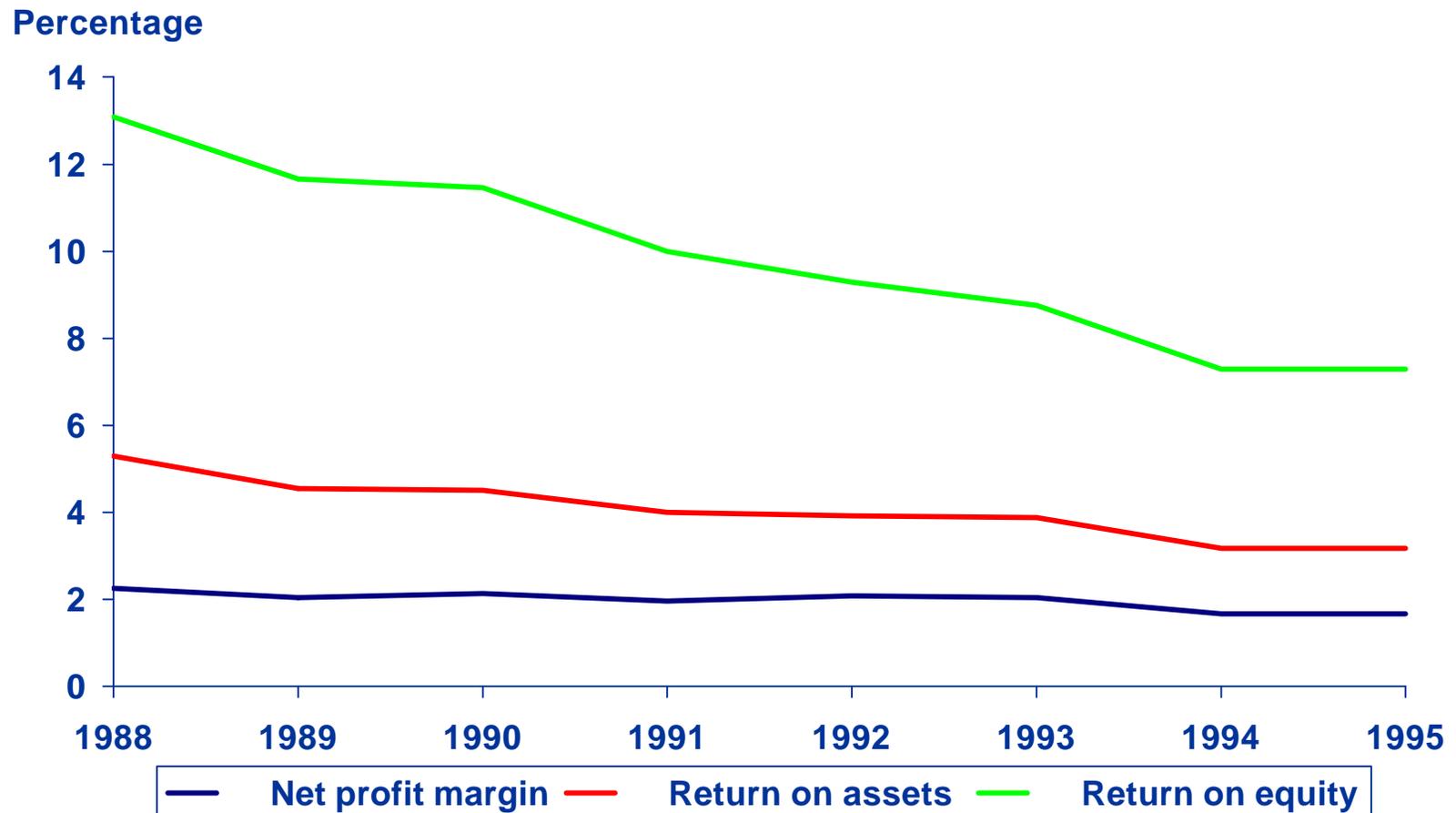


## Food Processing



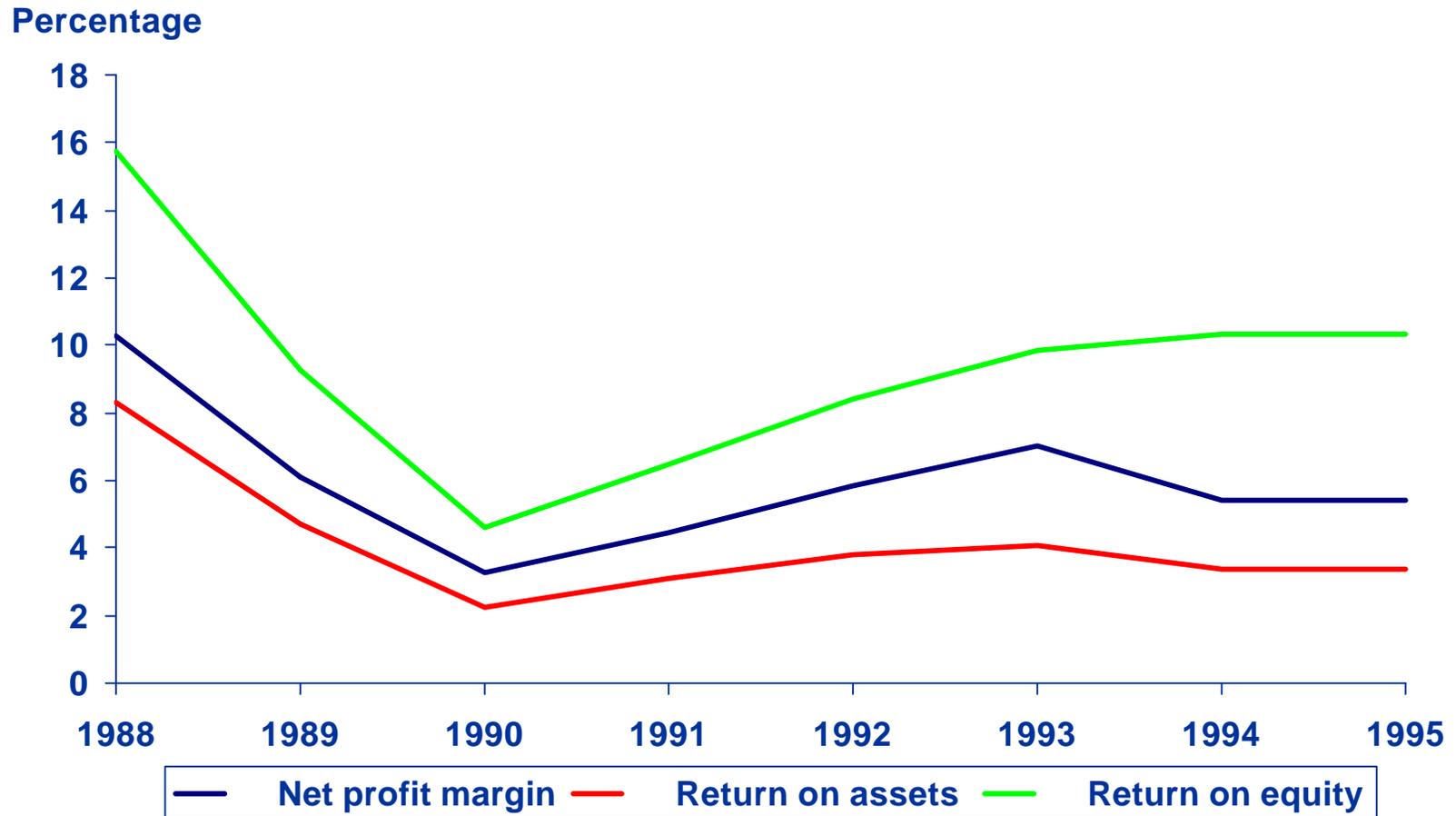
Source: Statistics Canada, Cansim.

# Canadian Food Processing Sector Profitability Measures



Source: Special Tabulations obtained from Statistics Canada, Business Finance and Taxation.

# Canadian Beverage Processing Sector Profitability Measures

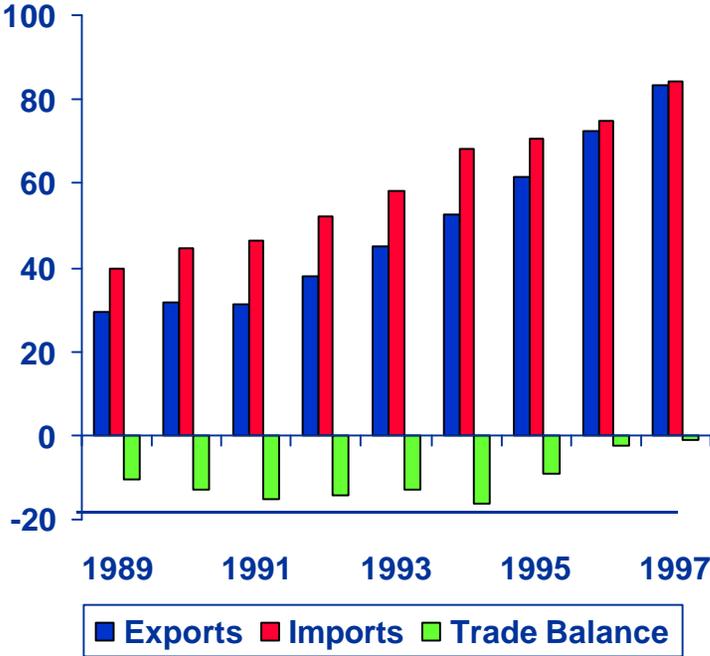


Source: Special Tabulations obtained from Statistics Canada, Business Finance and Taxation.

