

# ***Farm Income Issues Data Source Book***

***February 2005***



Agriculture and  
Agri-Food Canada

Agriculture et  
Agroalimentaire Canada

Canada



# **FARM INCOME ISSUES DATA SOURCE BOOK**

Strategic Research  
Policy and Planning Team  
Agriculture and Agri-Food Canada

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February 2005

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## Foreword

This publication is a resource book of statistics on farm income in Canada. Farm income is a complex issue reflecting the complexity of Canadian farms and agricultural production in Canada. There are approximately 247,000 farms in Canada of which some 98% are operated as family farms. To provide a better understanding of the financial conditions of farms in Canada and the families that operate these farms the resource book focuses on both income and the pressures facing Canadian agriculture. Charts, figures and tables with brief accompanying text are used to summarize information and to provide base performance indicators. The data for the charts are all available on the Agriculture and Agri-Food Canada web site at [www.agr.gc.ca/spb/rad-dra](http://www.agr.gc.ca/spb/rad-dra).



# Executive Summary

## A. Structural Change in Canadian Agriculture

- The number of census farms in Canada has trended steadily down since 1941 to reach 246,923 in 2001. At the same time, the average size of farm and total farm output has increased. A similar shift in agricultural production to larger-scale farms is occurring in most developed economies. Farms in Canada are also becoming increasingly specialized in production. In 2002, about two-thirds of Canada's agricultural production was produced on farms that had 90% or more of gross farm receipts derived from one commodity type.
- Labour productivity growth in Canadian agriculture has exceeded other major industries in recent years. Between 1997 and 2002, labour productivity growth in the crop and animal production sector averaged 5.8%, nearly three times the economy-wide average of 2.3%. With increased agricultural productivity comes a decline in primary agricultural employment. About 340,000 Canadians are employed in agricultural production (2% of the labour force), half the level of fifty years ago. Increased productivity has enabled farms to increase their size while remaining family owned and operated: over 98% are still family farms.
- Over the past 15 years, the value of Canadian agri-food exports has more than doubled. In 2001, agri-food exports peaked at nearly \$27 billion. Export focus varies widely by commodity. Canada is also facing increased competition, especially from emerging economies throughout the world.

## B. Farm Income, Assets and Liabilities of the Primary Agriculture Sector

- There are several indicators of economic performance and income can be measured before or after program payments and before or after depreciation. All of the indicators show downward trends after adjusting for inflation but other indicators such as farm capital and asset values indicate a more positive outlook for the industry.
- Aggregate net cash income in Canada has trended down after adjusting for inflation. In 2003, net cash income dropped sharply due to the impacts of Bovine Spongiform Encephalopathy (BSE) and the 2002 drought in the Prairies. Net cash income from the market has declined and has been partially offset by larger program payments, resulting in a declining share of net cash income from the market.
- Net cash income in Canada trended closely to that of the United States (U.S.) between 1971 and 1999 but have diverged since this time. After accounting for inventory change and depreciation, the U.S. net income has trended higher compared to that of Canada.
- The aggregate value of farm capital in Canada has trended up since 1987. On a per farm basis, liabilities more than doubled between 1993 and 2003 but asset values grew nearly as fast and net worth increased substantially. The largest increases were for dairy, poultry and egg, and hog farms.

## **Executive Summary (cont'd)**

### **C. Variability and Diversity of Canadian Farm Income**

- The net operating income per farm varies significantly by farm type. Potato, poultry and dairy farms tend to be larger and have higher net operating income per farm while beef cattle, other animal, and fruit and nut farms are smaller and have lower net operating incomes.
- There is a large diversity among such factors as age of the operator, financial situation and size of the operation. AAFC use these factors to develop a typology in which about half of Canada's farms were business focussed. They accounted for 88% of agricultural revenues and 82% of program payments. The remaining farms are classified as retirement farms, lifestyle farms and low income farms. All but the very large business-focussed farms rely heavily on off-farm income sources.
- Farm performance varies widely among farms of the same type, size and region. Differences are mainly related to the lower costs for the higher performing farms.

### **D. Farm Family Finances**

- The income of farm families has trended up since 1980 mainly as a result of increasing off-farm income. In 2001, off-farm income as a percent of total family income was lowest for farm families operating dairy farms and highest for those operating beef cattle farms.
- The income of farm families is comparable to that of other rural non-farming families, but is lower than that of urban families. The incidence of low income for farm families has declined from a peak of 11% in the mid 1980s to 4% in 2002.
- Ninety percent of farm families in Canada believe their standard of living is as good as or better than people living in nearby urban centers. Their response did not vary significantly by farm type or typology.



# **Section A**

## **Structural Change in Canadian Agriculture**

- A1. Farm Numbers and Farm Production
- A2. Productivity and Labour
- A3. Concentration and Specialization
- A4. Production, Trade and Competitiveness



# A1

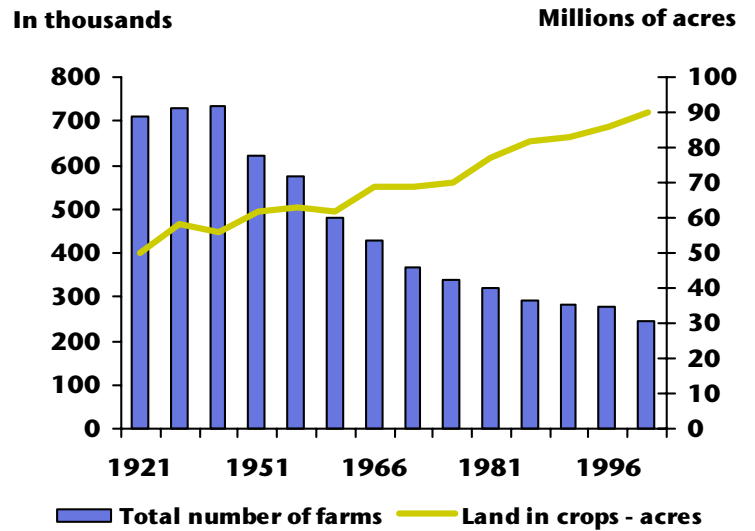
## Farm Numbers and Farm Production

- Charts A1.1 and A1.2 show that the number of farms has changed since 1921 while the land in crops has increased.
- Charts A1.3 to A1.6 show consistent trends towards consolidation into larger operations across all major farm types (wheat, beef, pigs and poultry).
- Chart A1.7 shows the distribution of farms by operating arrangement.
- Finally, chart A1.8 shows that despite the consolidation into larger operations and changes in the distribution of operating arrangements, more than half of farms still had sales of less than \$100,000 in 2002.

# Farm numbers in Canada have been declining since 1941 while land in crops has been increasing steadily

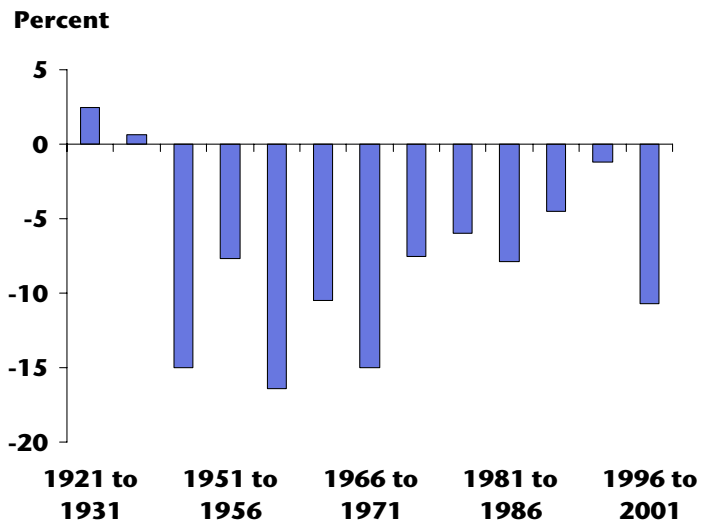
- The number of census farms in Canada peaked at 732,832 in 1941. Since then, the number of farms in Canada has been on a downward trend dropping to 246,923 in 2001.

**Chart A1.1**  
Number of Farms and Land in Crops in Canada, 1921-2001



- Between 1996 and 2001, Canada experienced the largest percent drop in the number of census farms since the late 1960s, a decline of 11%.

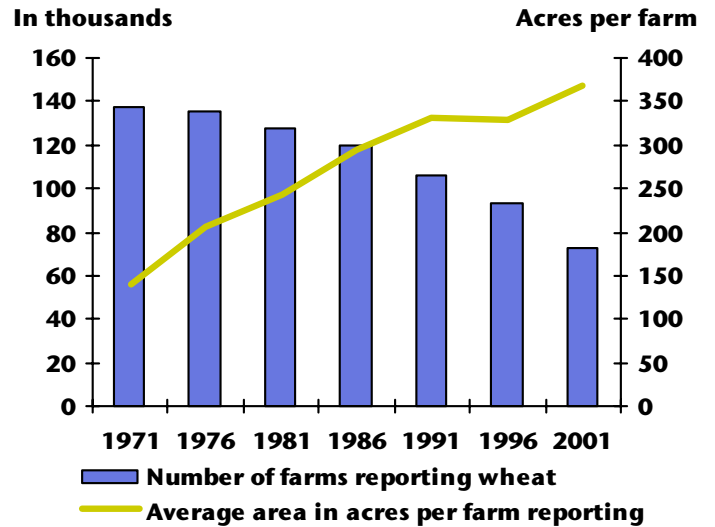
**Chart A1.2**  
Percent Change in Number of Census Farms in Canada, 1921-2001



# Since 1971 there has been a decline in farm numbers but an increase in farm size for farms reporting wheat and farms reporting beef cows

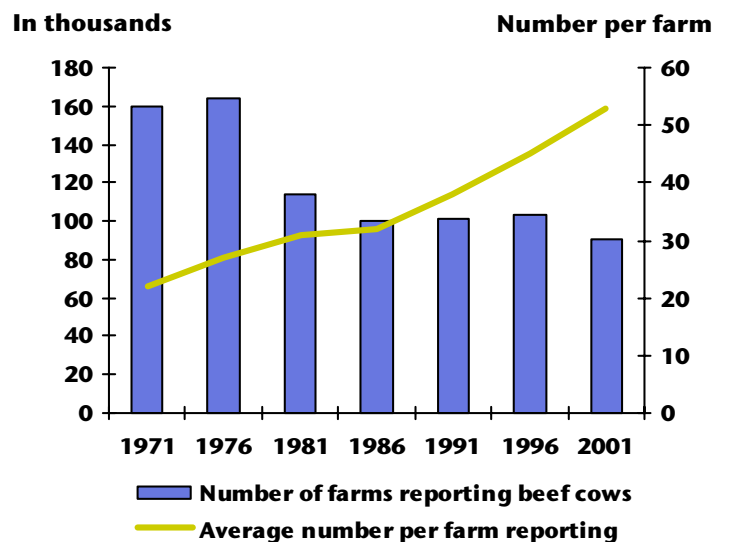
- Between 1971 and 2001, the number of farms reporting wheat declined by almost half from 137 thousand 73 thousand. During the same period, acres planted to wheat per farm reporting wheat more than doubled from 141 acres to 369 acres.

**Chart A1.3**  
**Number of Farms Reporting Wheat and Acres of Wheat Per Farm Reporting in Canada, 1971-2001**



- Between 1971 and 2001, the number of farms reporting beef cows declined from 160 thousand to 90 thousand while the average herd size more than doubled from 22 head to 53 head.

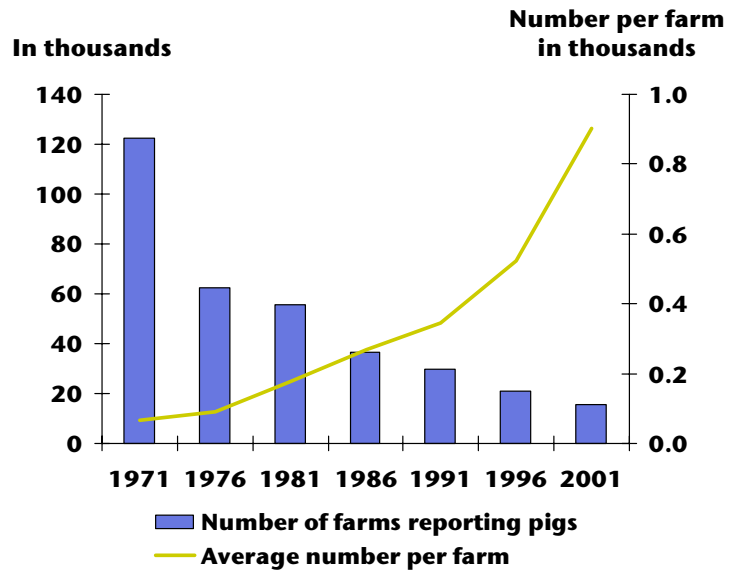
**Chart A1.4**  
**Number of Farms Reporting Beef Cows and Number Per Farm Reporting in Canada, 1971-2001**



# The number of farms reporting pigs and poultry decreased dramatically while farm size increased

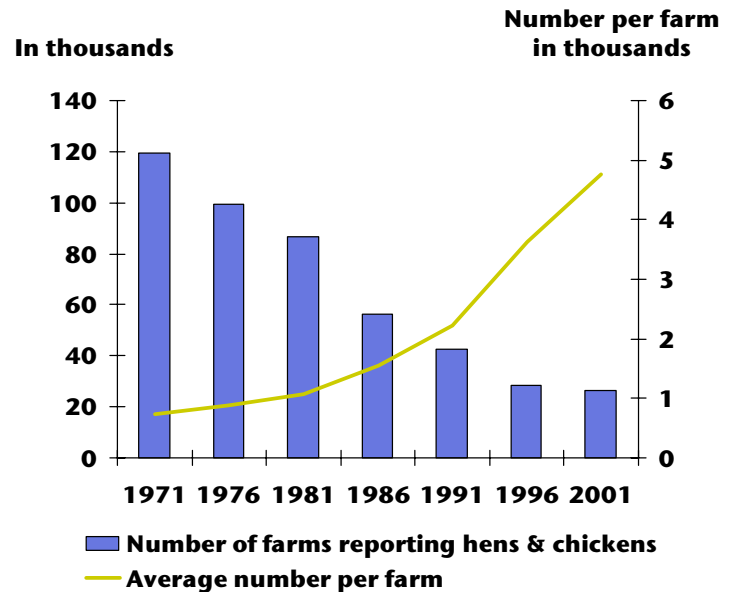
- Although the number of farms reporting pigs has declined 87% over the past 30 years, the number of pigs raised per farm has been equally dramatic, increasing fourteen-fold to 900 pigs per farm in 2001.

**Chart A1.5**  
Number of Farms Reporting Pigs and Number Per Farm Reporting in Canada, 1971-2001



- The number of farms reporting hens and chickens declined 78% from approximately 122,000 in 1971 to 26,000 in 2001. At the same time, the number of hens and chickens per farm increased five-fold to about 5,000 birds per farm in 2001.