# Value of Trade

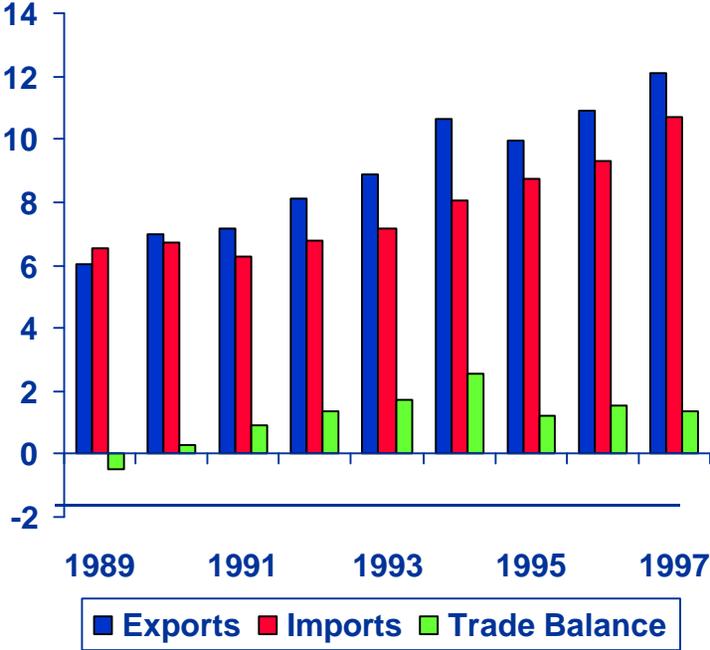
Food Processing Sector

Billions \$



Beverage Processing Sector

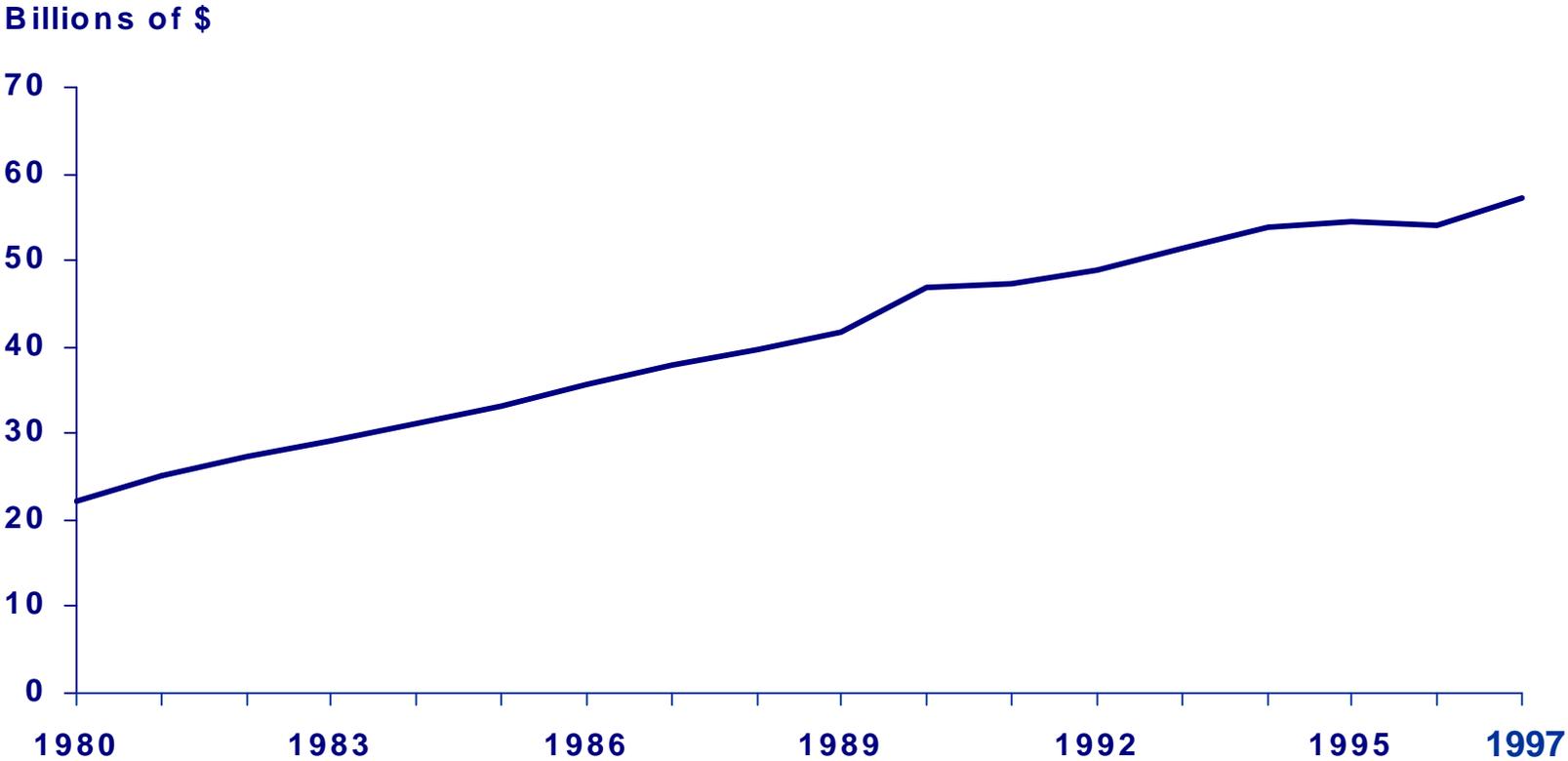
Billions \$



Sources: Statistics Canada, BID; Industry Canada, Canadian Industry Statistics.

# **Retail and Food Service Sector: Structure and Performance**

# Canadian Retail Food Sales

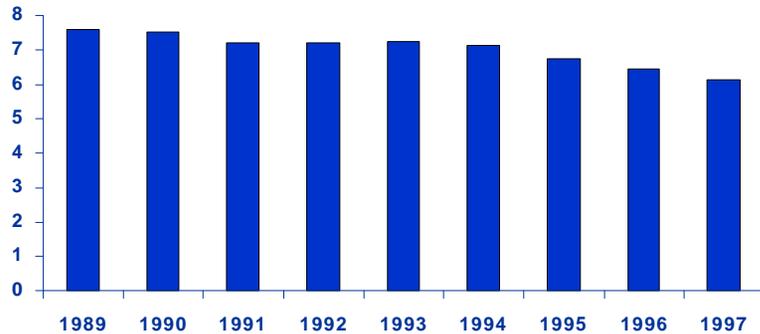


Source: Canadian Grocer, February 1991 and February 1998.

# Number of Retail Food Outlets

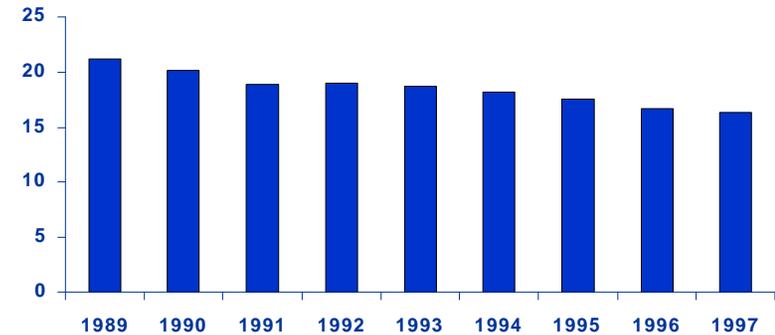
Western Canada

Thousands



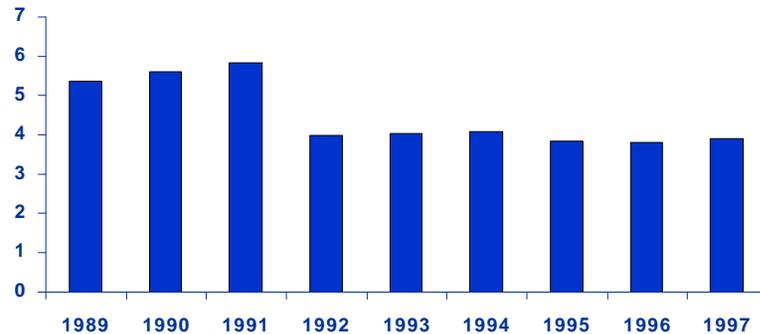
Central Canada

Thousands



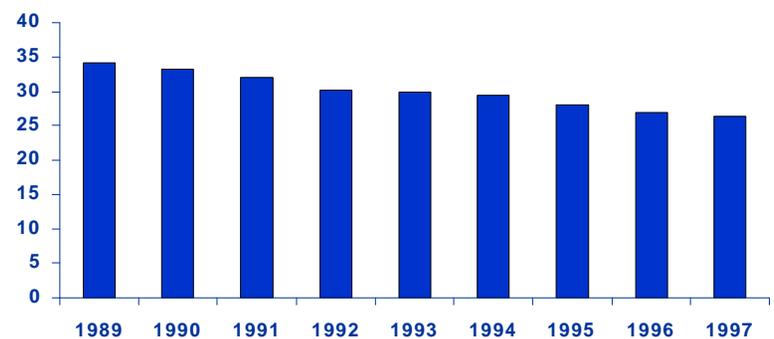
Atlantic Canada

Thousands



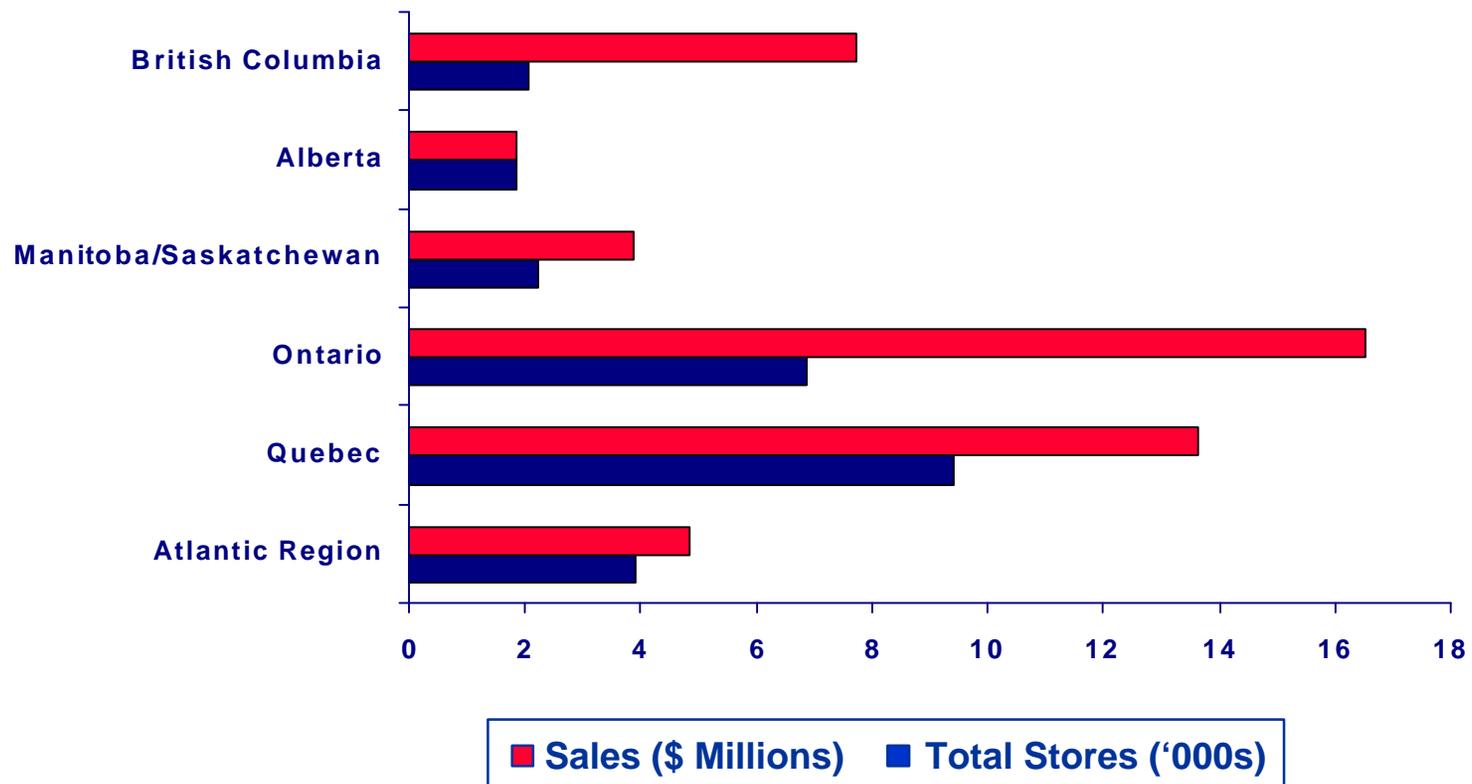
Canada

Thousands



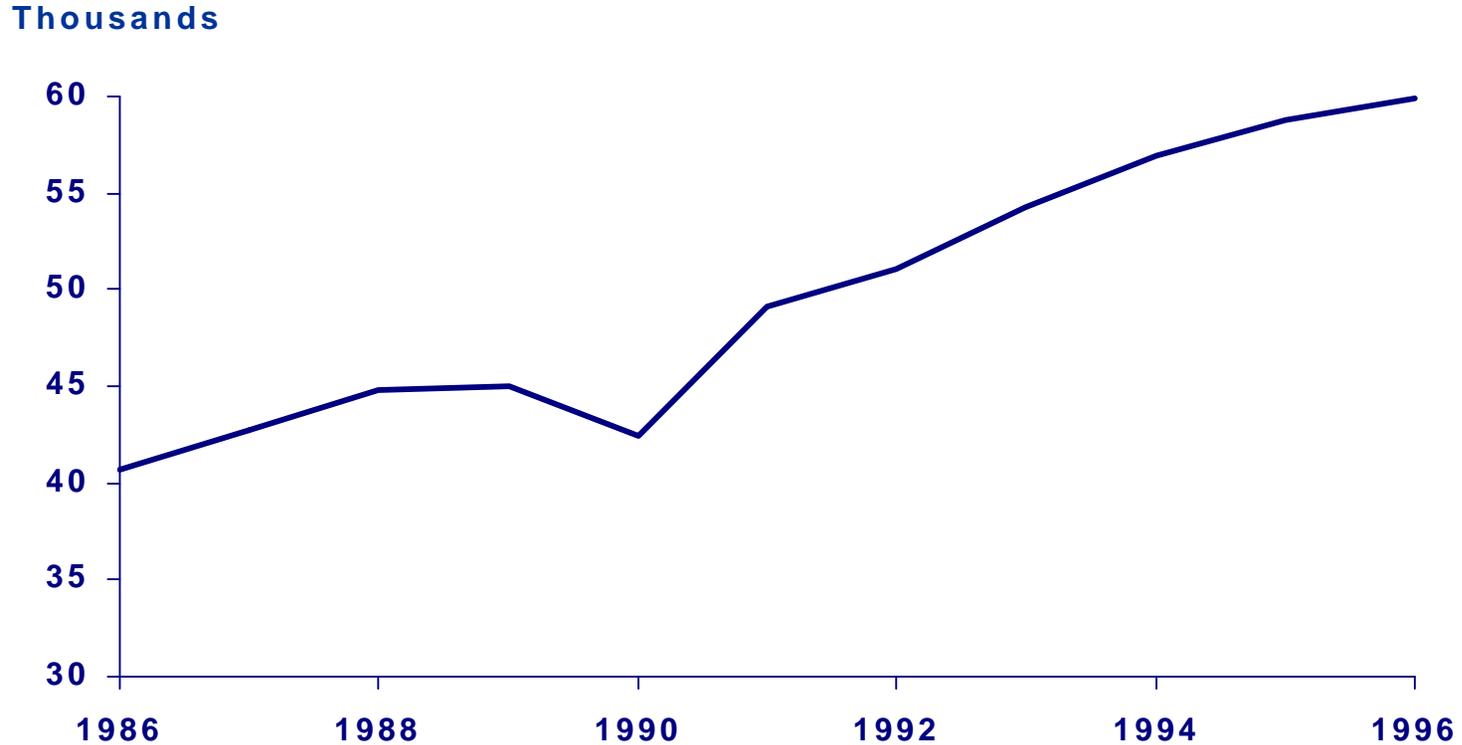
Source: Canadian Grocer, February 1998.

# Canadian Food Store Sales, 1997



Source: Canadian Grocer, February 1998.

# Number of Commercial Food Service\* Establishments



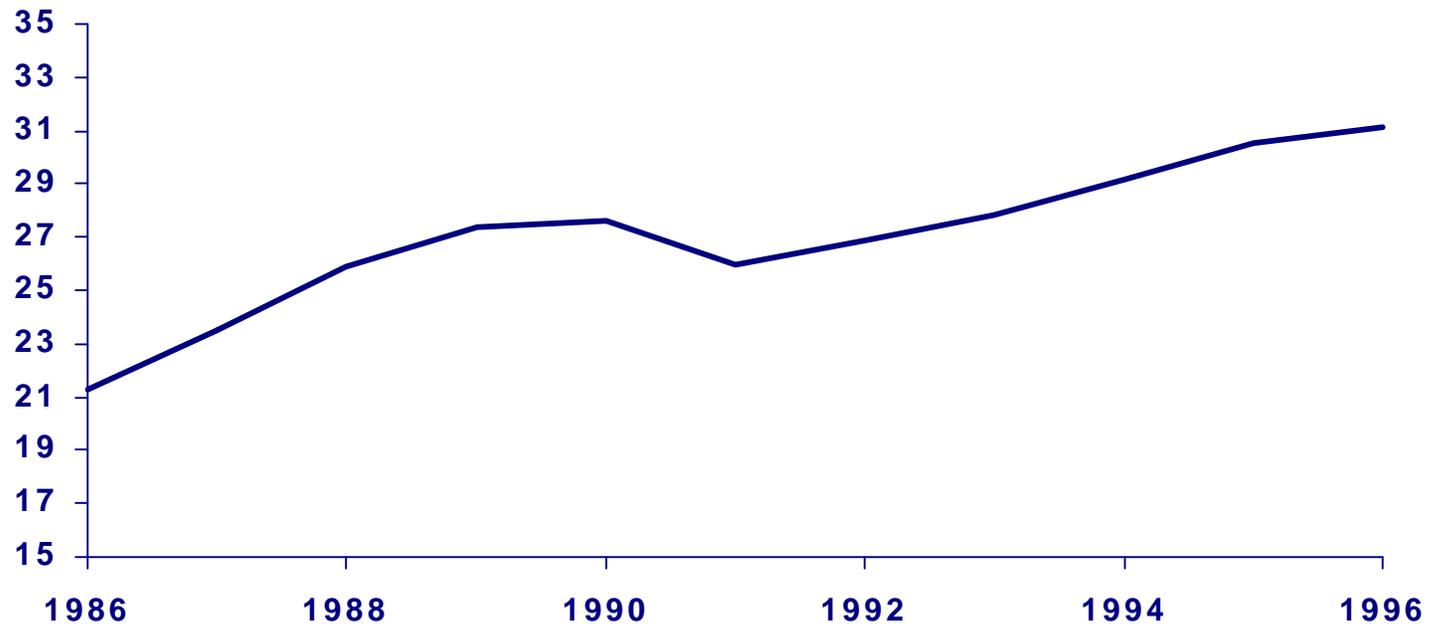
Note:

- 1) \*Restaurants (licensed and unlicensed), Take-out & Delivery, Social/Contract Catering and Pubs/Taverns/Lounges
- 2) 1995 and 1996 data are estimates only.

Sources: CFRA's InfoStats and Statistics Canada.

# Commercial and Institutional Food Services\* Sales

Billions of \$



Notes:

- 1) \*Includes Restaurants, Pubs/Taverns, Vending, Hotel/Motel, Take-out & Delivery, Leisure Industry, Department Stores (but not Drug Stores), Social/Contract Caterers, Institutions.
- 2) 1995 and 1996 data are estimates only.

Sources: CFRA's InfoStats and Statistics Canada.

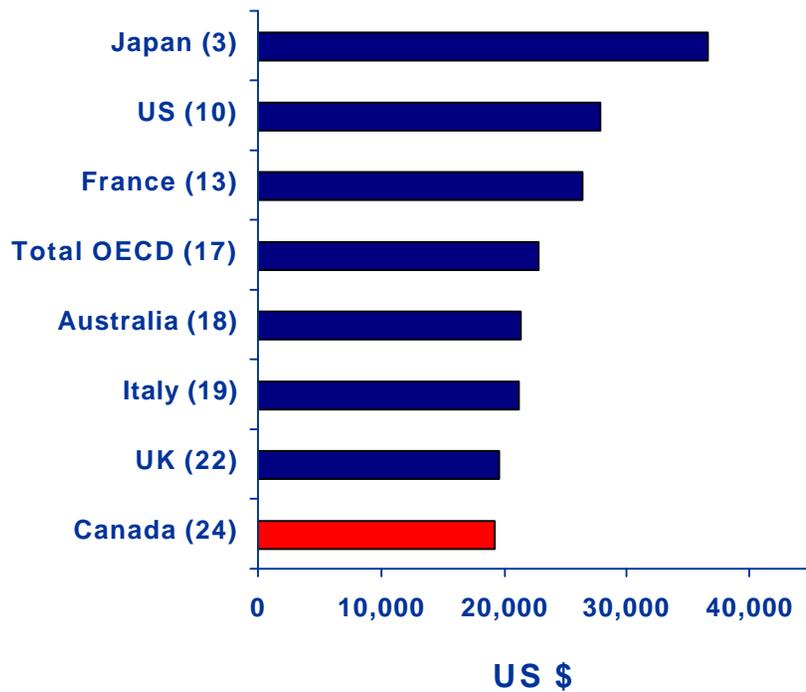
# Glossary of Terms

<b>Commercial &amp; Institutional Food Sales</b>	Includes sales from restaurants, pubs & taverns, vending, hotel/motel, take-out & delivery, leisure industry, department stores, social/contract caterers, institutional foodservices
<b>Food Service Establishments</b>	Includes restaurants (licensed and unlicensed), take-out and delivery, social/contract caterers, and pubs/taverns/lounges
<b>Food Store Sales</b>	Includes chain stores, independents, but does not include food sales through department stores or specialty stores (i.e., bakeries, butchers, etc.)
<b>Retail Food Sales</b>	Includes chains, independents, department stores, all other food stores (specialty food stores, butchers, warehouse clubs, bakeries, etc.) but does not include food sold through drug stores (estimated at 2.4% of retail food sales)
<b>CFRA</b>	Canadian Foodservice and Restaurant Association