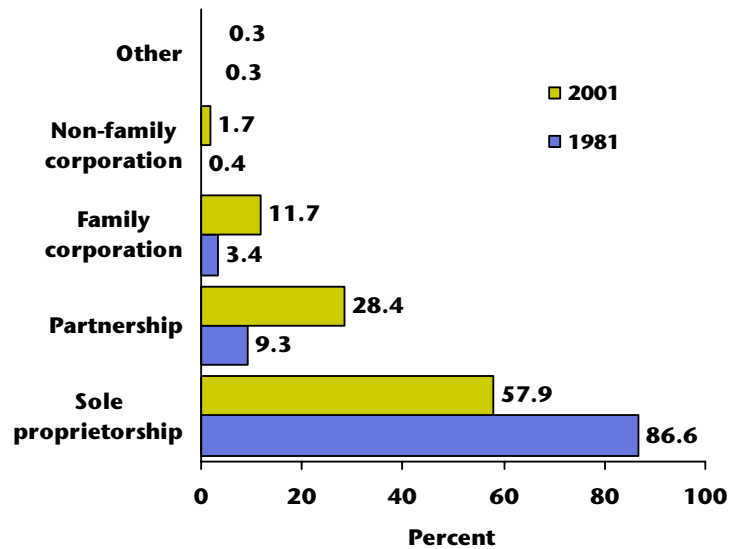
**Chart A1.6**  
Number of Farms Reporting Hens and Chickens and Number per Farm Reporting in Canada, 1971 to 2001



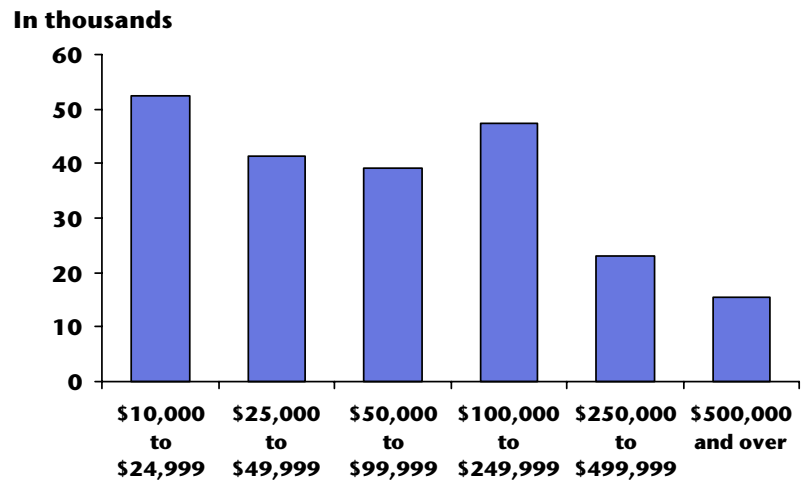
# Canadian agriculture is still dominated by family farms, more than half of which reported gross farm revenue of less than \$100,000 in 2002

- Family farms still account for 98% of all Canadian farms. The percentage of farms that are family farms has been very stable in the past 20 years although there has been a shift to partnerships and family corporations.
- Non-family farms still account for about 2% of all farms.

**Chart A1.7**  
Distribution of Farms by Operating Arrangement in Canada, 1981 and 2001



**Chart A1.8**  
Number of Farms by Revenue Class in Canada, 2002



- In 2002, 61% of the 218,000 farms in Canada with gross revenues of \$10,000 or more had less than \$100,000 in gross farm revenue.





# A2

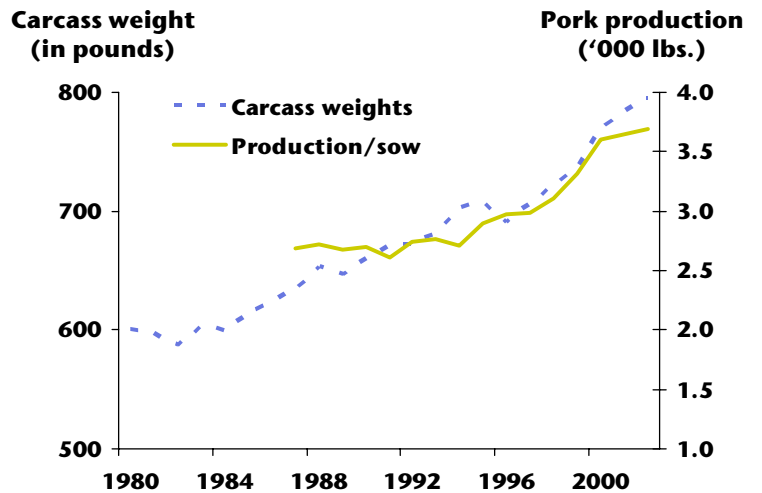
## Productivity and Labour

- Charts A2.1 and A2.2 show the increases in livestock and crop yields over time.
- Chart A2.3 shows the declining trend in wheat prices in Canada.
- Charts A2.4 and A2.5 show labour productivity increases in agriculture and other sectors over time and the decrease in agriculture employment in Canada.
- Chart A2.6 shows the distribution of employment by class of worker in Canadian agriculture in 2003.
- Charts A2.7 and A2.8 show the trend in Canadian employment in primary agriculture in comparison with that in the U.S. and the European Union-15 (EU-15).

# While farms have been getting bigger, production per unit has also increased

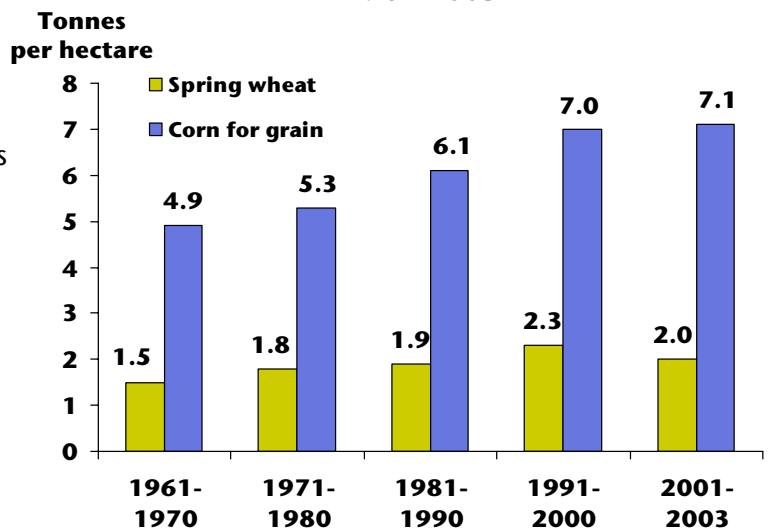
- Livestock yields have increased over time as a result of genetics, technological improvements and better management practices.

**Chart A2.1**  
Average Carcass Weight for Cattle and Pork Production per Sow in Canada, 1980-2002



Note: Data for pork begins in 1987.

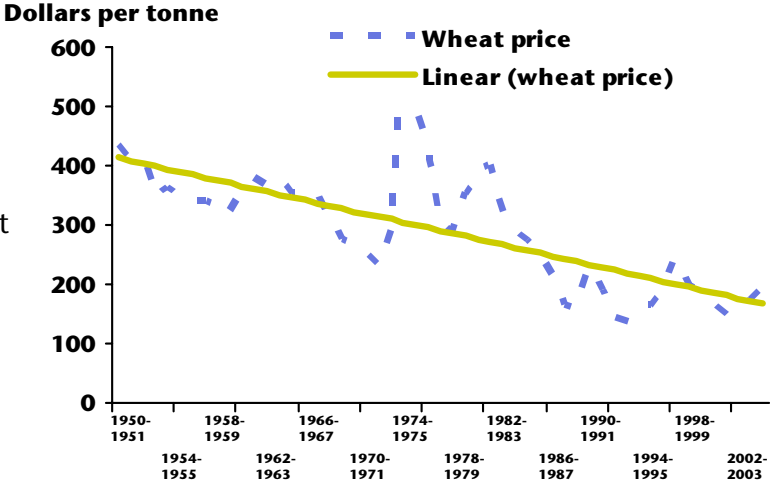
**Chart A2.2**  
Spring Wheat and Corn Yields in Canada, 1961-2003



- Crop yields have also shown steady growth as a result of plant breeding and management practices (i.e. rotations, fertilizer, tillage).

# The real price of wheat has been declining, reflecting technology improvements

**Chart A2.3**  
**Price of Wheat in Canada, 1992/93 Dollars, 1950-2003**

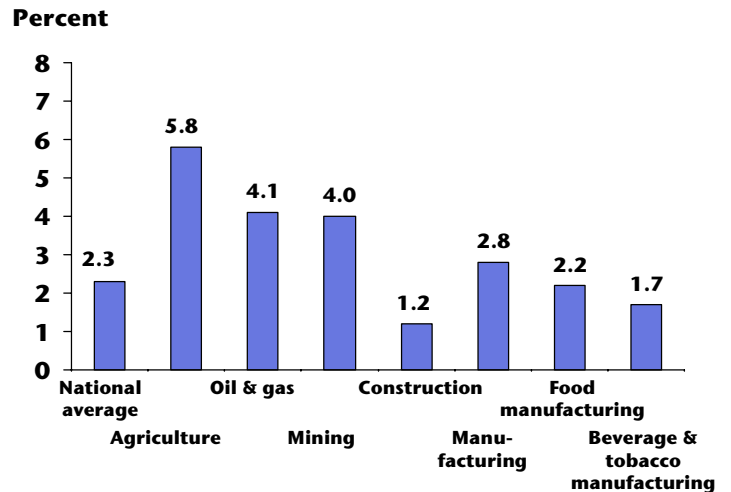


- Technology improvements and increased competition have contributed to the decline in real wheat prices as well as most agricultural commodities.

# Increasing farm size and increasing production per unit have resulted in larger labour productivity gains in agriculture

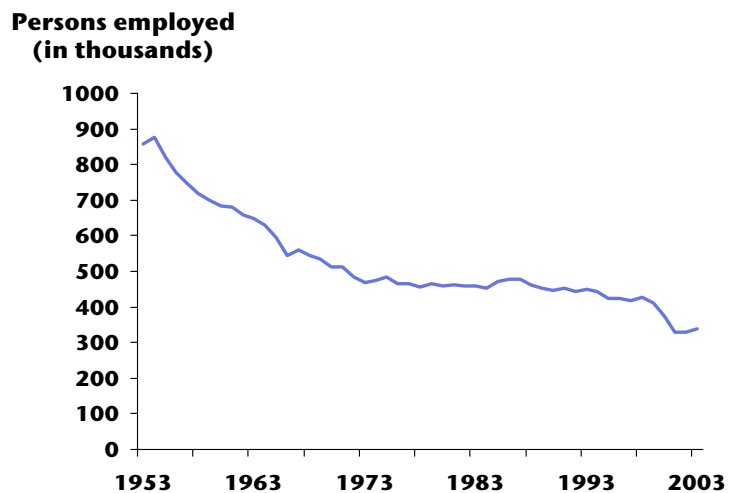
- Labour productivity in the agriculture sector grew at an annual average rate of 5.8% from 1997 to 2002. This is the fastest growing rate of all sectors at nearly three times the national average increase of 2.3%.

**Chart A2.4  
Labour Productivity of Canadian Industries,  
1997-2002  
(Average Annual Percent Growth Rate)**



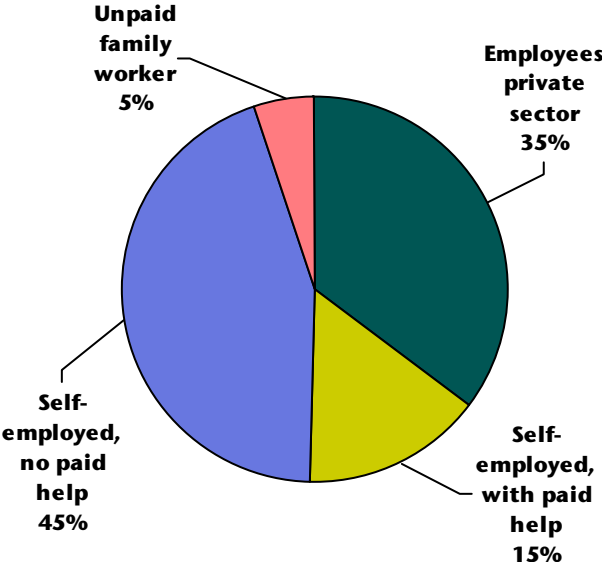
- The increases in labour productivity were accompanied by declines in agricultural employment.
- Canadian employment in agriculture declined from 860,000 persons in 1953 to 340,000 persons in 2003.
- The lowest level of employment was 310,000 in 2001.

**Chart A2.5  
Employment in Agriculture in Canada,  
1953-2003**



# The majority of those employed in primary agriculture in Canada are self-employed

**Chart A2.6  
Employment in Primary Agriculture  
by Class of Worker in Canada, 2003**

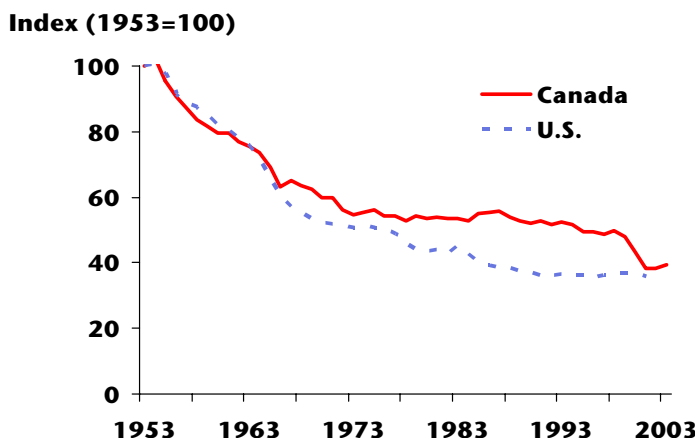


- Only 35% of those employed in the primary agriculture industry are employees of private sector firms, the remainder are self-employed or unpaid family workers.

# There has also been a rapid reduction in agricultural employment in the U.S. and the EU-15 countries

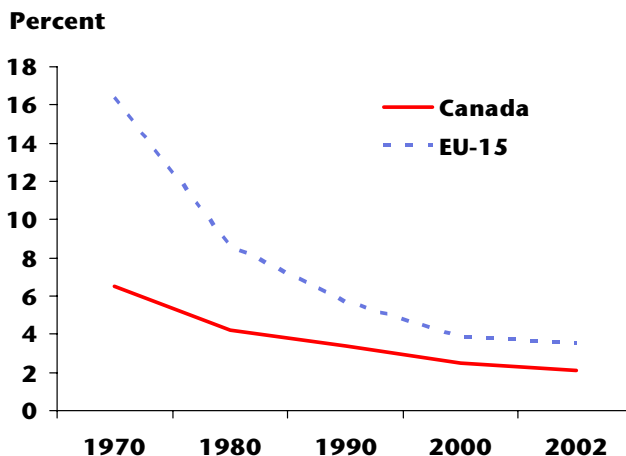
**Chart A2.7**  
**Farm Employment in Canada and the U.S.,**  
**1953-2003 (1953=100)**

- Between 1953 and 1996, farm employment decreased by about 50% in Canada, compared to a 66% decrease in the U.S.
- Since 1996 employment decreased by 25% in Canada, while it remained constant in the U.S.



**Chart A2.8**  
**Trend in the Share of Farm Employment in**  
**Canada and the EU-15**  
**1970-2002**

- In Canada between 1970 and 2002, the employment share of agriculture declined from 6.5% to 2.1%.
- For the EU-15 countries, the share of primary agricultural employment declined from 16.4% to 3.5% over the same period. (The EU-15 values do not include the ratios for the United Kingdom (UK), the Netherlands and Portugal).