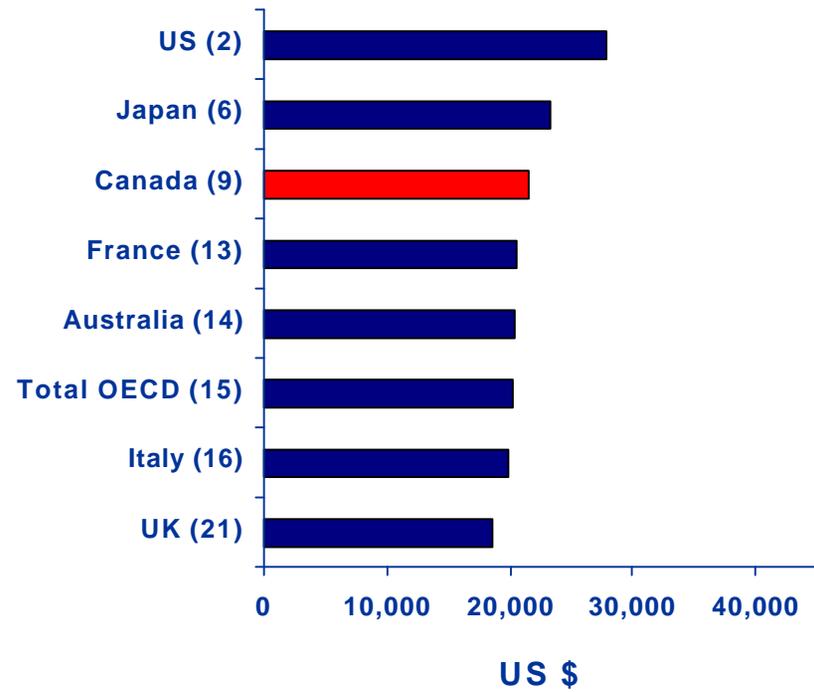
# **Performance Indicators: International Comparisons**

# GDP - 1996

## GDP Per Capita Exchange Rate Basis



## GDP Per Capita Purchasing Power Parities Basis



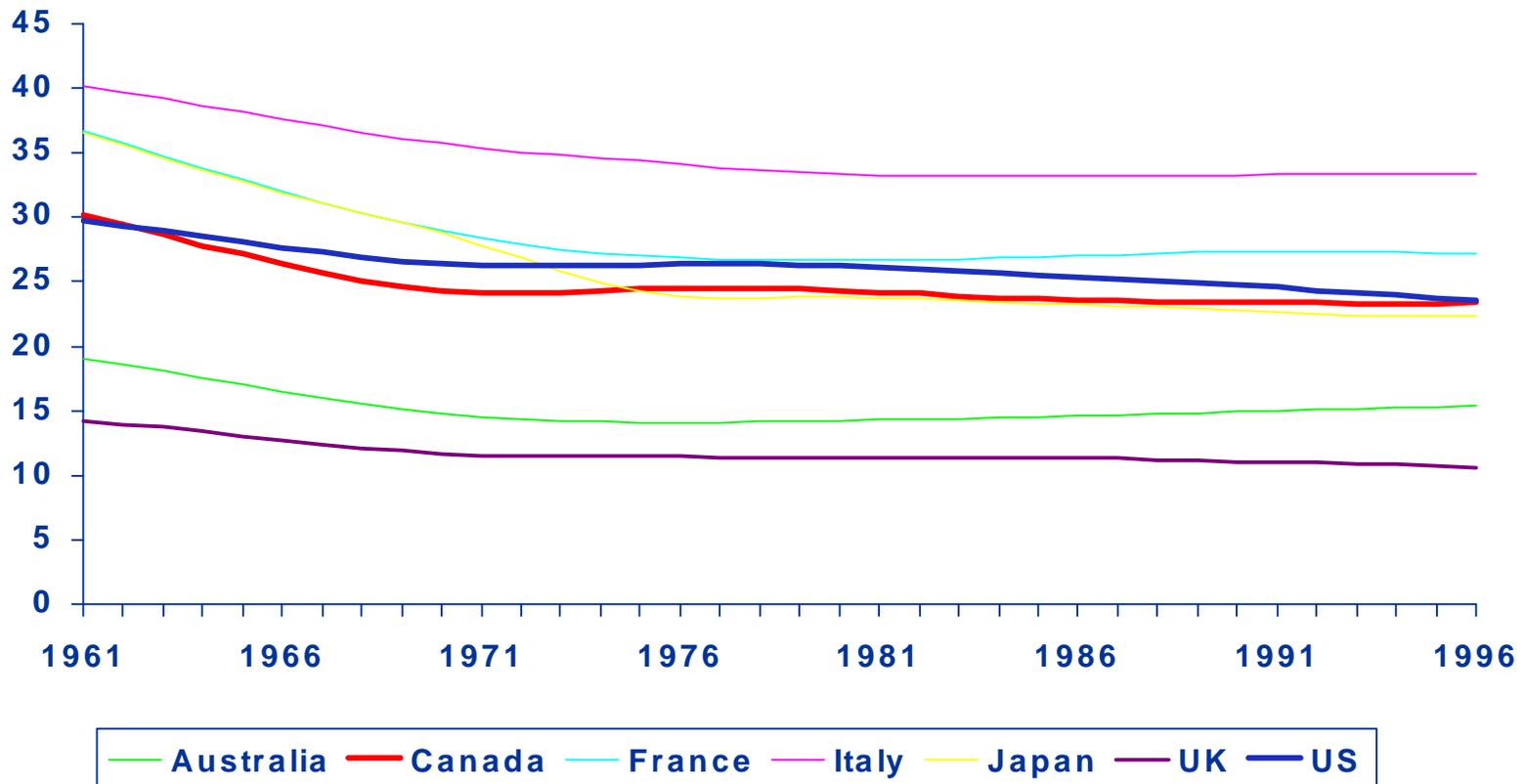
Note: Numbers in brackets represent OECD ranking.

Source: OECD National Accounts.

Graph 6-2

## Rural Population as a Percentage of Total Population

Percentage



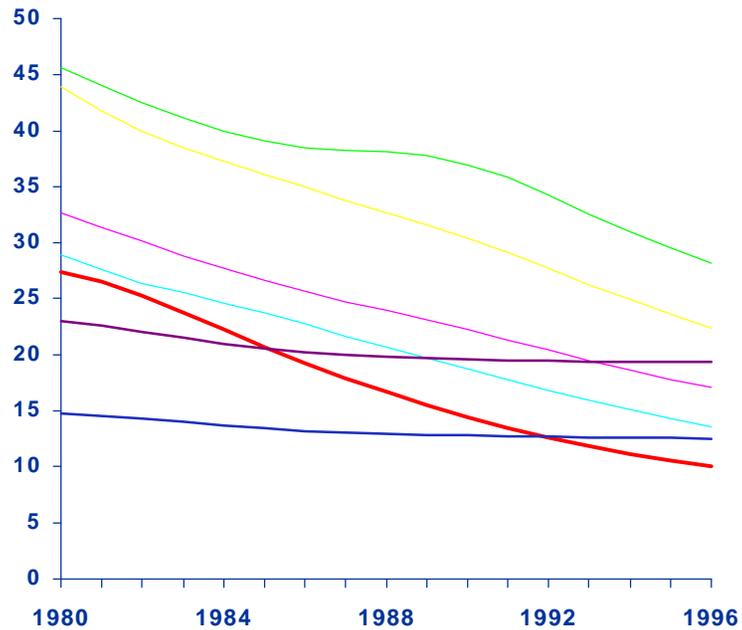
Source: FAOStat.

# Agricultural Population

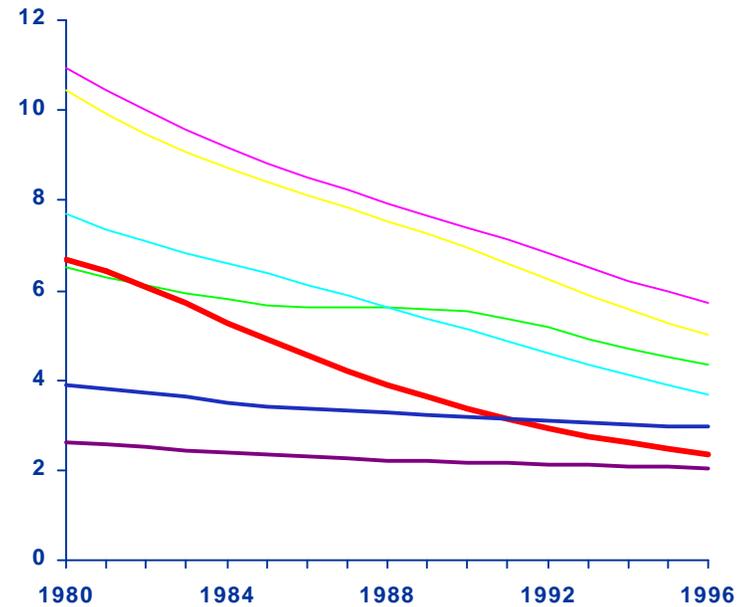
## As Percentage of Rural Population

## As Percentage of Total Population

Percentage



Percentage

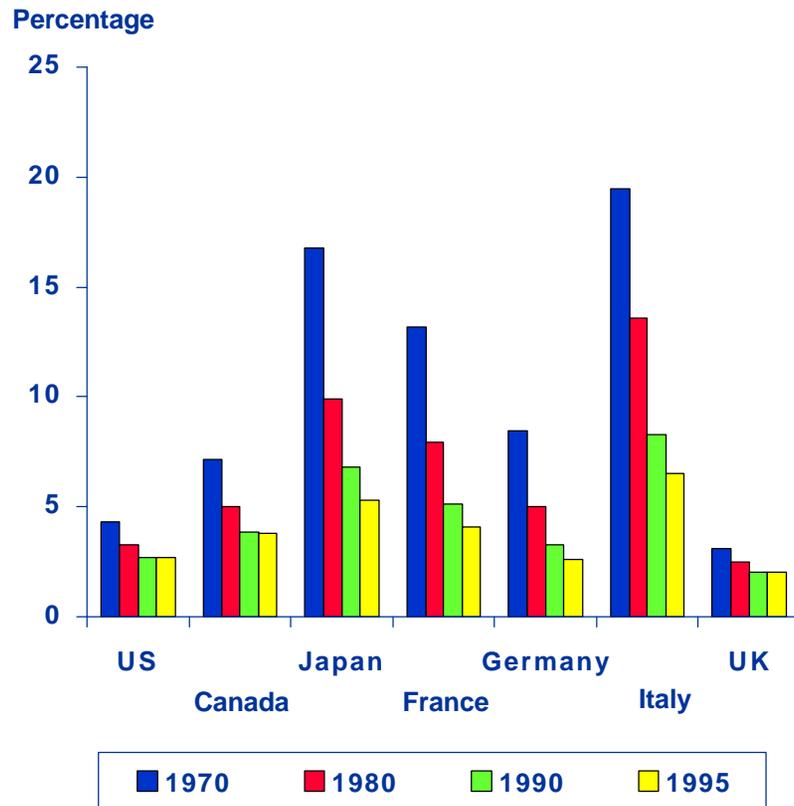


Source: FAOStat.