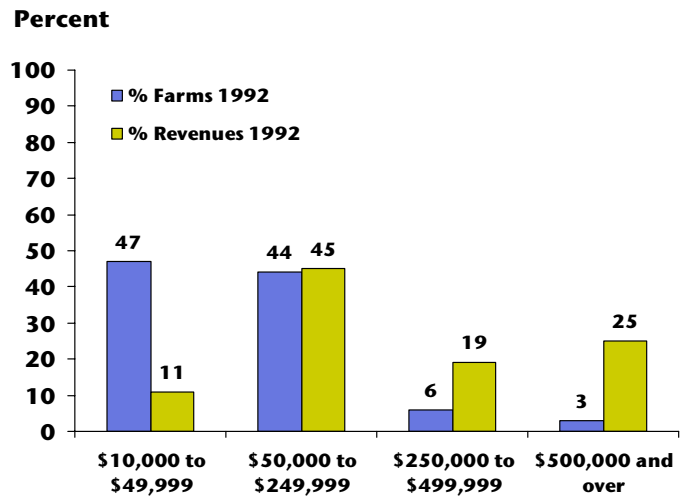
# A3

## Concentration and Specialization

- Charts A3.1 to A3.4 show that concentration has affected the distribution of farms and revenues by revenue class and farm type.
- Chart A3.5 shows that the share of production of the largest farms increased between 1971 and 2001.

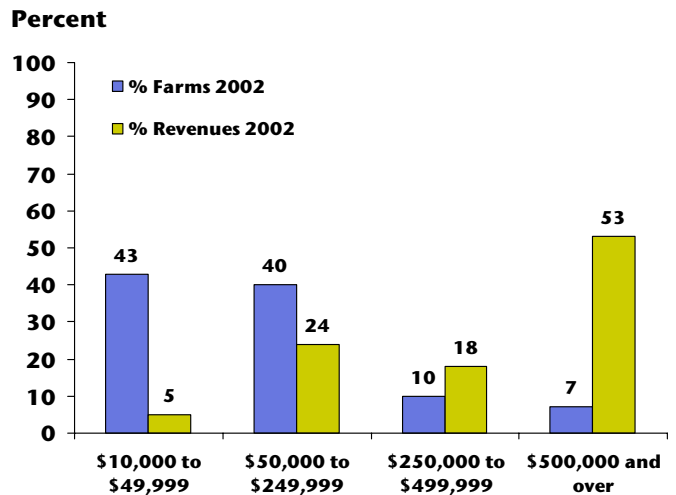
# While the majority of farms in Canada are small to mid-size, production is shifting to larger operations

**Chart A3.1**  
**Distribution of Farms and Total Revenues by Revenue Class in Canada, 1992**



- In 2002, 83% of farms in Canada were small to mid-size (revenues less than \$250,000) compared to 91% in 1992.
- However, between 1992 and 2002, higher proportions of farm revenues were being generated by the very large-size farms (revenues of \$500,000 and over). In 1992, 25% of total farm operating revenues were generated by these very large-size farms rising to 53% by 2002.
- This shift has reduced the share of production of farms in the \$50,000 to \$249,999 revenue class where the share of total farm operating revenues has declined from 45% to 24%.

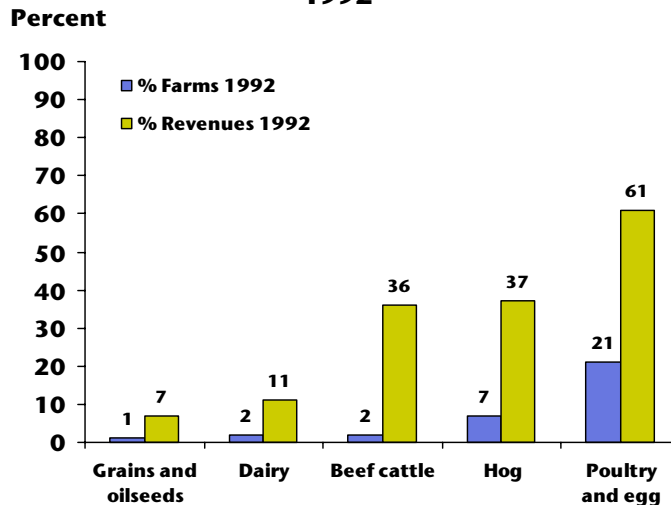
**Chart A3.2**  
**Distribution of Farms and Total Revenues by Revenue Class in Canada, 2002**





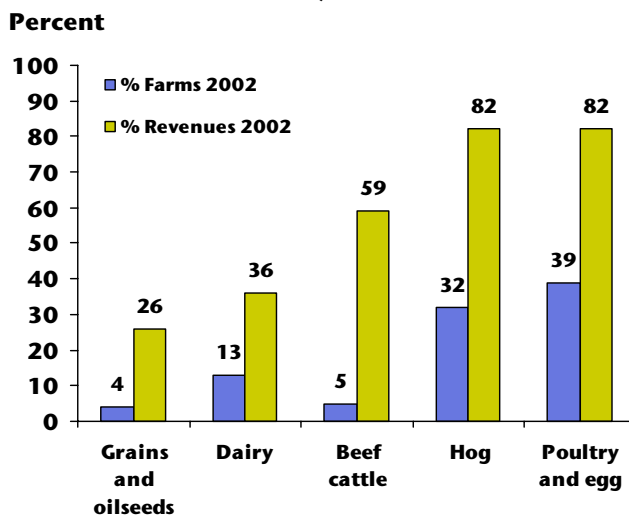
# The shift in agricultural production to very large-size farms is occurring in all sectors

**Chart A3.3**  
**Percentage of Farm Numbers and Total Revenues of Very Large-size Farms by Farm Type in Canada, 1992**



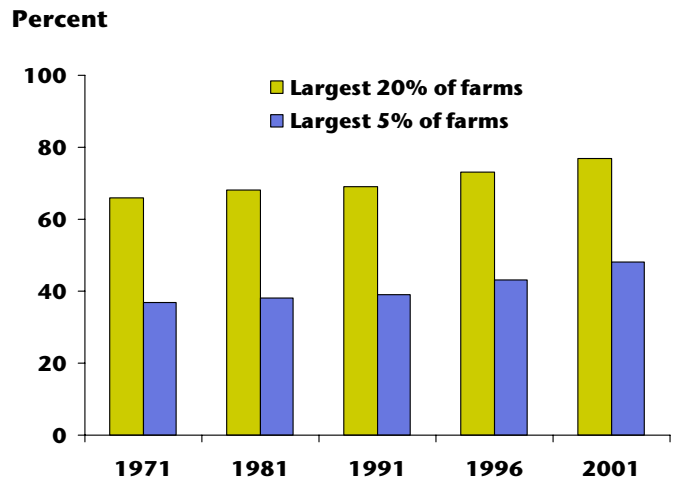
- The shift in agricultural production to very large-size farms (\$500,000 and over) has occurred in all sectors.
- The hog sector experienced the largest shift to very large-size farms. In 2002, very large-size hog farms generated 82% of total revenues, up from 37% in 1992.
- Poultry is also highly concentrated while grains and oilseeds production is less concentrated.

**Chart A3.4**  
**Percentage of Farm Numbers and Total Revenues of Very Large-size Farms by Farm Type in Canada, 2002**



# Despite the increase in production by very large-size farms, there has been only a moderate increase in the overall concentration of production

**Chart A3.5**  
**Concentration of Farm Production in Canada, 1971-2001**



- Between 1971 and 2001, the largest 5% of farms increased their share of total Canadian production from 37% to 48%.
- In the same period, the largest 20% of farms increased their share of total production from 66% to 77%.

# A4

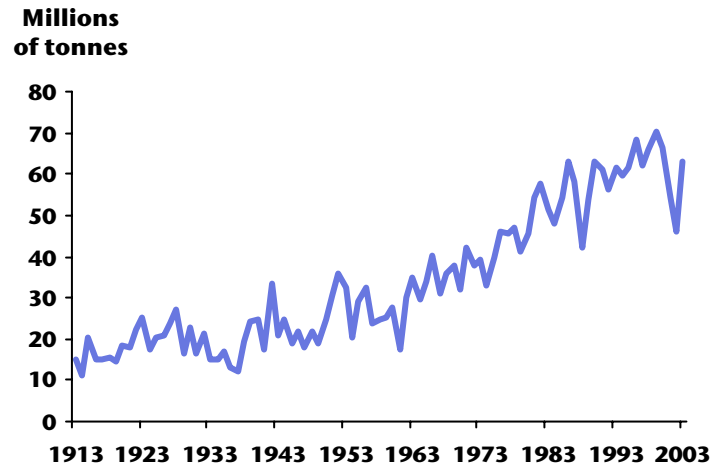
## Production, Trade and Competitiveness

- Charts A4.1 to A4.3 show the increases in Canadian production by major agricultural sector (grains and oilseeds, pork, beef and veal and chicken) over time.
- Charts A4.4 and A4.5 show the increase in exports over time in the aggregate and by commodity. While charts A4.6 and A4.7 compare the trends for wheat and oilseeds with major international competitors.
- Charts A4.8 and A4.9 illustrate the significance of the exchange rate on the value of Canadian production.

# Canadian farm output has been growing for crops and red meat...

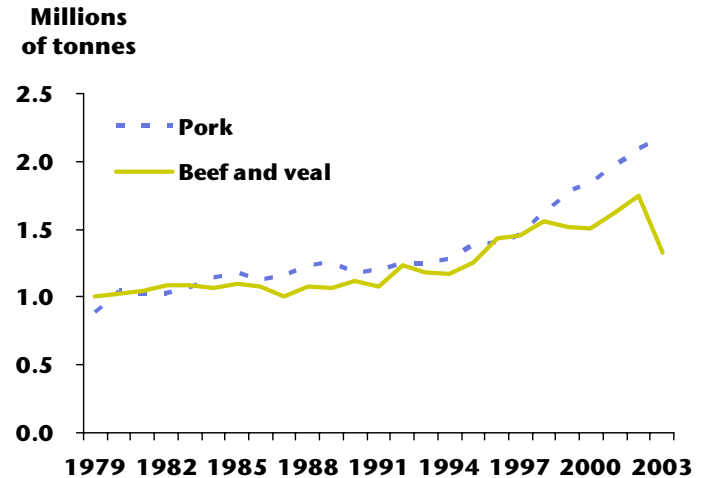
- Technology improvements have contributed to a doubling of grain, oilseeds and special crop production in the past 50 years.

**Chart A4.1**  
**Total Grain, Oilseed and Special Crops**  
**Production in Canada, 1913-2003**



- Canadian pork production has grown rapidly in the last decade, whereas beef production increases have been modest.

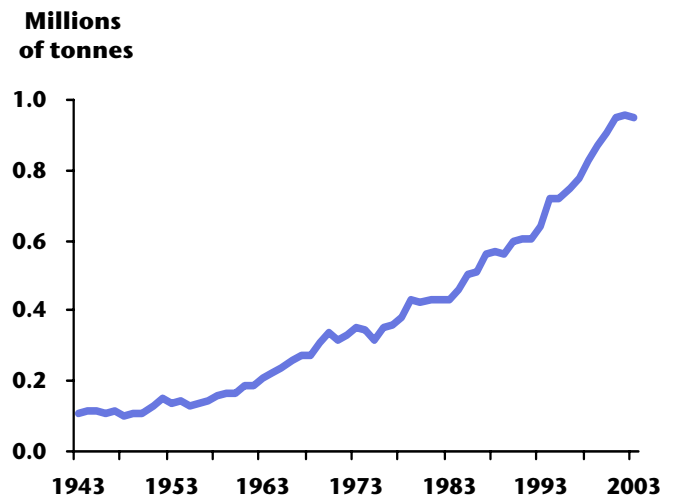
**Chart A4.2**  
**Farm Level Output of Beef and Pork in Canada,**  
**1979-2003**



# Canadian farm output has been growing for crops, red meat and poultry

**Chart A4.3**  
**Total Chicken Production in Canada,**  
**1943-2003**

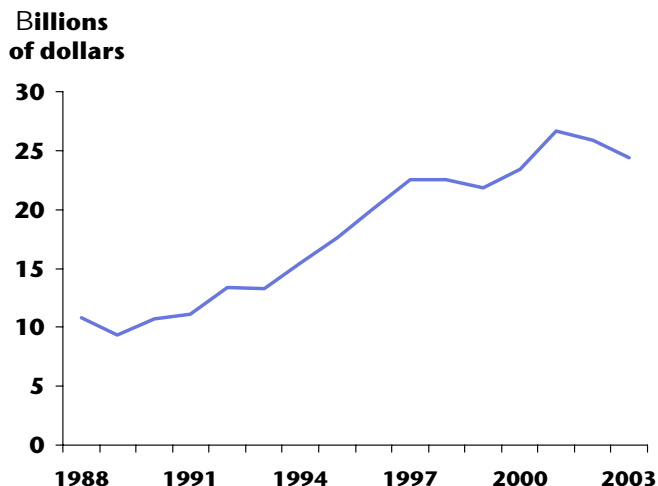
- Since 1943, chicken production in Canada has increased more than ten-fold, reaching almost 1 million tonnes in 2003.



# The focus on exports varies widely by commodity: the importance of exports to the grains and oilseeds sector declined as that of the red meat sector increased

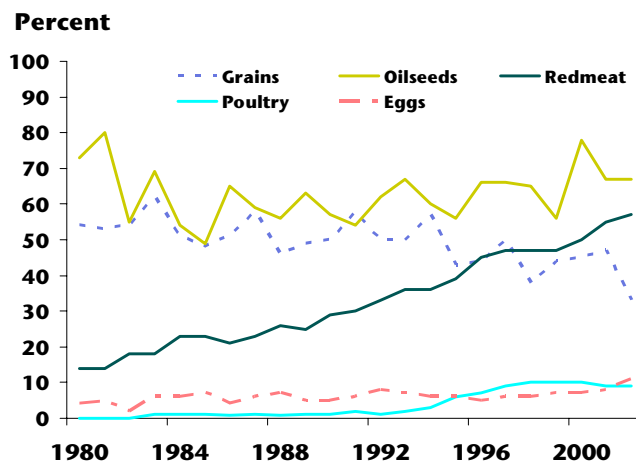
**Chart A4.4**  
Total Value of Canadian Agri-Food Exports, 1988–2003

- Between 1988 and 2003, Canadian agri-food exports more than doubled from \$10.9 billion to \$24.4 billion.
- The value of agri-food exports peaked at \$26.6 billion in 2001.
- Exports in 2003 fell because of the combined effects of drought and BSE.



**Chart A4.5**  
Value of Exports as a Percentage of Value of Production, by Farm Type in Canada 1980-2002

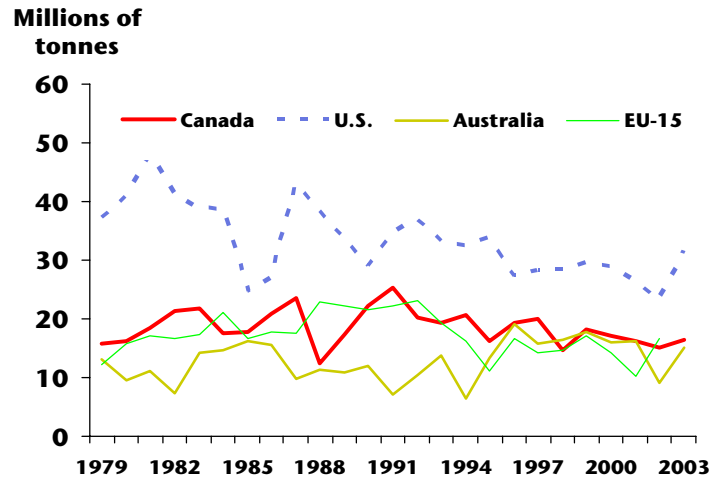
- Between 1980 and 2002, the share of Canadian grains and oilseeds production that was exported decreased from 54% to 33% and from 73% to 67%, respectively.
- During the same period the export share of the red meat sector increased four-fold, as the share of red meat production that was exported increased from 14% to 57%.
- The trends in export focus are a result of domestic demand for feed grains to support increased livestock production.