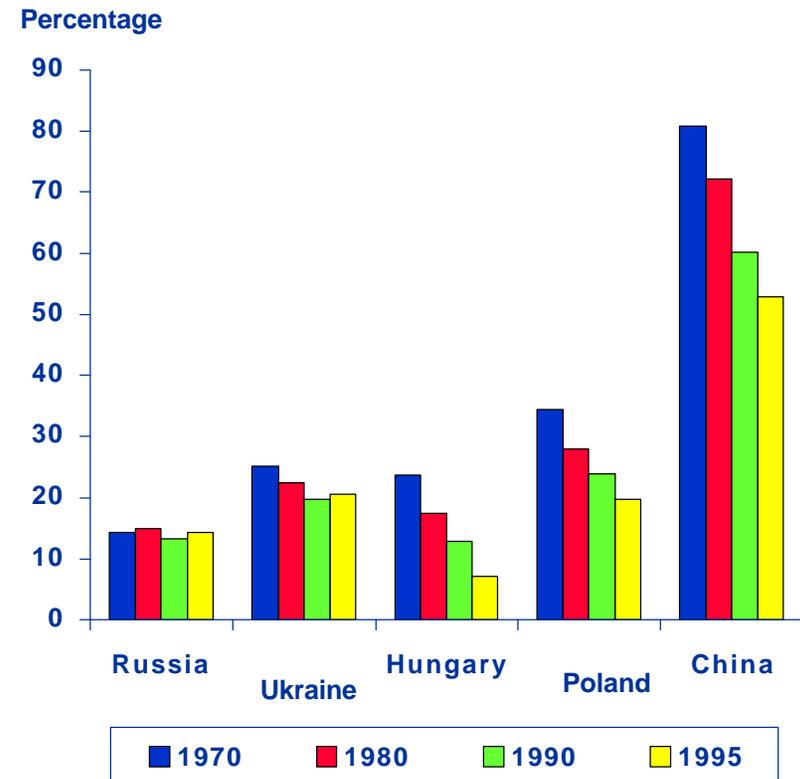
Graph 6-4

# Agricultural Labour Force Share of Total Labour Force

## Developed Economies



## Transition Economies

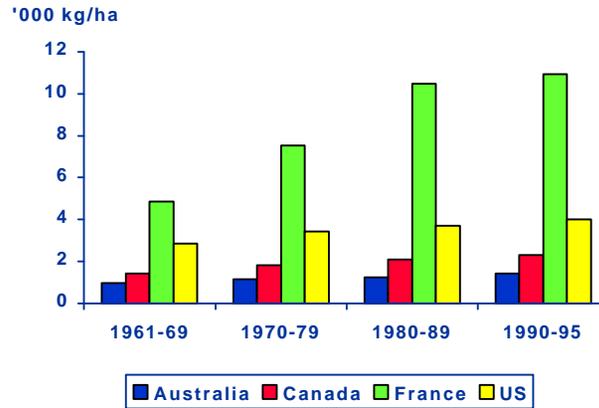


Source: CIA Handbook.

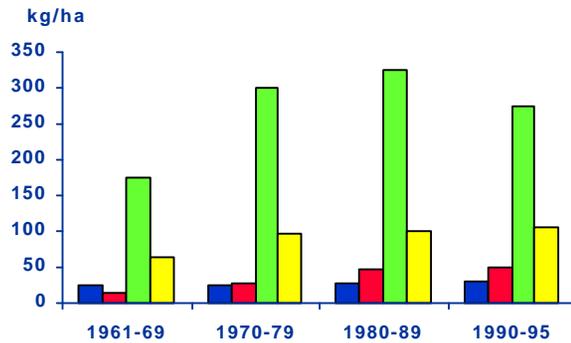
Note: 1995 data is not available for Germany, U.K., Hungary and Poland. Poland, Germany and UK contain 1994 data. Hungary contains 1993 data.

# Fertilizer

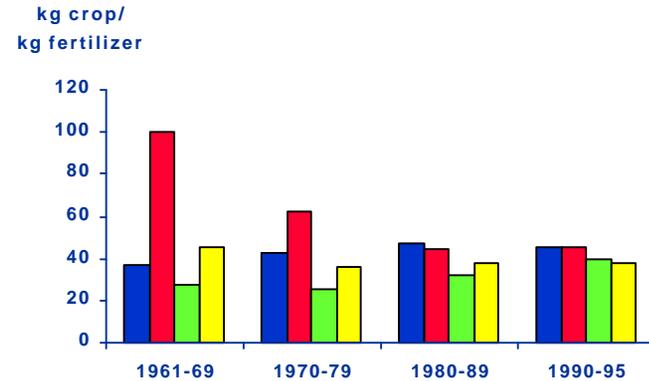
## Average Primary Crop Production



## Average Fertilizer Usage



## Fertilizer Response - Yield to Fertilizer Use Ratio

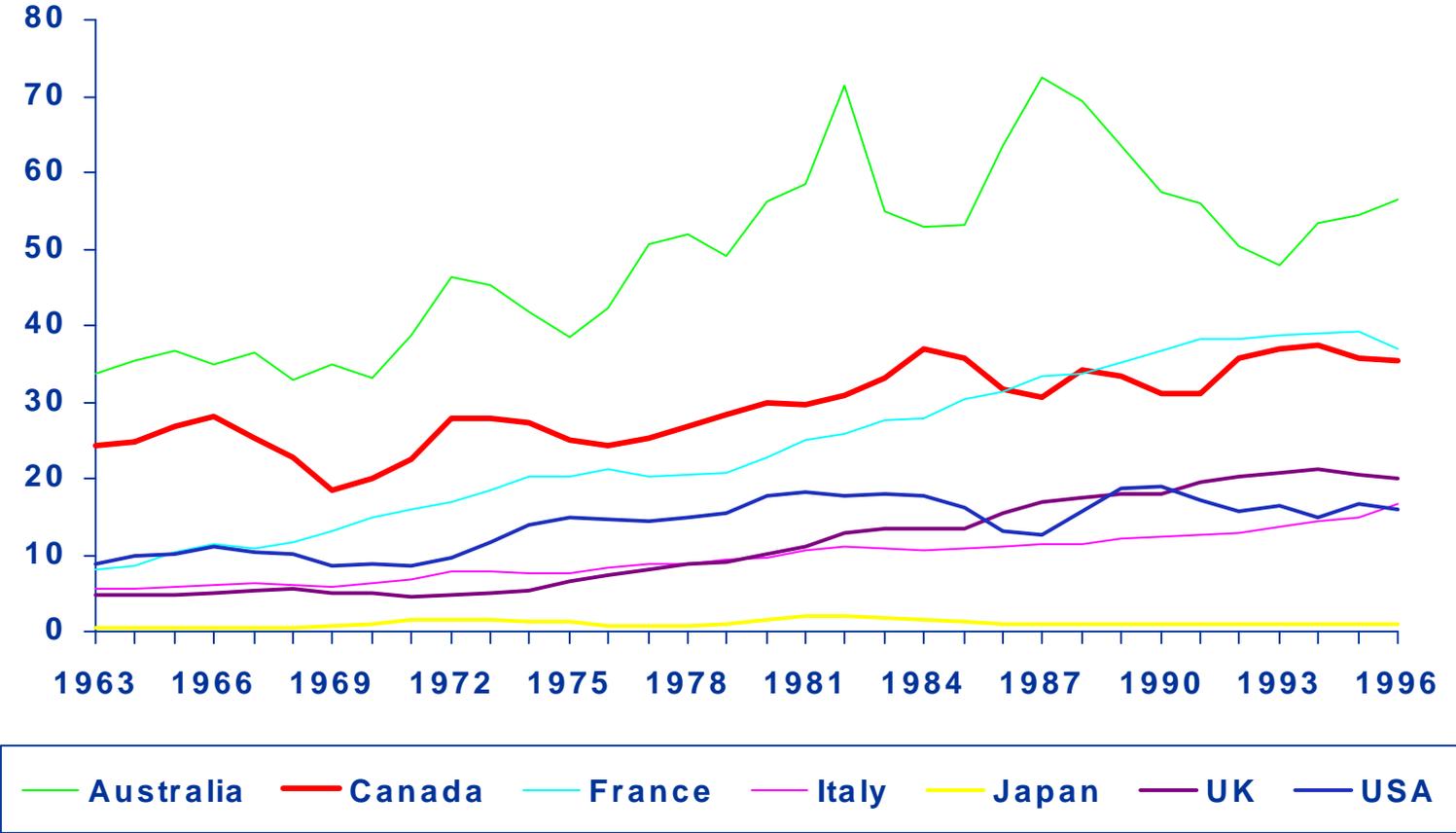


Source: FAOStat.

**Graph 6-6**

# Export Propensity\* - Agri-Food Trade

Percent of Production

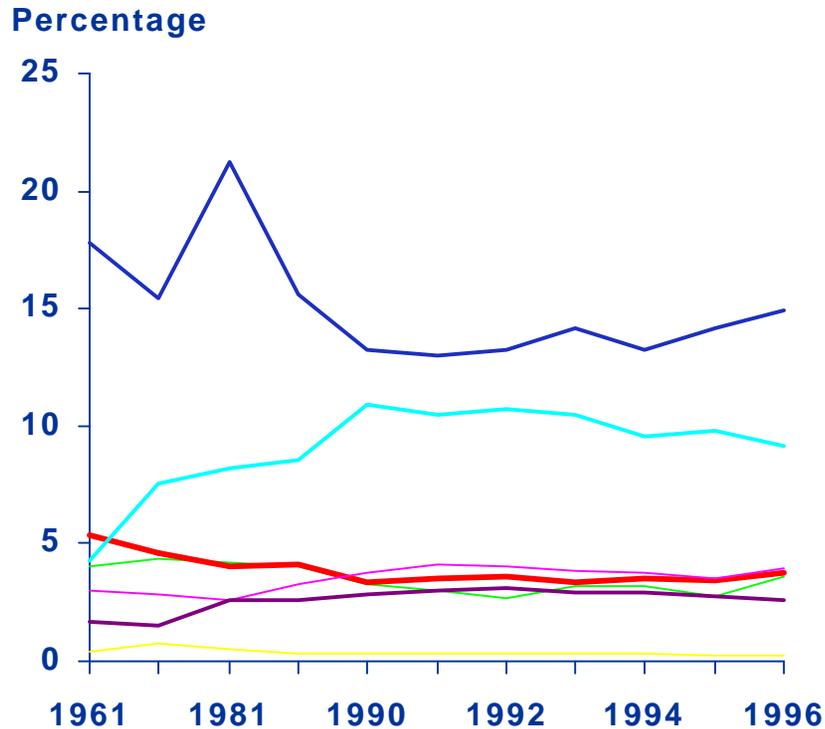


\*Based on 3 year moving average ratio of exports to production (quantities).

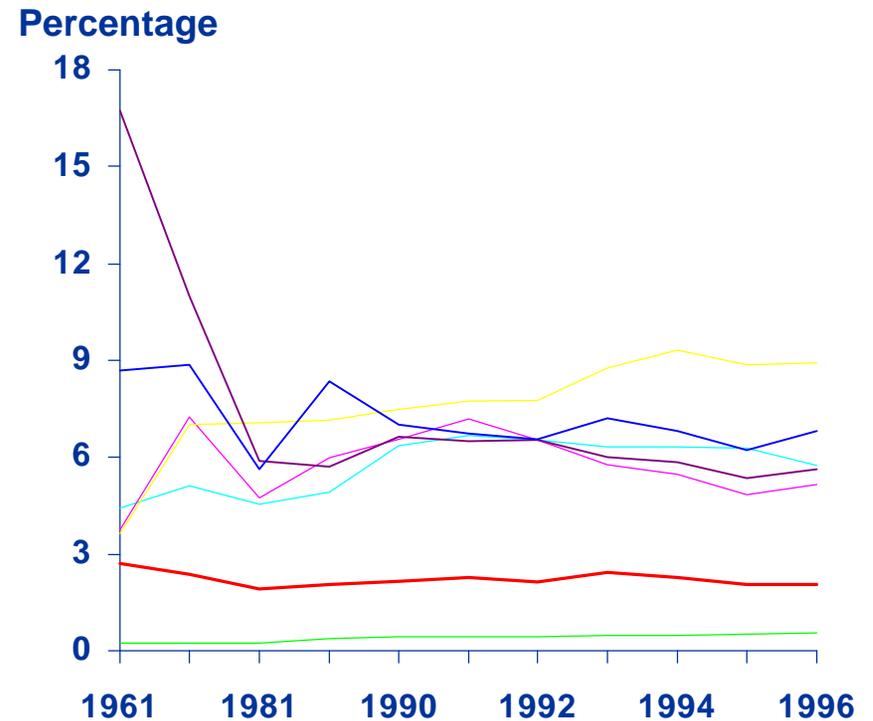
Source: FAOStat.

# Share of World Food Exports and Imports

## World Food Exports



## World Food Imports



Source: FAOStat.

# Glossary of Terms

## **Export Propensity**

Export values as a percentage of the value of production.

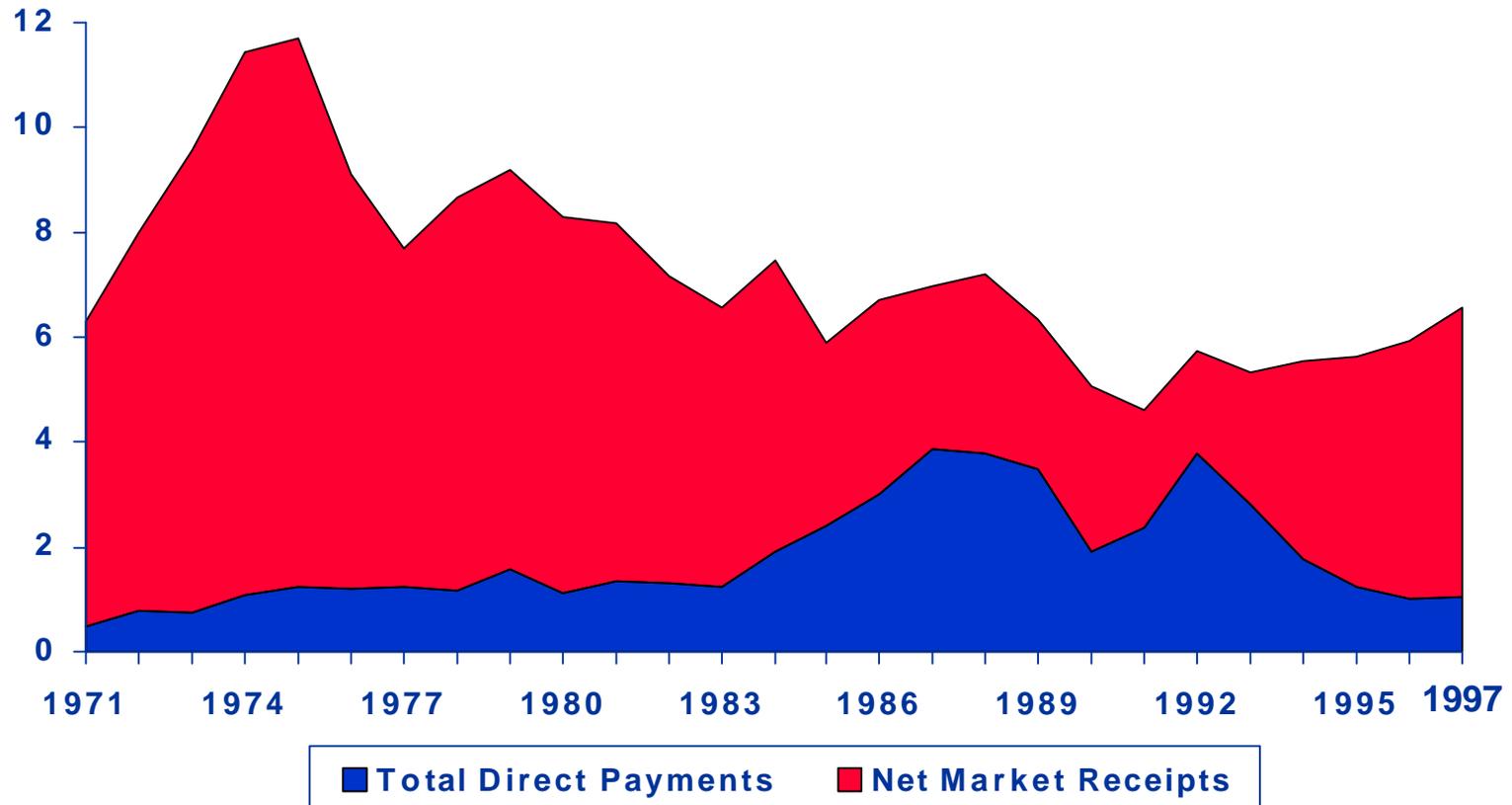
## **Foreign Direct Investment (FDI)**

Investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy by an enterprise resident in another country's economy.

# **Government Support of Agri-Food System**

# Farm Market Income and Direct Government Payments - Canada

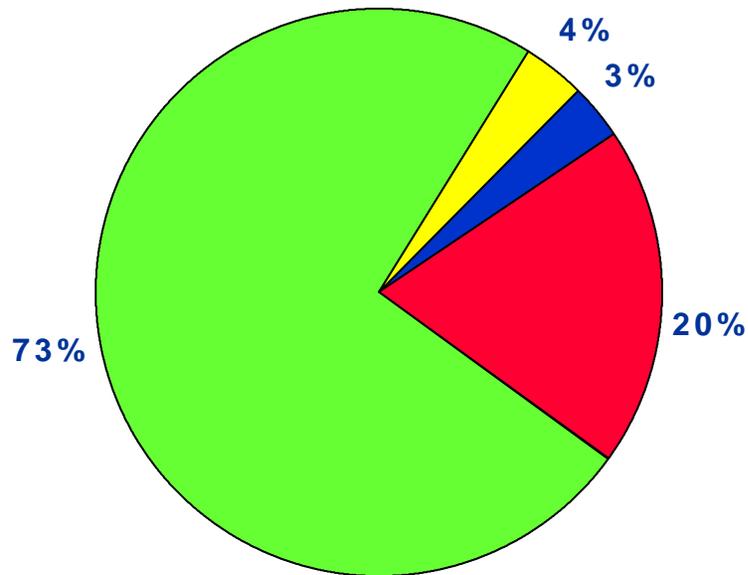
Billions 1986 \$



Source: AAFC - Farm Income, Financial Conditions and Government Assistance Data Book, 1998.

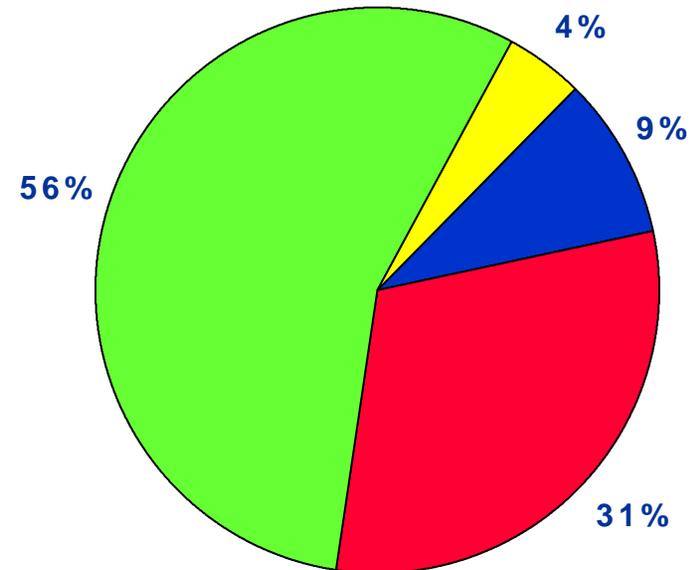
# AAFC Expenditures by Business Lines

1996-97 Estimate



\$1.8 B\*

2000-01 Planned



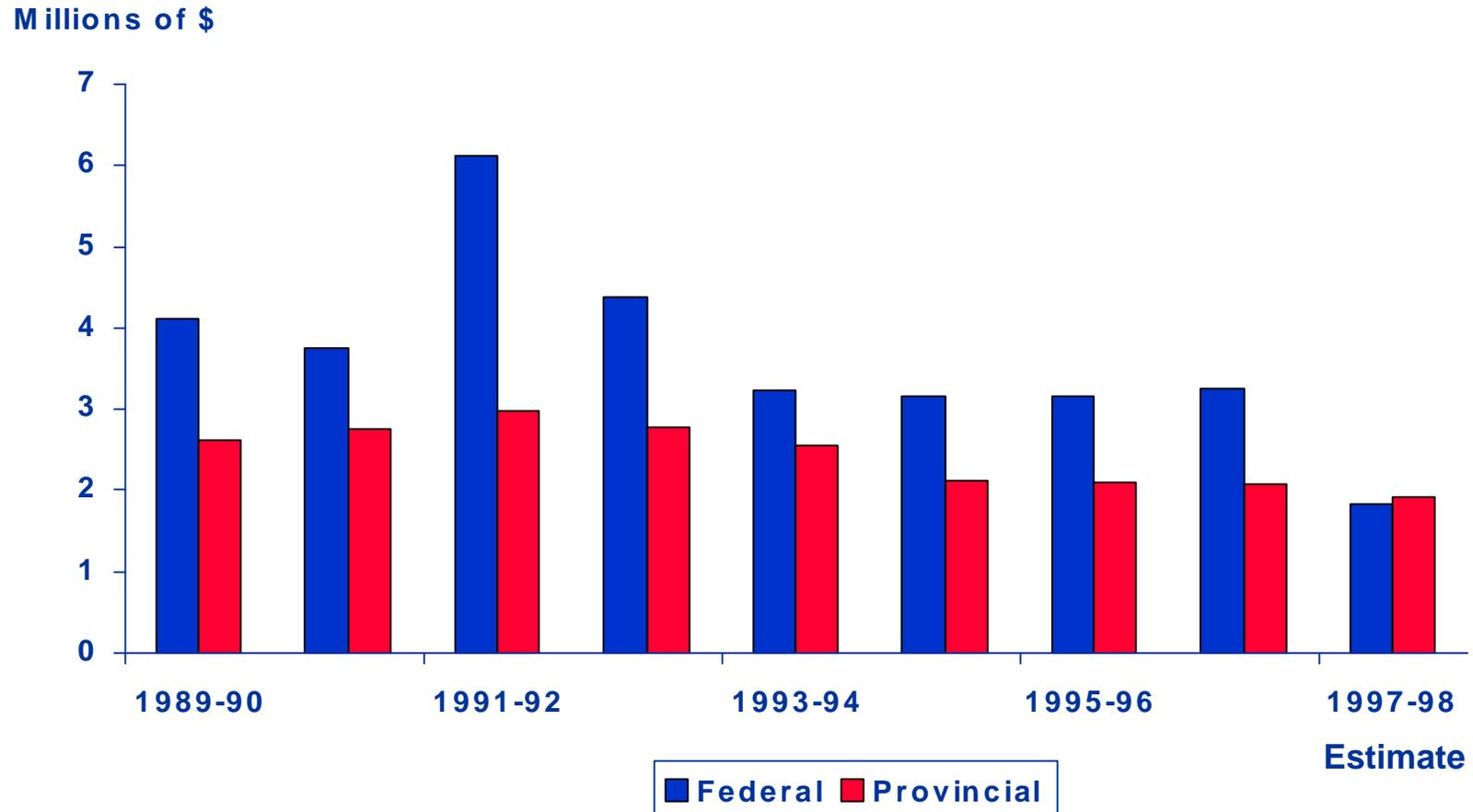
\$0.9 B\*



\*Does not include Canadian Food Inspection Agency.