# Canada faces increased competition from countries other than the U.S. and the EU(15)

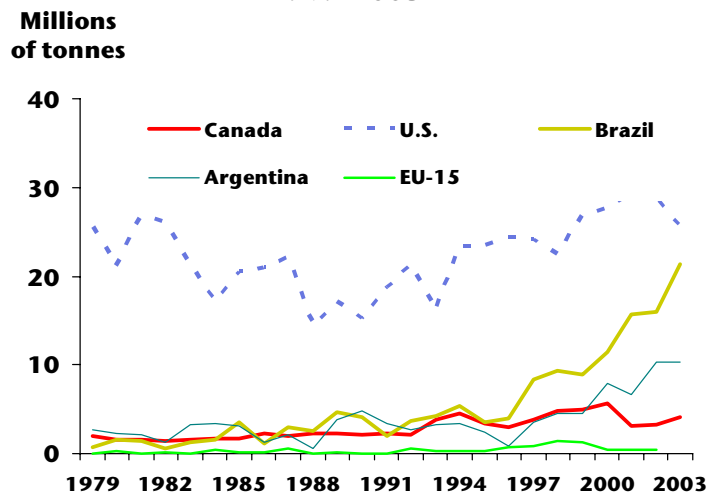
- Between 1979 and 2003, Canadian wheat exports fluctuated from 12 to 25 million tonnes around a stable trend. During the same period, U.S. wheat exports declined from 42 million tonnes (1979-1981 average) to 27 million tonnes (2001-2003 average).

**Chart A4.6  
Wheat Exports of Canada and International Competitors 1979-2003**



- Between 1979 and 2003, Canadian oilseed (rapeseed, soybeans and sunflower seeds) exports more than doubled from 1.7 million tonnes (1979-1981 average) to 3.5 million tonnes (2001-2003 average).
- U.S. oilseed exports increased beginning in the early nineties.
- During the same period, Brazilian exports increased fourteen-fold, while Argentinean and the EU-15 exports increased four-fold.

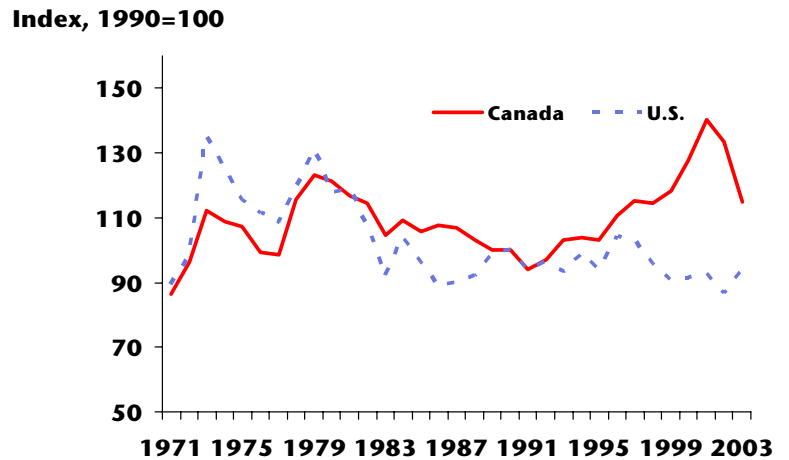
**Chart A4.7  
Oilseed Exports of Canada and International Competitors 1979-2003**



# The exchange rate is a major determinant of the value of Canadian production and competitiveness

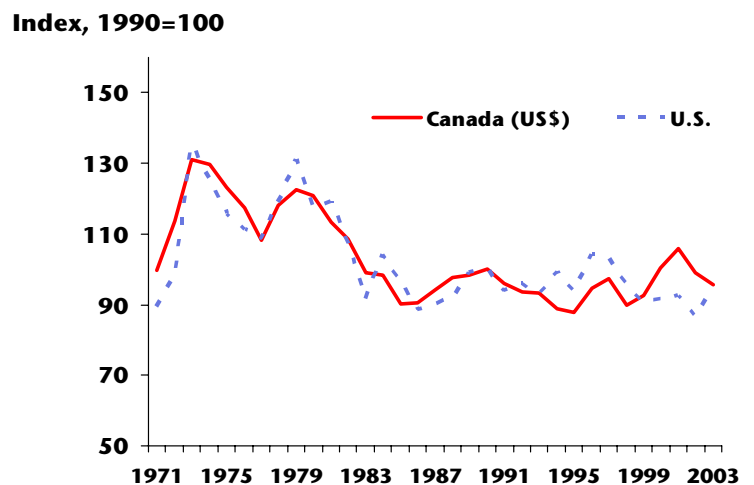
**Chart A4.8**  
**Value of Crop and Livestock Production in Canada and the U.S.**  
**1971-2003**

- Canadian value of agricultural crop and livestock production in Canada (measured in CAN\$) peaked in 2001 when its level was 40% above that of 1990.
- Since the mid 1990s the value of production in Canada and the U.S. varied significantly.



**Chart A4.9**  
**Value of Crop and Livestock Production in Canada and the U.S. (Measured in U.S. Dollars),**  
**1971-2003**

- However when measured in US\$, Canadian production tracks very closely the trend of U.S. production.





# **Section B**

## **Farm Income, Assets and Liabilities of the Primary Agriculture Sector**

- B1. Farm Income, Assets and Liabilities - in Aggregate
- B2. Farm Income, Assets and Liabilities - per Farm
- B3. Benchmarking Canadian Agriculture Sector Performance in International Markets



# B1

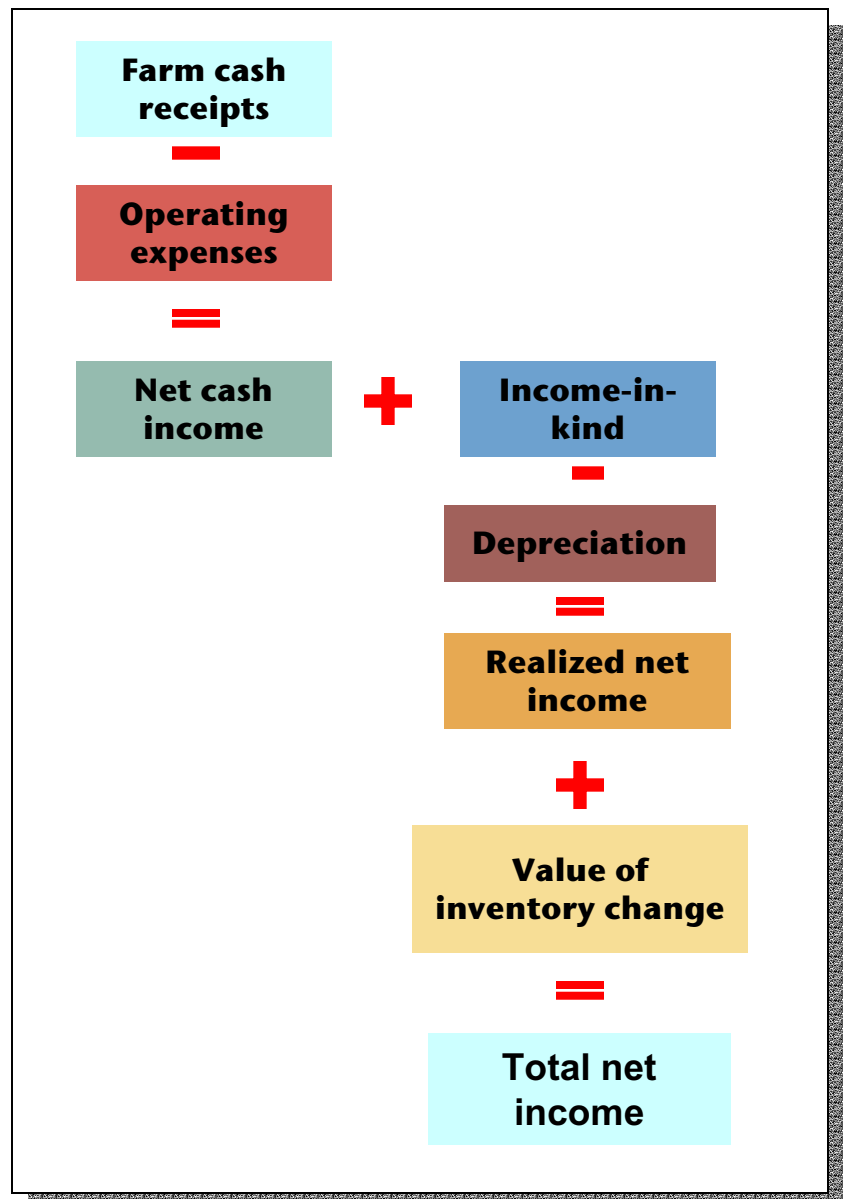
## Farm Income, Assets and Liabilities - in Aggregate

- Chart B1.1 provides an overview of aggregate farm income measures.
- Charts B1.2 to B1.7 show trends for different measures of aggregate farm income.
- There are other important measures of farm income and economic performance. Charts B1.8 and B1.9 show Canadian agriculture net value added and the distribution of net value added between farm operating expenses and returns to the farm business.
- Charts B1.10 to B1.11 show the trends in farm assets and liabilities in current and constant 1997 dollars.
- Chart B1.12 shows the composition of assets over the long term.

# How aggregate farm income is measured

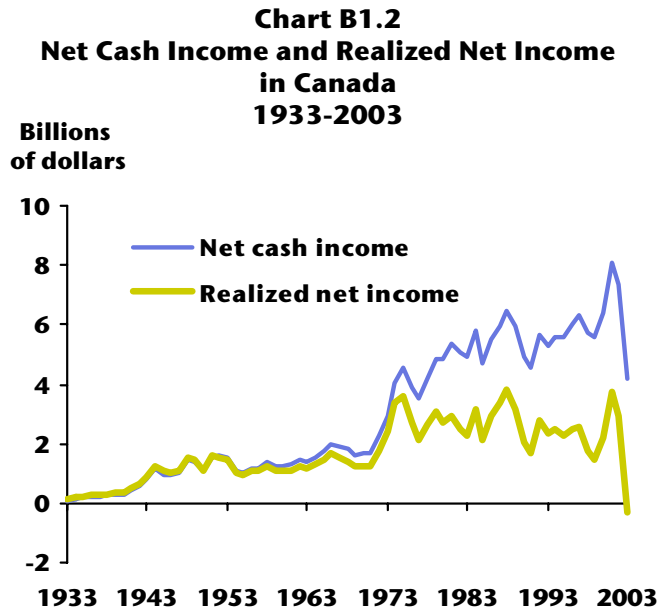
Chart B1.1  
Aggregate Farm Income Measures (National Accounts)

- There are three measures of aggregate farm income based on the national accounts data:
  - Net cash income
  - Realized net income
  - Total net income
- **Net cash income** is farm cash receipts less operating expenses.
- **Realized net income** is net cash income plus income-in-kind less depreciation.
- **Total net income** is realized net income plus the change in the value of inventories.

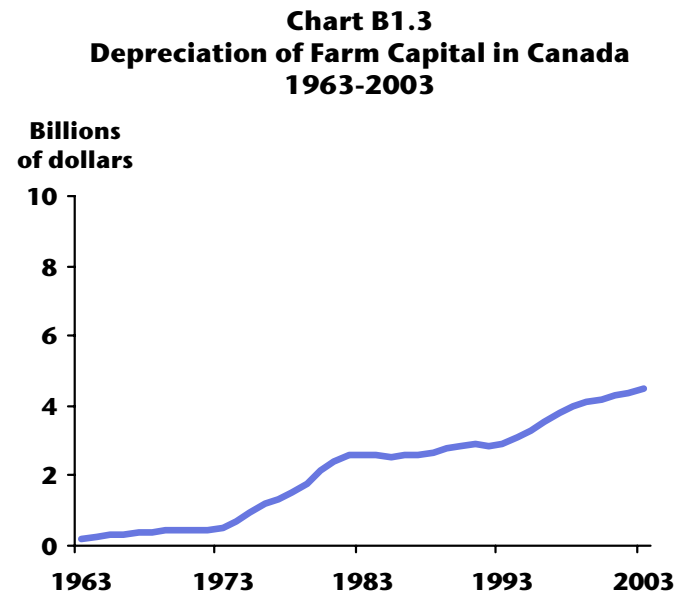


# Changes in the structure of agriculture are linked to divergent trends in farm income measures

- Before the 1970s, there was little difference between net cash income and realized net income because income-in-kind largely offset depreciation. (Depreciation was less than income-in-kind before 1952).
- The sharp decline in income between 2002 and 2003 was mainly due to drought in the Prairie provinces and the impacts of BSE.



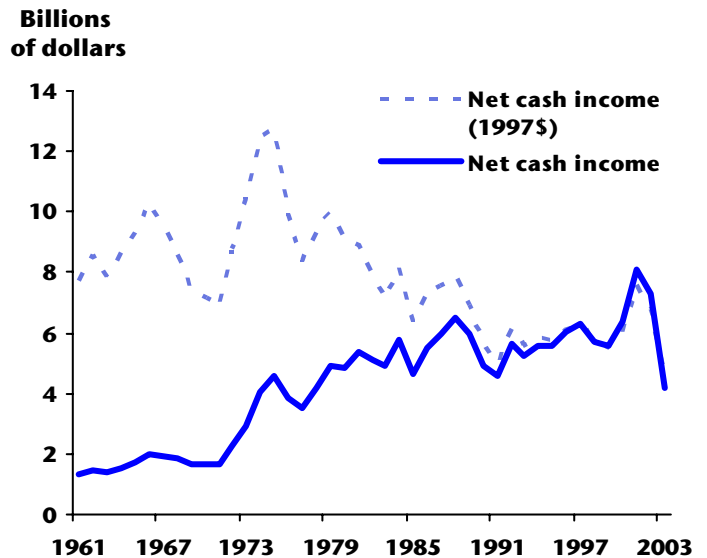
- Since the 1970s, depreciation has become increasingly important. In nominal terms, realized net income has declined marginally while net cash income has trended upwards.



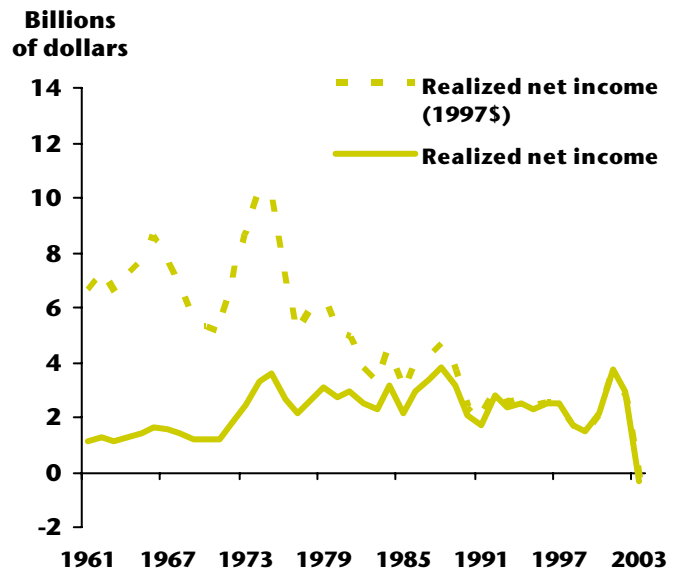
# After adjusting for inflation, net cash income trends downwards

- Although net cash income has increased in nominal dollars, in real terms (constant 1997\$) income in Canada has trended downwards. Net cash income in real terms peaked in 1975 at over \$12 billion and trended downwards to average \$6 billion over the past decade.
- The 1975 peak was due to the convergence of unique global factors, which resulted in record high commodity prices.

**Chart B1.4  
Net Cash Income in Canada  
1961–2003**



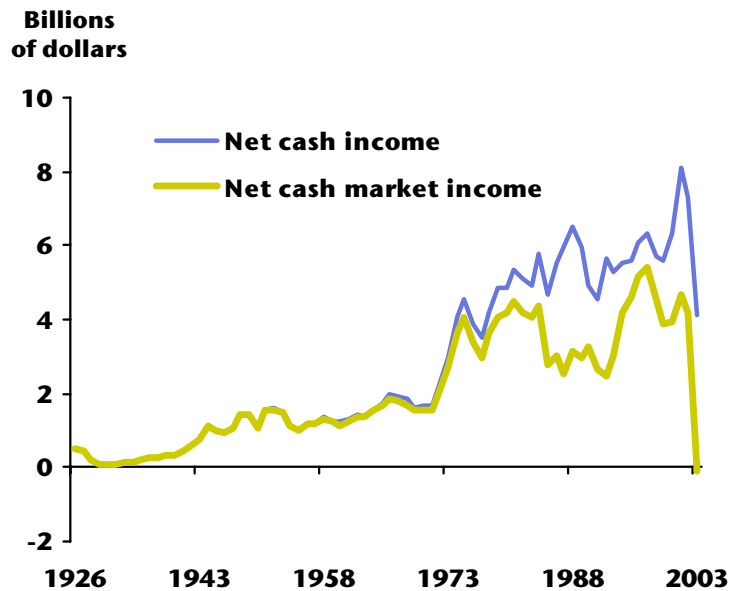
**Chart B1.5  
Realized Net Income in Canada  
1961–2003**



- Realized net income showed a similar trend in real terms.

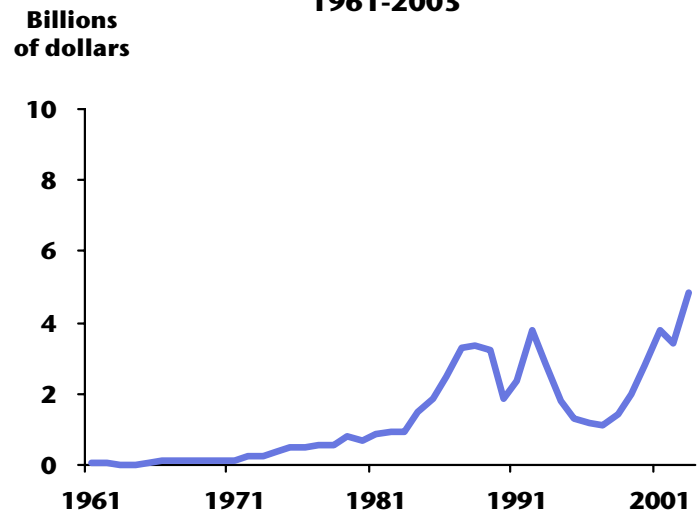
# Direct support programs have contributed significantly to net cash income since the mid 1970s

**Chart B1.6**  
**Net Cash Income and Net Cash Market Income**  
**in Canada**  
**1926-2003**



- Before the 1960s, direct payments by governments were not a major factor in farm income in Canada.
- In 2003, net cash market income was negative for the first time on record.

**Chart B1.7**  
**Direct Government Payments in Canada,**  
**1961-2003**

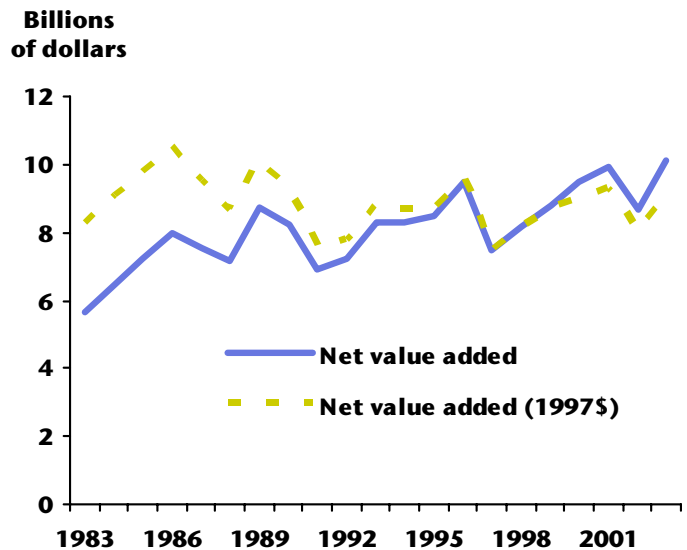


- Since that time, the role of direct payments by governments has increased, as shown by the difference between net cash income and net cash market income.
- Government payments were at record high levels in 2003.

# Canadian agriculture's net value added has varied between \$8 and \$10 billion in real dollars over the past twenty years

- Agriculture value added is the value of income generated from the production of agricultural goods and services.
- The 2003 value of agricultural production in Canada reached a record high of \$45.7 billion resulting in \$10.1 billion in net value added in nominal terms.
- Net value added in real terms has remained relatively stable since 1983.

**Chart B1.8**  
Agriculture Net Value Added in Canada, 1983-2003



- In 2003, 43% of the net value added remained with the owner/operator as wages and profits. The balance went to interest payments, land rent and non-family wages.

Net value added = total value of production less input expenses, business taxes and depreciation

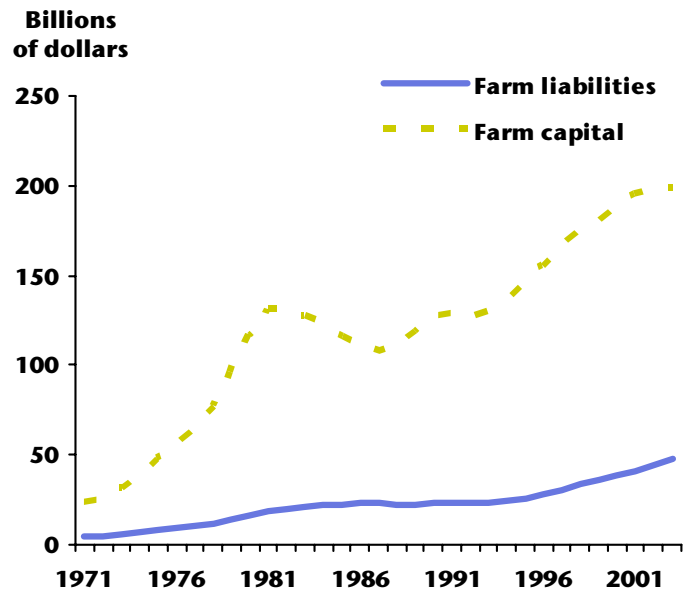
**Chart B1.9**  
Distribution of Net Value Added in Canada, 2003

	Percent
<b>Farm Operating Expenses</b>	
Cash and share rent to non-operators	12
Interest	23
Non-family wages	22
<b>Sub-total</b>	<b>57</b>
<b>Farm Business Returns</b>	
Family wages	16
Corporation profits	14
Unincorporated operator returns	13
<b>Sub-total</b>	<b>43</b>
<b>Total</b>	<b>100</b>



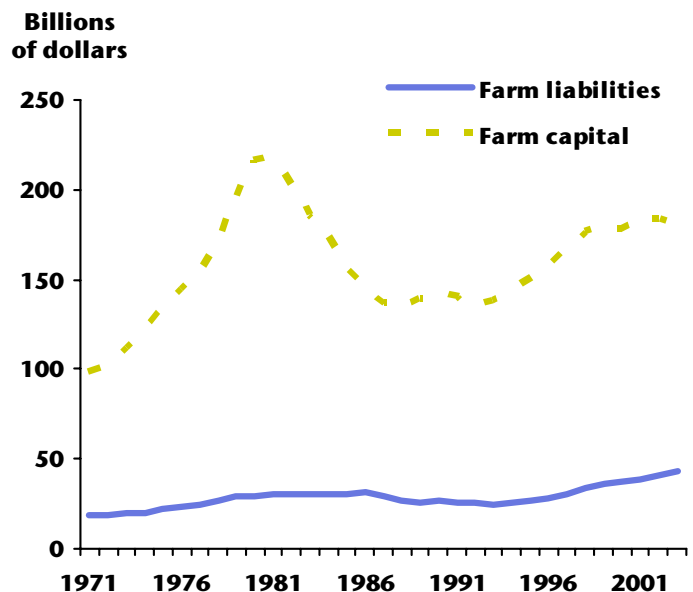
# The value of farm capital and farm liabilities steadily increased during the 1990s

**Chart B1.10**  
Farm Capital and Liabilities in Canada, 1971–2003 (Nominal\$)



- The value of farm capital in Canada includes livestock and poultry, land and buildings, machinery and equipment.
- Except for 1982 to 1987, the value of farm capital in Canada has trended upwards to peak at \$198 billion in 2003.
- Farm liabilities increased steadily to reach \$48 billion in 2003, 22% above the previous five-year average.

**Chart B1.11**  
Farm Capital and Liabilities in Canada, 1971–2003 (1997\$)

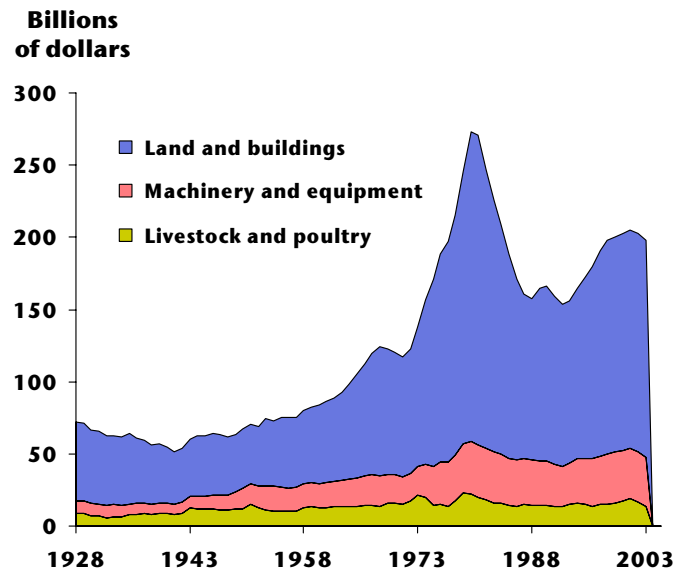


- The trends in capital and liabilities are similar after adjusting for inflation. However, farm capital values have remained relatively flat since 1988 in real terms, and 18% below the high of 1981. Farm liabilities have increased 41% since 1981 in real terms.

# Land prices are a determinate for the value of farm assets

- Between 1928 and 2003, the value of land and buildings as a percent of total asset values has fluctuated around a stable trend of 70%. An exception was the 1970s when land prices both increased and decreased rapidly peaking in 1980.
- During the same period, machinery and equipment constituted around 15% of total capital. The share of land and buildings was at its lowest in the 1950s, at which time the share of machinery and equipment peaked. The share of livestock and poultry has been declining since the 1950s.

**Chart B1.12**  
**Total Value of Farm Assets in Canada**  
**(2003 Dollars), 1928-2003**



# B2

## Farm Income, Assets and Liabilities – per Farm

- Charts B2.1 to B2.3 show Canada's net operating income and value-added per farm for 1992 to 2003.
- Chart B2.4 and B2.5 shows income, assets, liabilities and net worth per farm for selected years between 1993 and 2003.
- Chart B2.6 shows net worth per farm by farm type in 2003.
- Charts B2.7 and B2.8 show assets and liabilities per farm by farm type for 1997, 2001, and 2003.
- Chart B2.9 shows the number of farm bankruptcies in Canada.

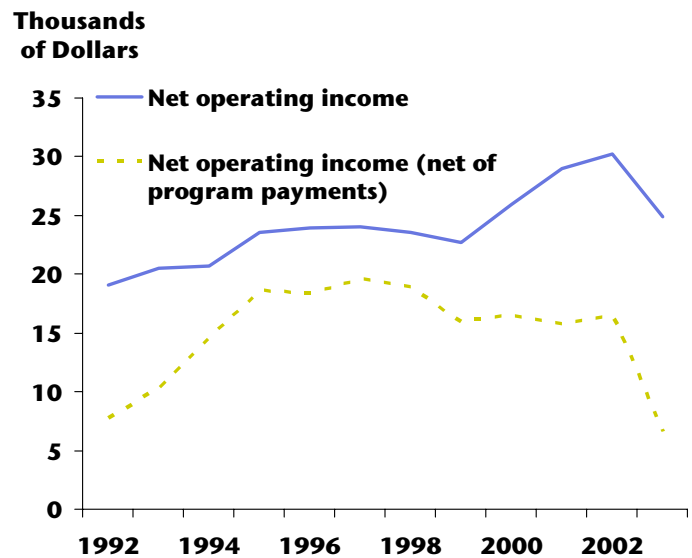
# Farm Level Financial Information

- Income per farm and other farm level financial information is based on two major data sources:
  - a representative sample of farm tax records provided to Statistics Canada by the Canada Revenue Agency; and
  - the Farm Financial Survey, which is a representative sample survey undertaken by Statistics Canada on behalf of Agriculture and Agri-food Canada.
- Net operating income is defined as operating revenues (including program payments) less operating expenses.
- Net operating income is used in this report for income per farm based on Taxfiler or Farm Financial Survey data to avoid confusion with net cash income, which is an aggregate income measure based on the national accounts data.

# Net operating income per farm trended upwards between 1992 and 2002, in part because of government support

- Net operating income per farm is based on Statistics Canada's taxfiler database. It is operating revenues less operating expenses as reported on the farm income statement for tax purposes.
- Net operating income averaged \$24,848 in 2003, a decline of 5% from the previous five-year average.
- Operating income was supported in 2003 by a 90% increase in program payments over the previous five-year average.

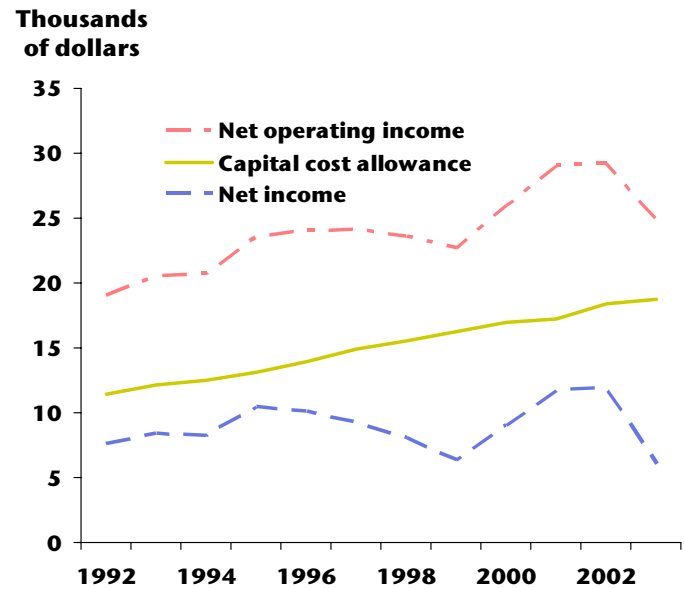
**Chart B2.1**  
**Net Operating Income per Farm in Canada, 1992-2003**



# Capital cost allowance expense per farm has increased steadily since 1992

**Chart B2.2**  
**Net Operating Income and Capital Cost Allowance in Canada**  
**1992-2003**

- Capital cost allowance (depreciation) claimed per farm was \$18,744 in 2003, an increase of 11% from the 1998 to 2002 average and a 64% increase from 1992.
- Net income averaged \$6,104 per farm in 2003, a decline of 35% from the previous five-year average and the lowest level in more than 10 years.