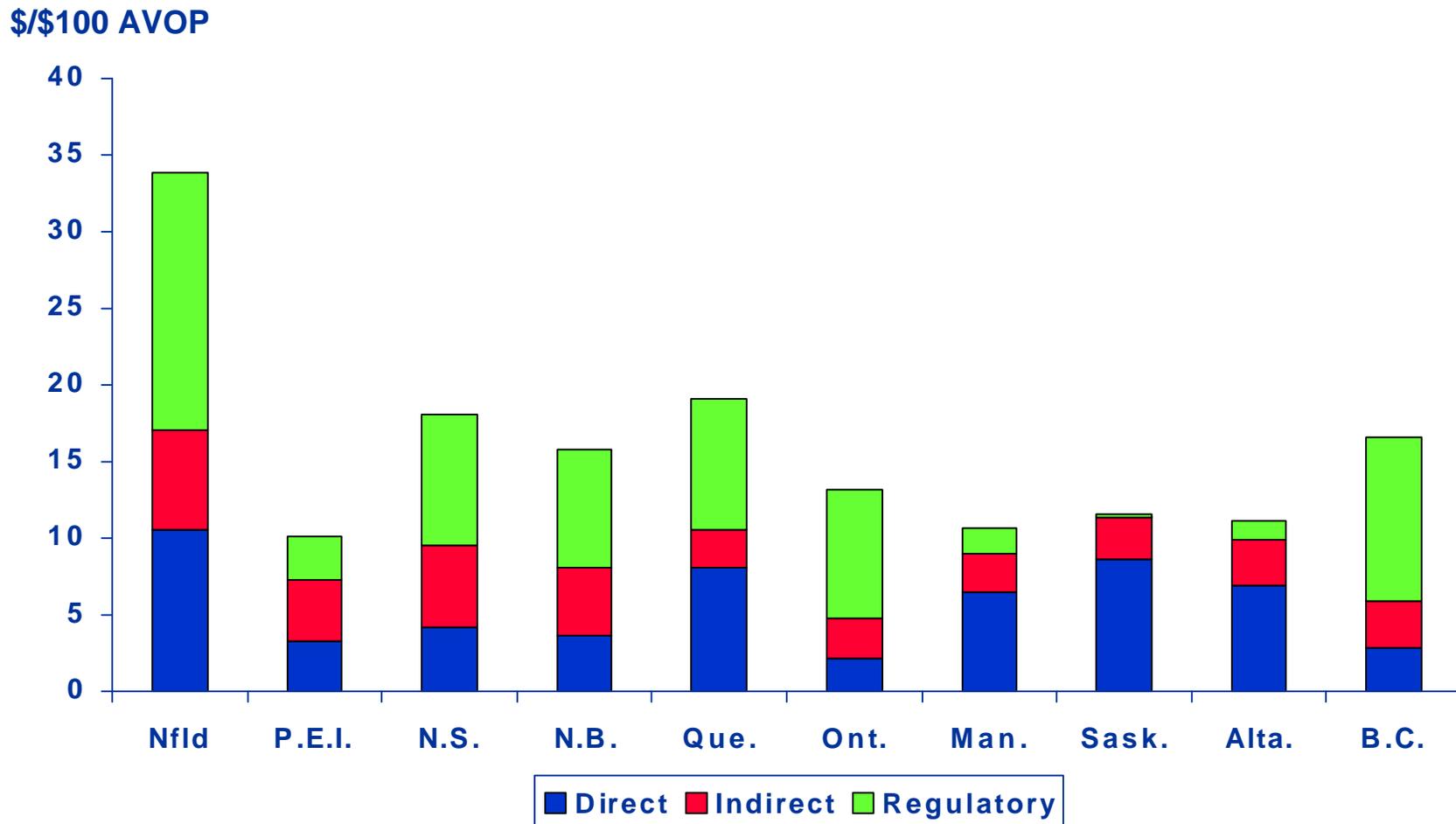
Source: AAFC - 1996-97 Performance Report.

# Government Expenditures in Support of Agri-Food System



Source: AAFC - Farm Income, Financial Conditions and Government Assistance Data Book, February 1998.

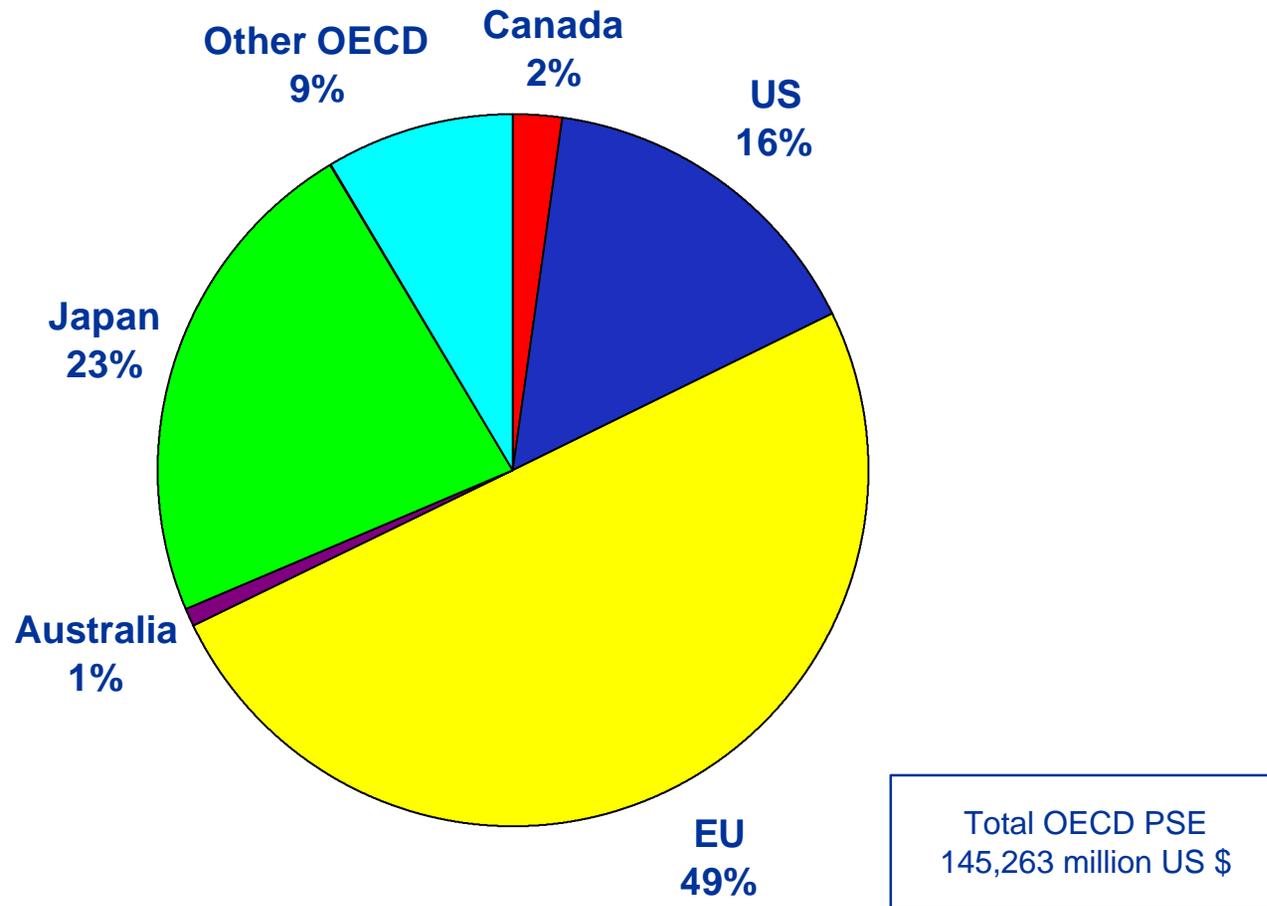
# Government Transfers by Type of Transfer, 1996-97