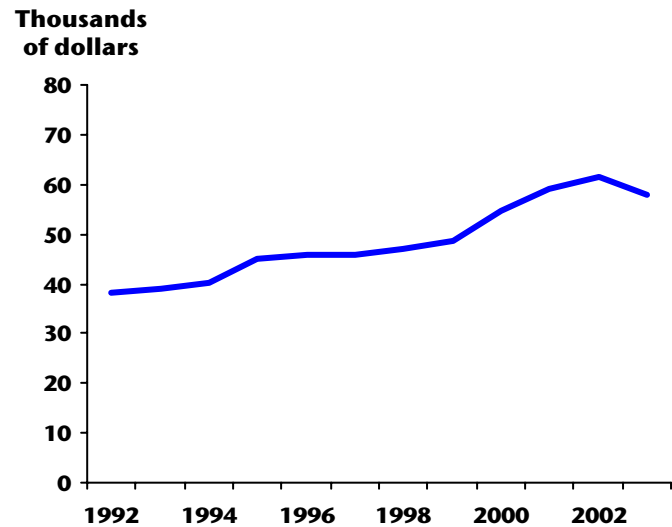


# Value added and net worth per farm have trended up since the early 1990s

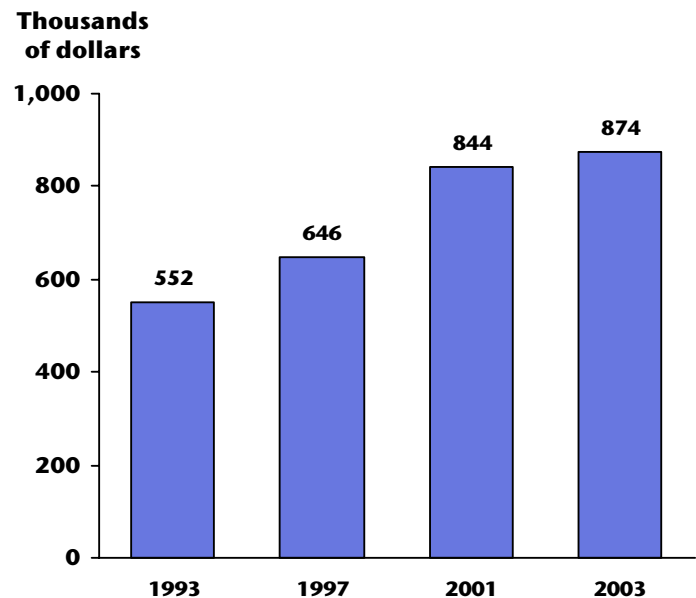
- Value added per farm shows an increasing trend between 1992 and 2003.
- Value added per farm averaged \$57,945 in 2003, an increase of 7% from the previous five-year average.

Value added = Net operating income plus salary, rent and interest costs

**Chart B2.3**  
Value Added per Farm in Canada  
1992-2003



**Chart B2.4**  
Net Worth per Farm in Canada  
1993-2003



- Net worth per farm has increased by \$322,896 over the 1993 to 2003 period.

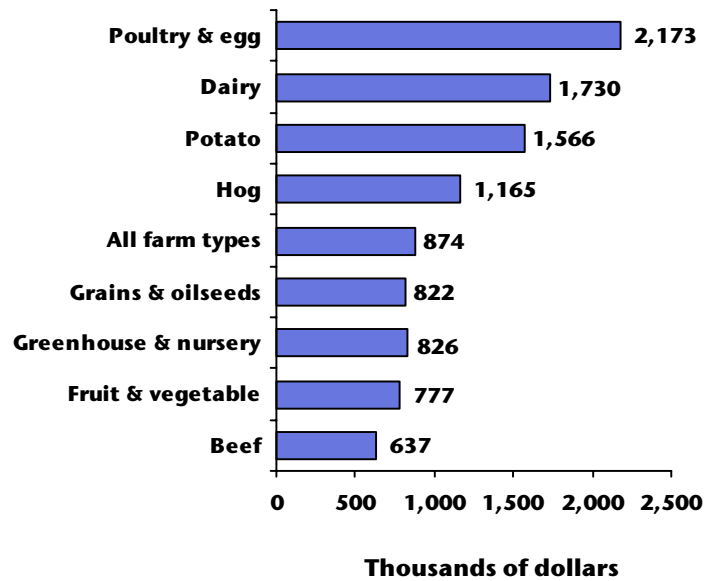
# Between 1993 and 2003, asset values per farm in Canada have increased 68% while liabilities more than doubled

**Chart B2.5  
Farm Financial Indicators in Canada,  
1993-2003**

	1993	1997	2001	2003
	Dollars			
Net market income	16,865	26,206	25,810	7,978
Program payments	13,866	5,419	14,821	17,334
Net operating income	30,731	31,625	40,631	25,312
Assets	654,726	777,249	1,038,914	1,098,000
Liabilities	103,191	130,822	195,043	223,569
Net worth	551,535	646,427	843,871	874,431

- Assets per farm increased by \$443,274 between 1993 and 2003, resulting in a net worth increase of \$322,896 per farm.

**Chart B2.6  
Net Worth per Farm by Farm Type in Canada, 2003**



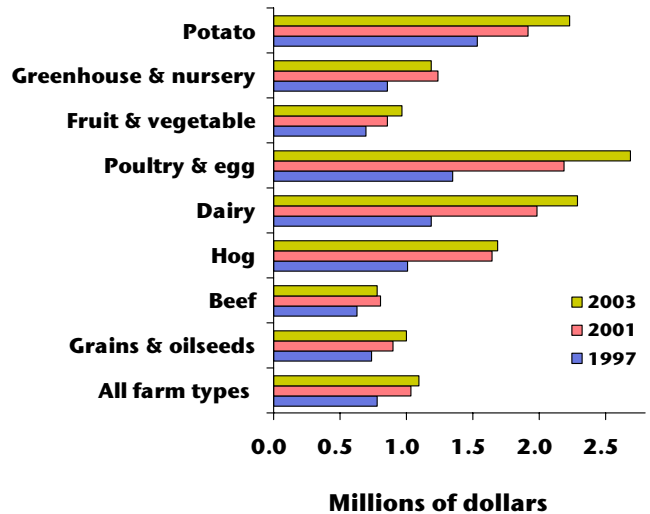
- Poultry and egg farms had the highest net worth in 2003 at nearly \$2.2 million.
- Dairy, potato and hog farms also had high net worth of \$1.7 million, \$1.6 million and \$1.2 million, respectively.
- Beef farms had the lowest net worth at \$637 thousand.



# Assets and liabilities per farm vary by farm type

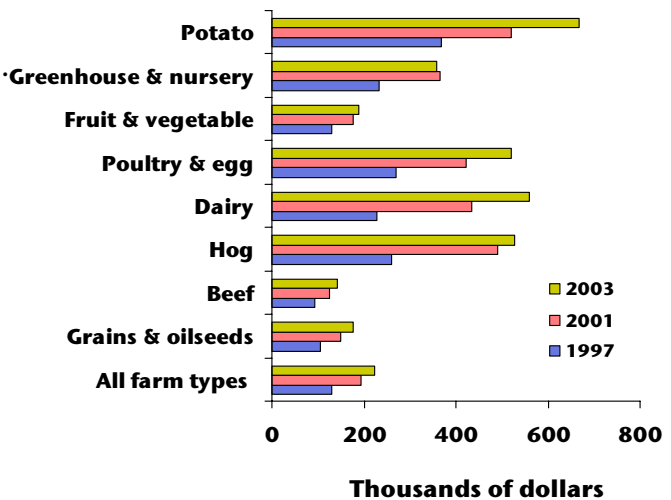
- Between 1997 and 2003, assets per farm increased for all farm types. Between 2001 and 2003, assets increased for all farm types except beef farms and greenhouse and nursery farms.
- In 2003, poultry, potato and dairy farms had the highest assets per farm with levels above \$2 million. Grains and oilseeds farms, beef farms, and fruit and vegetable farms had assets per farm below \$1 million.
- Between 1997 and 2003, poultry farms doubled assets per farm. Beef farms had the lowest increase in average farm assets with a 20% change during the same period.

**Chart B2.7**  
Assets per Farm by Farm Type in Canada, 1997, 2001 and 2003



- Between 1997 and 2003, average liabilities increased for all farm types. Between 2001 and 2003, liabilities increased for all farm types except greenhouse and nursery farms.
- In 2003, potato farms had the highest liabilities per farm at \$667 thousand. Beef farms had the lowest liabilities per farm at \$125 thousand.
- Between 1997 and 2003, dairy farms had the highest increase in liabilities from \$227 to \$558 thousand, a change of 150%.

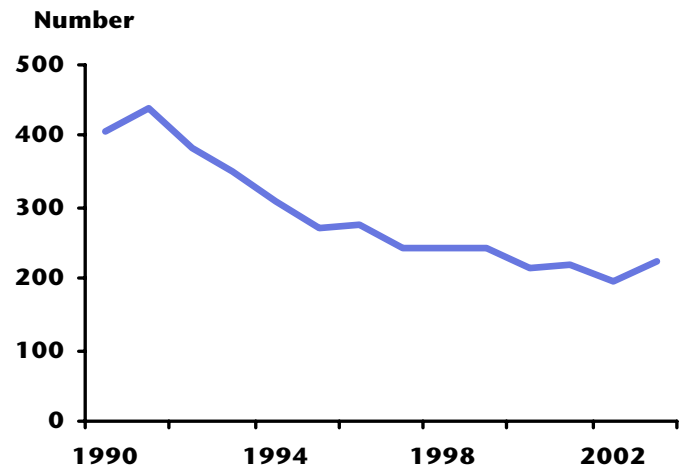
**Chart B2.8**  
Liabilities per Farm by Farm Type in Canada, 1997, 2001 and 2003



# Farm bankruptcies trend down in Canada

- In 1991, 441 farm bankruptcies were recorded in Canada. Bankruptcies trended down over the past decade to a low of 197 in 2002, but increased slightly in 2003 to 222.
- Between January and September 2004 there were 169 farm bankruptcies in Canada, similar to 2003 for this same period.
- It should be noted that farm bankruptcies reflect a small percentage of farms that are being sold or liquidated each year.

**Chart B2.9**  
**Farm Bankruptcies in Canada,**  
**1990-2003**



# B3

## Benchmarking the Canadian Agriculture Sector's Performance in International Markets

### Sector Level Benchmarks

- Charts B3.1 and B3.2 compare net cash income and total net income for Canada and the U.S. between 1971 and 2003. Charts B3.3 and B3.4 compare total net income between Canada, U.S., France and the UK over a 30-year period.
- Charts B3.5 to B3.8 compare financial ratios for the sector for Canada and the U.S. between 1980 and 2003.
- Chart B3.9 compares the Producer Support Estimate (PSE) of Canada to other OECD countries over time.

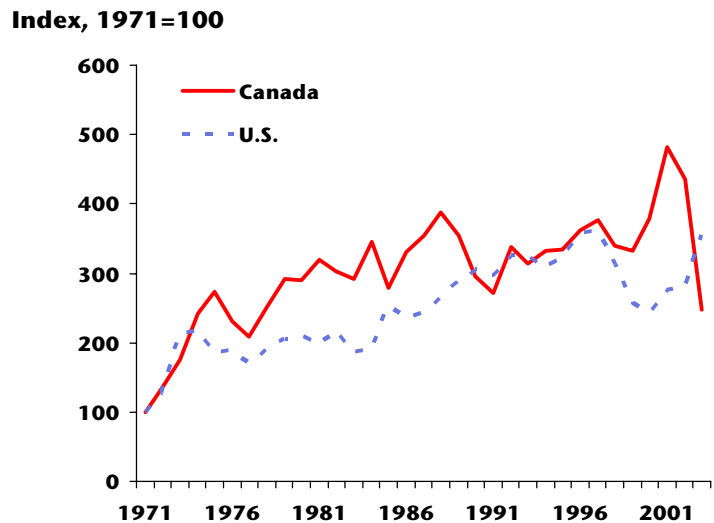
### Farm Level Benchmarks

- Charts B3.10 to B3.12 compare net operating income per farm by farm type for Canada, the U.S. and the EU-15. Charts B3.13 and B3.14 compare financial ratios per farm in Canada and the U.S. for 1997 to 2003.

# Canadian and U.S. trends for net cash income and total net income have followed different paths in recent years

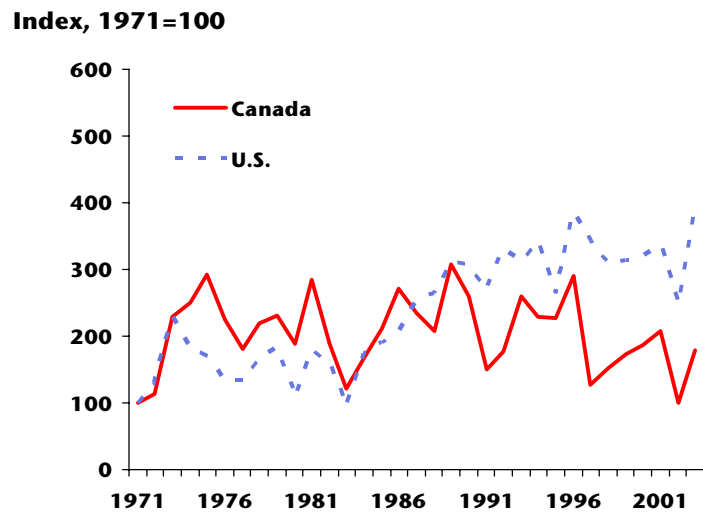
- Canadian and U.S. net cash incomes have similar long term trends but have moved in opposite directions since 1999.
- From 1971 to the mid 1990s, net cash incomes of Canadian and U.S. agriculture increased by slightly more than 3.5 times in nominal terms.
- Since the mid 1990s, Canadian net cash income increased until 2001 and then decreased, while U.S. net cash income experienced the opposite trend.

**Chart B3.1**  
Net Cash Income in Canada and the U.S., 1971-2003



- Canadian and U.S. total net income diverged in the 1990s.
- Total net income can also be used to compare the aggregate performance of the agriculture sector in Canada and the U.S.
- U.S. total net income has trended slightly upwards in the 1990s.

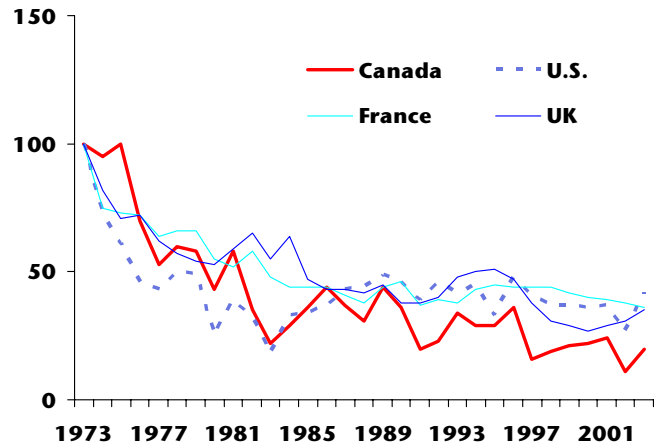
**Chart B3.2**  
Total Net Income in Canada and the U.S., 1971-2003



# Total net income in Canada has fallen faster in real terms than in major competitor countries

**Chart B3.3**  
Total Net Income in Canada, the U.S., France and the UK, 1973-2003

Index, 1973=100



- Total net income (1997\$) has declined substantially over the period 1973 to 2003 for all selected countries.
- However, Canada experienced a greater decline over this period: Canadian net income in real terms declined 80% while the U.S., UK, and France declined 58%, 64% and 65%, respectively.

**Chart B3.4**  
Percent Change in Total Net Income in Canada, U.S., France, and U.K., 1973-2003

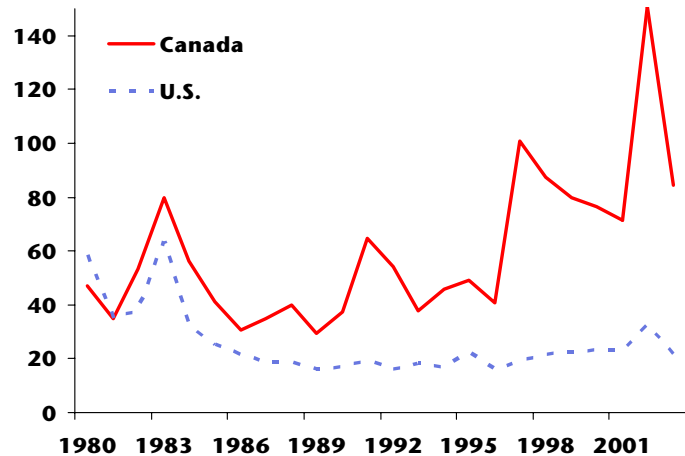
	1973 -1983	1983 - 1993	1993 - 2003
Canada	-78.6	49.2	-42.6
U.S.	-81.7	127.5	0
France	-51.9	-21.2	-4.9
UK	-45.2	-13.2	-27.2

- In Canada and the U.S. net incomes fell in the decades of 1973 to 1983 and 1993 to 2003, but recovered between 1983 and 1993. In France and the UK, net incomes fell in each of the three decades with the largest decline between 1973 and 1983.

# The capital income ratio shows how well capital is able to produce income

**Chart B3.5**  
**Capital over Total Net Income,**  
**Canada and the U.S.,**  
**1980-2003**

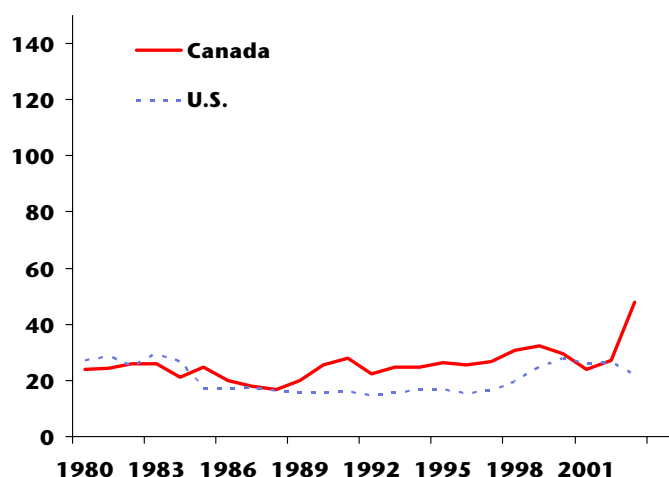
Capital over Income



- Farm capital income ratios diverge between Canada and the U.S. if calculated over total net income but are similar if calculated over net cash income.
- For Canada's agriculture sector, capital over total net income ratio more than doubled between 1990 and 2003. The beginning and ending three-year averages were 45 and 102, respectively. In contrast, the U.S. ratio declined by almost half from a 1980 to 1982 average of 44 to a 2001 to 2003 average of 26.
- Capital over net cash income is similar for the Canadian and the U.S. agriculture sector. The averages for 1980 to 1982 and 2001 to 2003 are 25 and 33 for Canada compared to 27 and 25 for the U.S.
- The rapid increase in depreciation in Canada is a factor in the divergence.

**Chart B3.6**  
**Capital over Net Cash Income,**  
**Canada and the U.S.,**  
**1980-2003**

Capital over Income

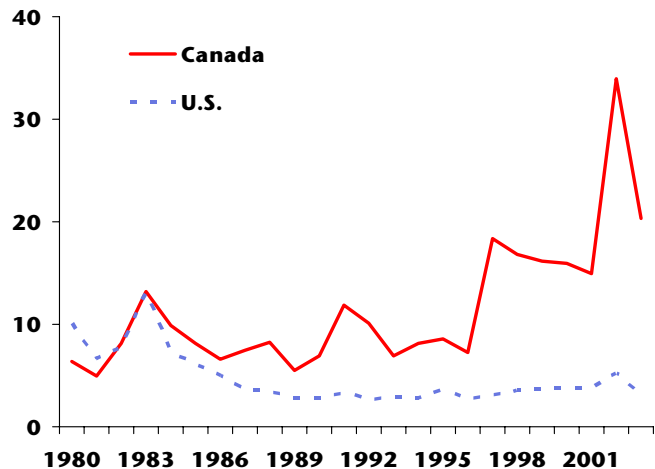


Capital is the value of livestock and poultry, machinery, and real estate. Total net income includes depreciation and change in inventory, while net cash income does not.

# A higher debt income ratio shows greater financial risk in Canada

**Chart B3.7**  
Farm Debt over Total Net Income,  
Canada and the U.S.,  
1980-2003

Debt over Income

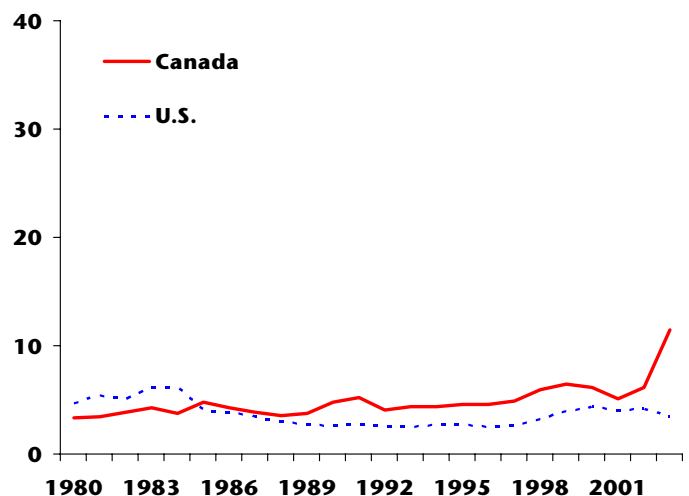


- Farm debt income ratios diverge between Canada and the U.S. in a similar fashion as capital income ratios.
- The debt net income ratio more than tripled in Canada from a 1980 to 1982 average of 6.5 to a 2001 to 2003 average of 23.1.
- During the same period, the U.S. ratio declined by half from 8.1 to 4.1, comparing three-year averages.
- The debt net cash income ratio doubled in Canada from 3.5 (1980 to 1982 average) to 7.6 (2001 to 2003 average).
- During the same period, the U.S. ratio declined by 25% from 5.1 to 3.9.
- The sharp changes in the Canadian ratios in 2002 and 2003 are related to the effects of drought and BSE on income.

Debt includes current and long-term debt. Total net income includes depreciation and change in inventory, while net cash income does not.

**Chart B3.8**  
Farm Debt over Net Cash Income,  
Canada and the U.S.,  
1980-2003

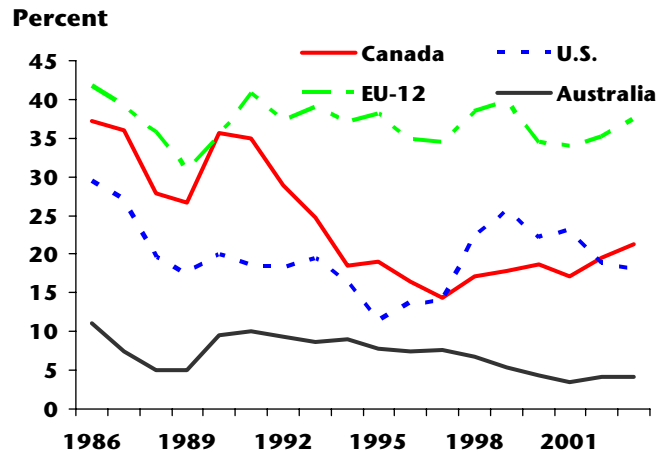
Debt over Income



# Canada provides an intermediate level of farm support similar to the U.S., as measured by the OECD producer support estimate

- Producer Support Estimate (PSE) is an indicator of the value of gross transfers to agricultural producers. The percentage PSE is the ratio of PSE over the value of total gross farm receipts including government support.
- Canadian support fell sharply between 1990 and 1997 as a share of the value of production, but has increased since and now stands at a record level in nominal dollars.
- In 2003, record high payments pushed Canada's percentage PSE above the U.S. percentage PSE for the first time since 1997.

**Chart B3.9**  
**Percentage PSE in Canada and**  
**other OECD countries,**  
**1986-2003**



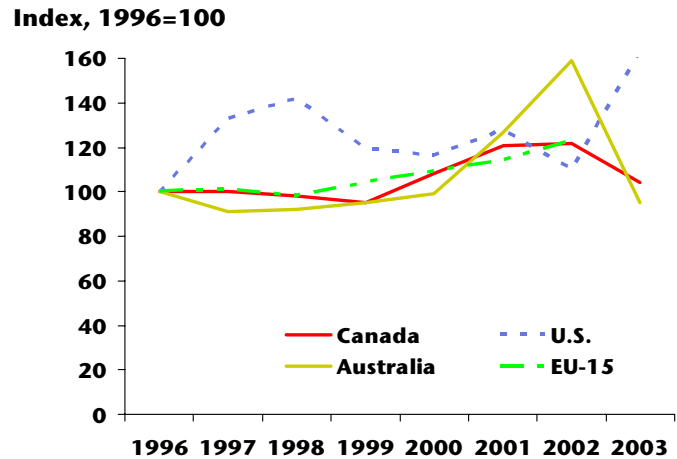


# Net operating income per farm in real terms varied more in the U.S. and Australia than in Canada or the EU-15 countries

**Chart B3.10**  
**Net Operating Income per Farm in Canada, the U.S., the EU-15, and Australia, 1996-2003**

- Between 1996 and 2003, average net operating income in Canada and the EU-15 countries followed a similar trend. In the U.S. and Australia, net operating income fluctuated counter-cyclically.

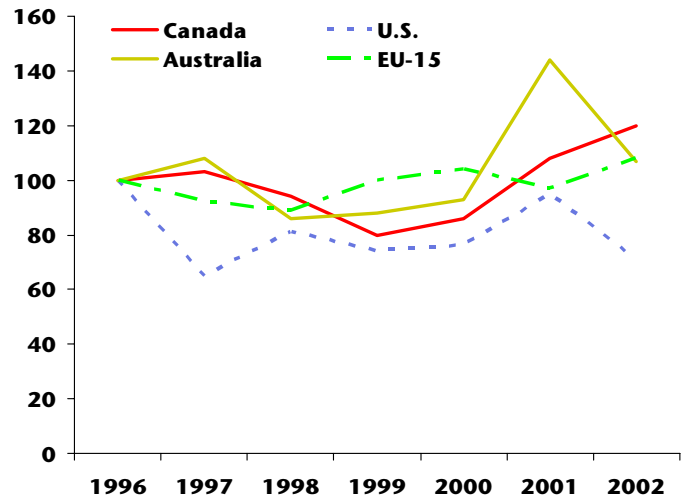
(Net operating income per farm for Canada has a very similar pattern to that of net cash income of the sector. U.S. net operating income per farm shows a different pattern with U.S. net cash income of the sector.)



# Trends in net operating income per farm vary by country for grains and oilseeds and dairy farms

**Chart B3.11**  
**Net Operating Income of**  
**Grains and Oilseeds Farms,**  
**1996-2002**

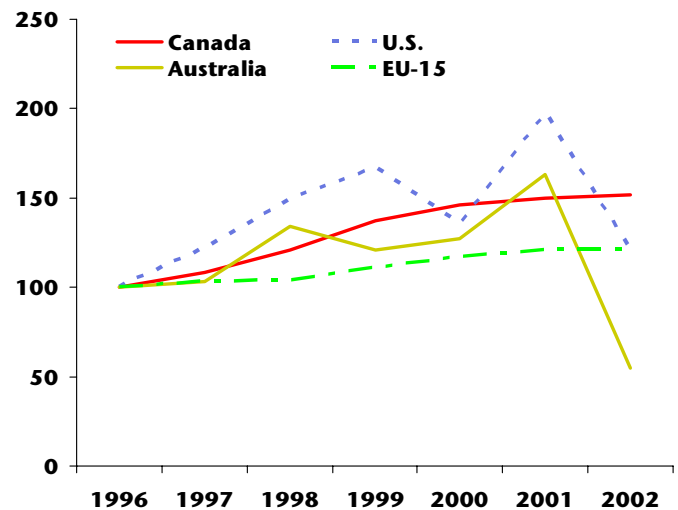
Index, 1996=100



- Average net operating income of Canadian cash crop farms compare well to other countries.

**Chart B3.12**  
**Net Operating Income of Dairy Farms, 1996-**  
**2002**

Index, 1996=100

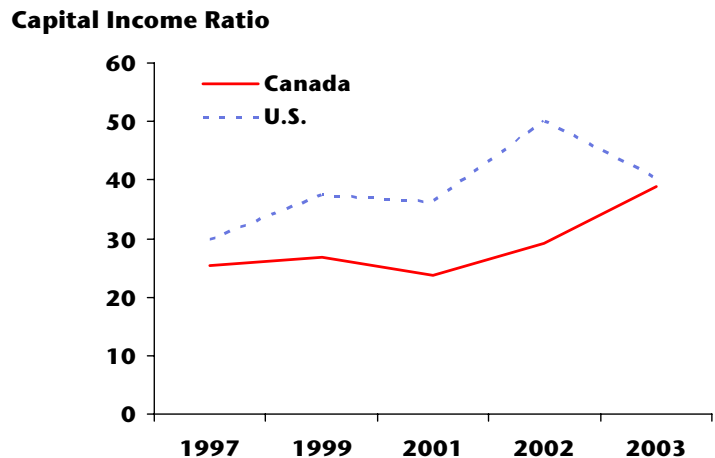


- Between 1996 and 2002, average net operating income of dairy farms rose more in Canada and the U.S. than in Australia and the EU-15.
- Net operating income was more varied for U.S. and Australian dairy farmers than for Canadian and European dairy farmers.

# The capital income ratio per farm is lower in Canada than the U.S., while the debt income ratio per farm is higher

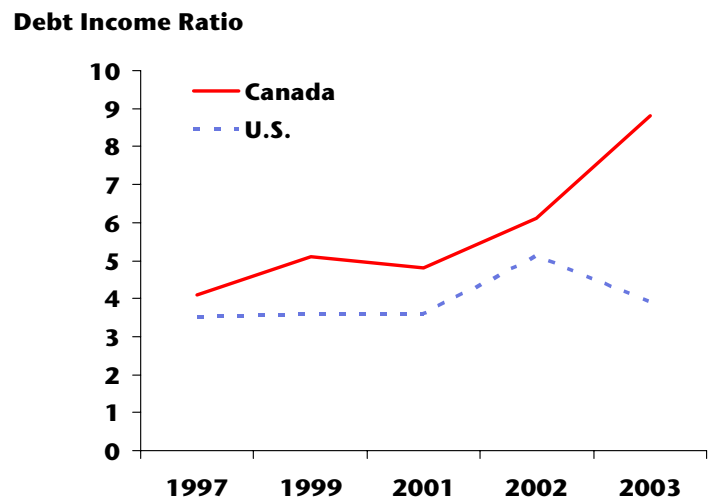
- The capital income ratio per farm for both Canadian and U.S. farms trended upwards between 1997 and 2003.
- The capital income ratio of the average Canadian farm increased from 25.4 to 39.0 between 1997 and 2003. During the same period, the capital income ratio of the average U.S. farm increased from 29.8 to 40.4.
- The U.S. capital income ratio per farm differs significantly from the aggregate income ratio reported in Chart B3.6.