AVOP - Adjusted Value of Production

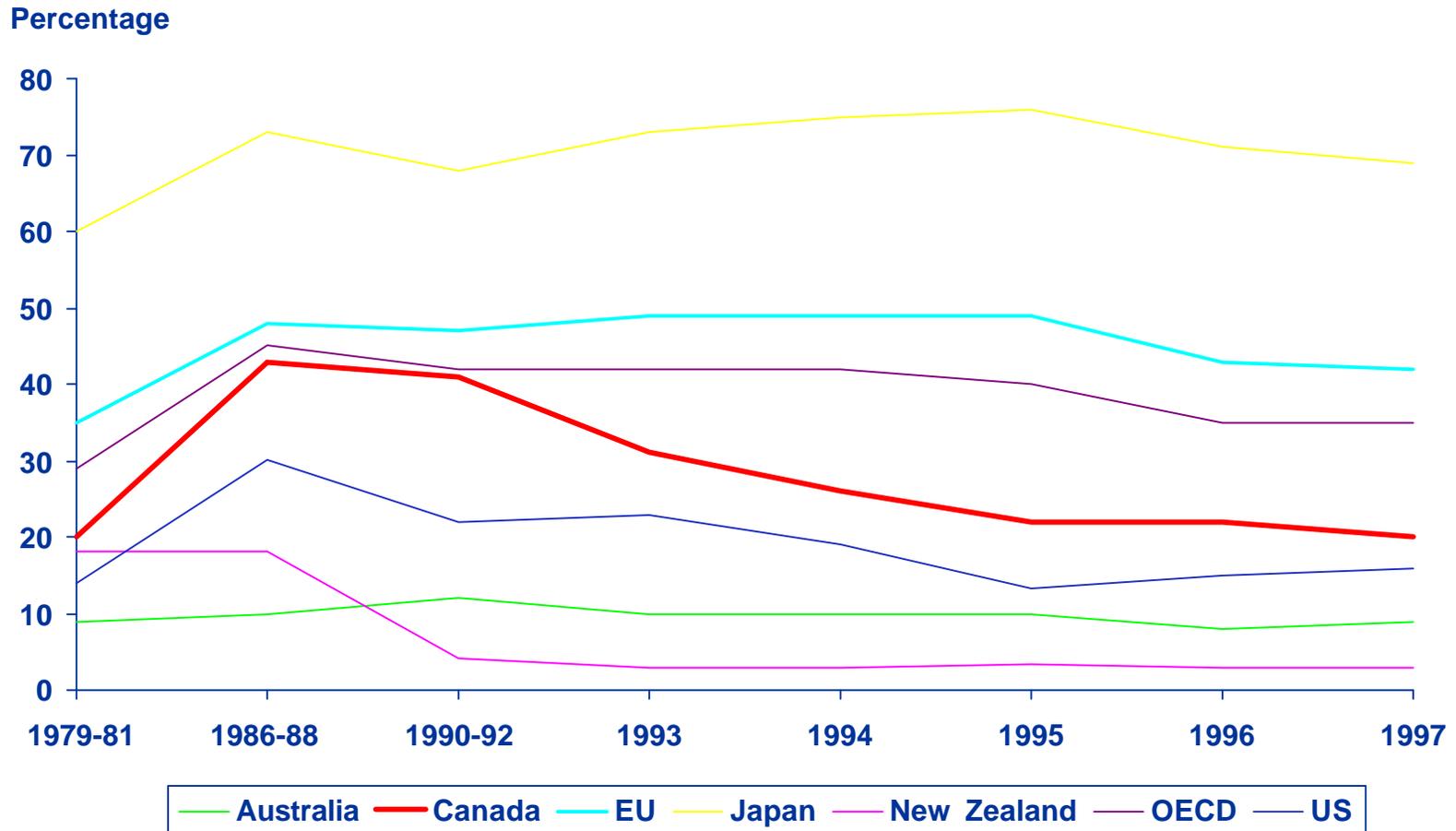
Source: AAFC - Farm Income, Financial Conditions and Government Assistance Data Book, February 1998.

# Distribution of Total OECD PSE by Country 1997



Source: Agricultural Policies in OECD Countries - Measurement of Support and Background Information, 1998 (draft).

# Percentage PSE, Selected Countries

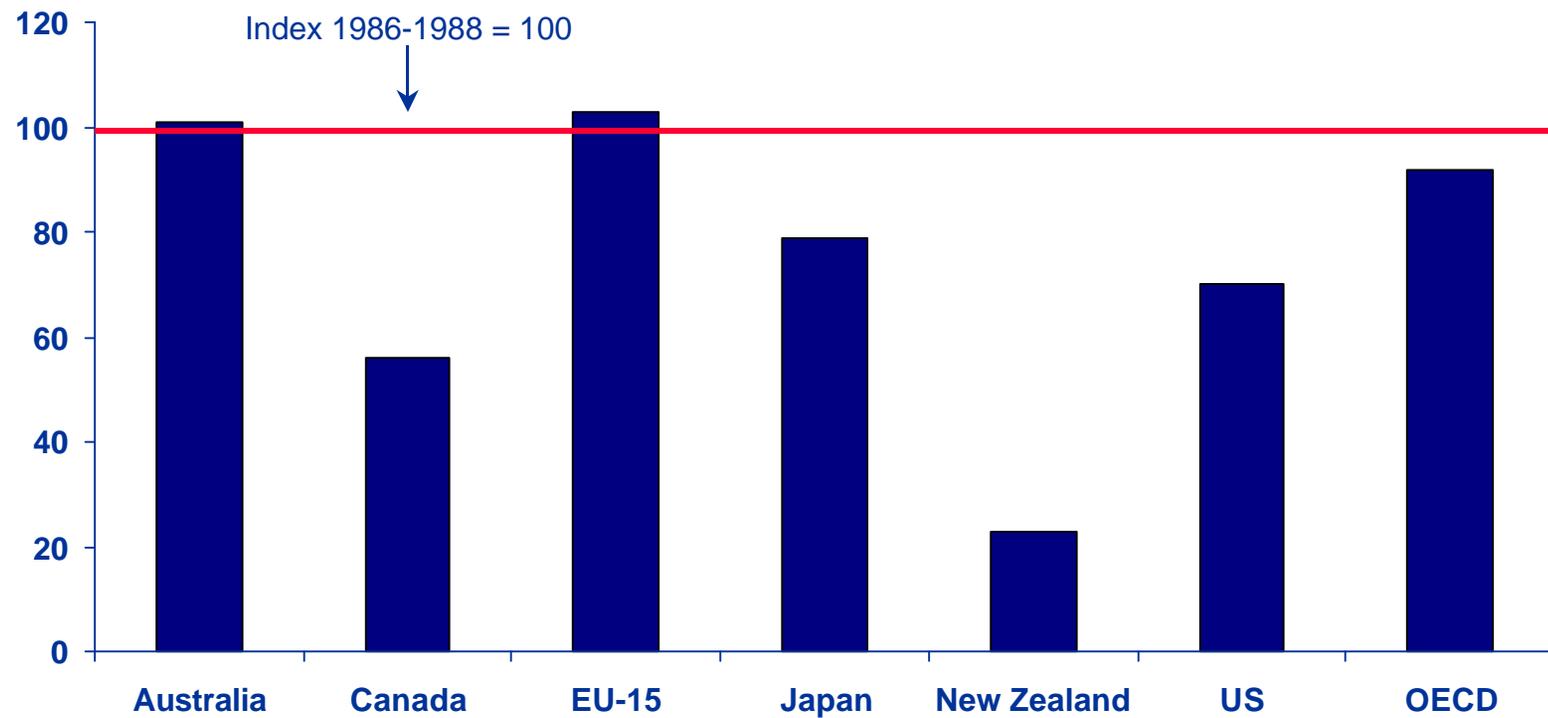


Sources: OECD PSE Database (diskettes) 1997.

Agricultural Policies in OECD Countries - Measurement of Support and Background Information, 1998 (draft).

# Index of Total PSE - 1997

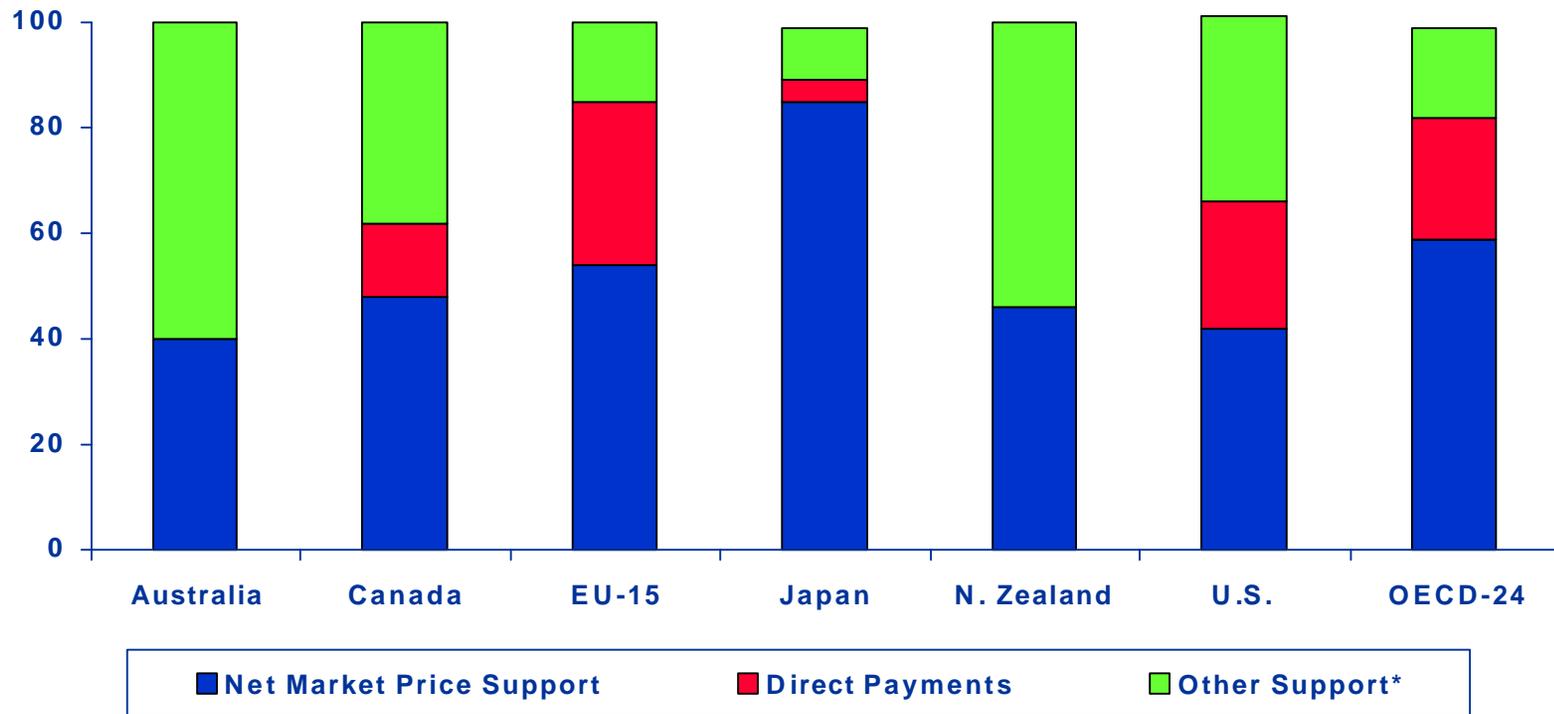
Local Currency



Source: Agricultural Policies in OECD Countries - Measurement of Support and Background Information, 1998 (draft).

# Composition of Support in Selected Countries, 1997

Percentage



\*includes input cost reduction and other services provided by government to the agri-food sector.

Source: Agricultural Policies in OECD Countries - Measurement of Support and Background Information, 1998 (draft).

# Glossary of Terms

<b>PSE (Producer Subsidy Equivalent)</b>	An indicator of the value of the monetary transfers to agriculture resulting from agricultural policies in a given year (developed by the OECD, Paris).
<b>Net Market Receipts</b>	Total market receipts less total cash operating expenses
<b>Total direct payments</b>	Include gross payments paid directly to producers under federal, provincial and municipal programmes
<b>AVOP (Adjusted Value of Production)</b>	Sum of three year moving average value of production plus current year's total direct transfers
<b>Government Expenditures</b>	Government spending (at all levels) on agriculture and the food and beverage processing industries in a year, both indirect and direct, to individuals, agencies or associations
<b>Government Transfers</b>	To agriculture only, including direct expenditures plus the effect of government regulations or policies on producers' market returns
<b>Net Market Price Support</b>	Transfers to agriculture resulting from measures (i.e., tariffs, administered prices) that raise prices to consumers of farm commodities, net levies and feed adjustments
<b>Other support</b>	Includes explicit and implicit subsidies on purchased farm inputs, farm credit, and government transfers to agriculture research and development, extension services, training and agricultural infrastructure