**Chart B3.13**  
Capital Income Ratio in Canada and the U.S., 1997-2003



- The debt income ratio per farm more than doubled in Canada while it increased only slightly in the U.S. between 1997 and 2003.
- Debt includes current and long-term liabilities. The ratios use net operating income.
- The debt income ratio of the average Canadian farm increased from 4.1 to 8.8 between 1997 and 2003. During the same period, the debt income ratio of the average U.S. farm increased from 3.5 to 3.9.

**Chart B3.14**  
Debt Income Ratio in Canada and the U.S., 1997-2003





# **Section C**

## **Variability and Diversity of Canadian Farm Income**

- C1. Farm Income - by Farm Type
- C2. Farm Income - by Farm Typology
- C3. Farm Level Performance



# C1

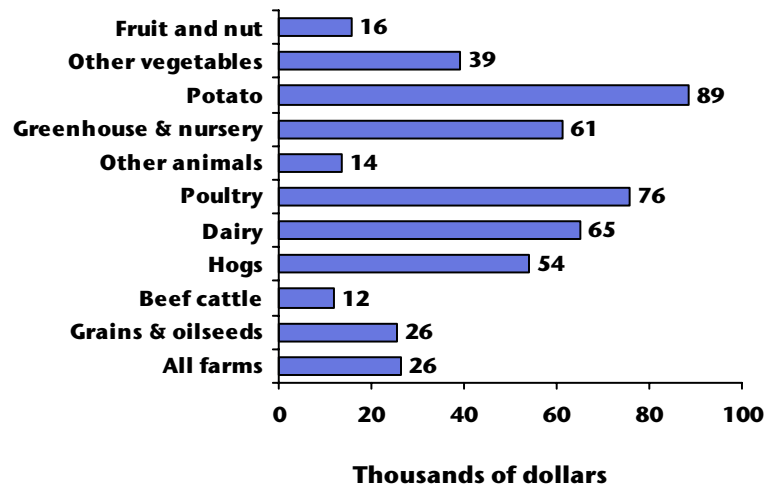
## Farm Income - by Farm Type

- Chart C1.1 shows the variation of net operating income across farm types.
- Charts C1.2 to C1.5 show the differences in the trend of net operating income across farm types between 1992 and 2003.

# Net operating income per farm varies widely by farm type

**Chart C1.1**  
**Net Operating Income per Farm**  
**by Farm Type in Canada**  
**Average 1998-2002**

- Potato, poultry and dairy farms generated the highest five-year average (1998 to 2002) net operating incomes.
- Beef cattle farms, other animal farms, and fruit and nut farms reported the lowest net operating incomes.
- The five-year average net operating income per farm in Canada was \$26,292.

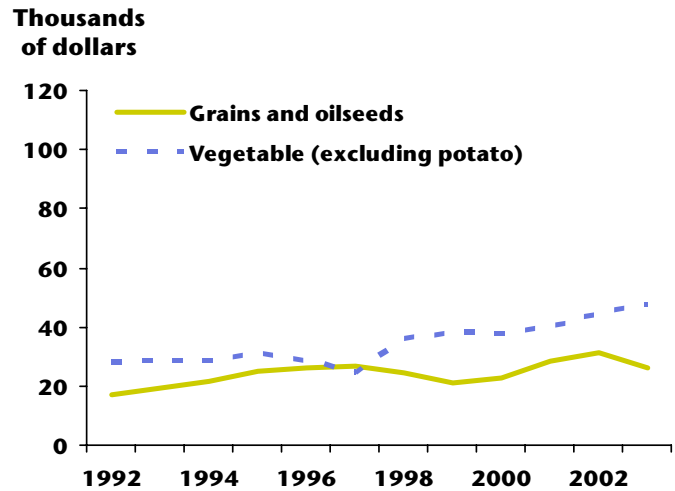




# Net operating income per farm varies by farm type for crop farms

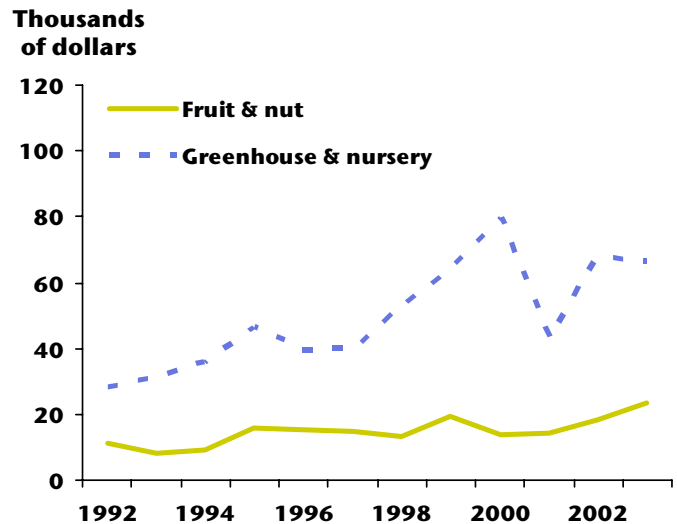
- Between 1992 and 2003, net operating income per farm in the grains and oilseeds sector and in the vegetable sector increased by 50% (1992 to 1994 average compared to 2001 to 2003 average).

**Chart C1.2**  
**Net Operating Income per Farm for Grains and Oilseeds and Vegetable Farms in Canada 1992-2003**



- During the 1990s, net operating income per farm fluctuated more in the greenhouse and nursery sector than the fruit sector.
- In both sectors net operating income almost doubled (1992 to 1994 average compared to 2001 to 2003 average).

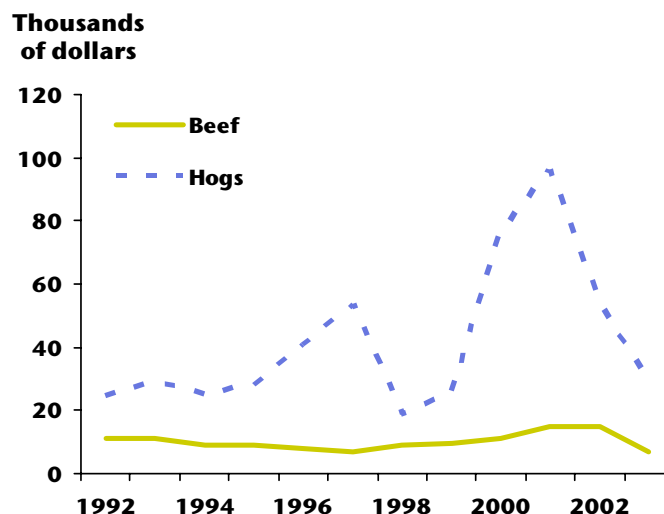
**Chart C1.3**  
**Net Operating Income per Farm for Fruit and Greenhouse & Nursery Farms in Canada 1992-2003**



## ... as well as for livestock farms

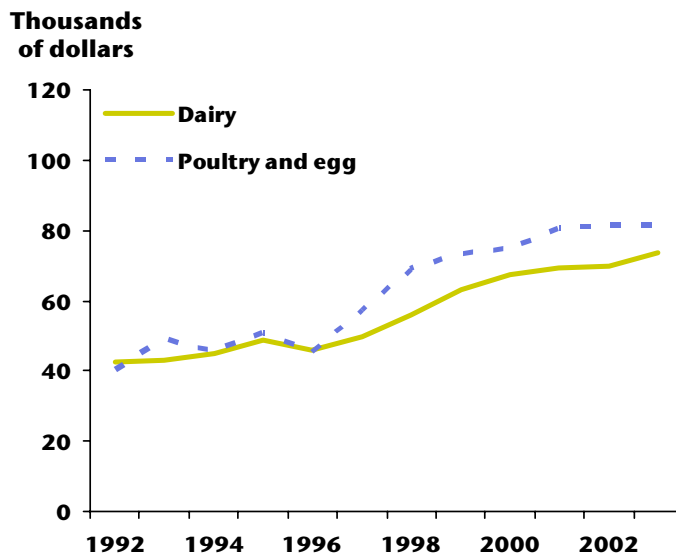
- Net operating income per hog farm has been extremely variable between 1992 and 2003.
- Net operating income per beef farm has been consistently lower than that of other farm types.

**Chart C1.4**  
**Net Operating Income per Farm for Beef and Hog Farms in Canada**  
**1992-2003**



**Chart C1.5**  
**Net Operating Income per Farm for Dairy and Poultry and Egg Farms in Canada**  
**1992-2003**

- Net operating income per farm increased by 63% and 80% for dairy farms and poultry and egg farms respectively (1992 to 1994 average compared to 2001 to 2003 average).



# C2

## Farm Income - by Farm Typology

- Chart C2.1 shows the definition of farm typology groups.
- Charts C2.2 to C2.5 show the distribution of farm typology groups and the variation of family income by farm typology group.
- Chart C2.6 shows the variation in assets, liabilities and net worth by farm typology groups.

# Background – Farm Typology

- The farm typology classification system was developed by Agriculture and Agri-Food Canada (AAFC) in 1998 to better understand the diversity of Canada’s farm sector. Farms are categorized into distinct groups using factors such as:
  - age of the operator
  - financial situation
  - size
- Farm typology is an important part of policy development, because the needs of farms and farm households vary systematically according to these characteristics.

**Chart C2.1**  
**Definition of Farm Typology**

---

## *Family Farms*

- |                           |  |
|---------------------------|--|
| Retirement                | ➤ Family farms where the oldest operator is 60 years or older and receiving a pension income, and where no children are involved in the day-to-day operation of the farm |
| Lifestyle                 | ➤ Small-size family farms (revenues of \$10,000 to \$49,999) with total family off-farm income of \$50,000 or more   |
| Low Income                | ➤ Small and medium-size family farms (total revenues of \$10,000 to \$99,999) with total family income less than \$35,000  |
| Small business-focus      | ➤ Family farms with total operating revenues of \$10,000 to \$49,999   |
| Medium business-focus     | ➤ Family farms with total operating revenues of \$50,000 to \$99,999   |
| Large business-focus      | ➤ Family farms with total operating revenues of \$100,000 to \$499,999   |
| Very large business focus | ➤ Family farms with total operating revenues of \$500,000 and over   |

## *Non-Family Farms*

- |                  |  |
|------------------|--|
| Non-family farms | ➤ Hutterite Colonies, communal operations and other non-family farms |
|------------------|--|
-

# The share of production and government support varies across typology groups

**Chart C2.2**  
**Distribution of Revenues and Direct Government Payments by Typology in Canada, 2003**

Typology	Number of farms	Revenues	Direct government payments
		Percent	
Retirement	18	7	10
Lifestyle	11	1	2
Low income	17	4	6
Small business-focus	4	1	1
Medium business-focus	7	2	4
Large business-focus	35	38	46
Very large business-focus	8	47	31
All farms	100	100	100

**Chart C2.3**  
**Distribution of Family Farms by Typology and Farm Type in Canada, 2003**

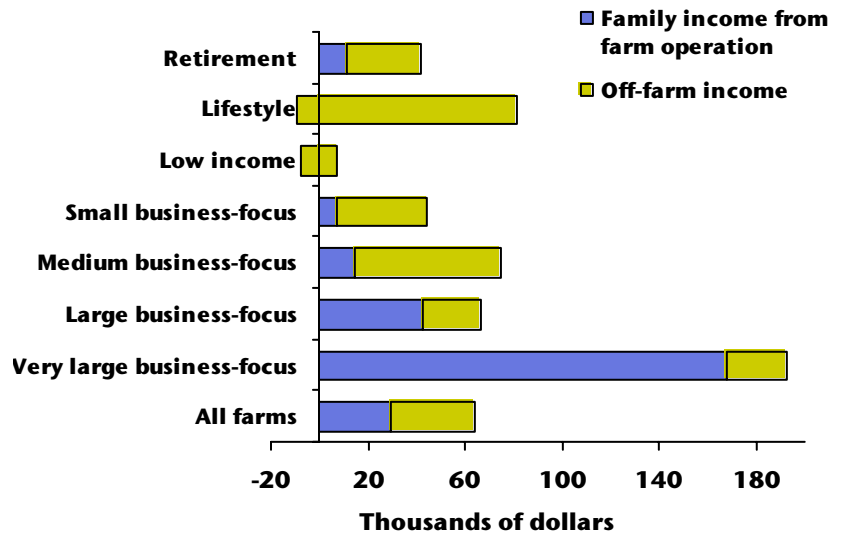
Typology	Grains & oilseeds	Beef cattle	Dairy & poultry	Hog	Horticulture	Other types
						Percent
Retirement	21	22	x	6	17	19
Lifestyle	9	16	x	2	12	18
Low income	12	26	4	12	13	19
Small business-focus	5	4	x	1	5	6
Medium business-focus	9	8	x	3	9	7
Large business-focus	38	21	72	47	28	24
Very large business-focus	6	3	19	29	16	7
All farms	100	100	100	100	100	100

*x : sample too small*

# The contribution of income from farm operations to total family income varies greatly across farm typology groups

- Family income from farm operations equals the farm family's share of net operating income plus farm wages paid to family members. (Some farms have a large number of family members involved in the farm operation.)
- Average family income from farm operations on large and very large business-focussed farms is \$35,000 and \$165,000 respectively.
- The average of lifestyle and low income farms had negative income from farm operations. As a result, off-farm income accounted for total family income and, in addition, covered the losses from farm operations.

**Chart C2.4**  
Average Total Family Income by Farm Typology in Canada, 2003



**Chart C2.5**  
Farm Family Income by Farm Typology in Canada, 2003

- In 2003, on average 53% of farm family income came from off-farm sources.
- Large and very large business-focussed farms had the smallest average contribution of off-farm sources to family income, with 36% and 13%, respectively.
- For the other typology groups, the average share of off-farm income to total family income was 73% or more.

Typology	Family income from farm operation	Off-farm income	Total family income	Off-farm income as % of total family income
	Dollars per farm			%
Retirement	11,516	30,629	42,145	73
Lifestyle	(8,884)	90,359	81,475	111
Low income	(7,647)	14,435	6,788	213
Small business- focus	6,952	36,950	43,902	84
Medium business-focus	14,626	59,906	74,532	80
Large business- focus	42,792	23,954	66,746	36
Very large business-focus	167,507	24,817	192,324	13
<b>All farms</b>	<b>29,833</b>	<b>34,241</b>	<b>64,074</b>	<b>53</b>

# The structure of assets and liabilities varies by farm typology

- The average very large business-focussed farm held assets of more than 3 times the average of all farms, and liabilities of almost 5 times the average of all farms.
- At the other end of the spectrum, the assets of retirement and lifestyle farms were 2/3 of those of the average Canadian farm and liabilities were 1/5 of the average farm.
- As a result, the debt to asset ratio across typology groups ranged from a high of 29% for very large business-focussed farms to 7% for retirement farms.

**Chart C2.6**  
**Farm Assets, Liabilities, Net Worth, and Debt Asset Ratio by Farm Typology in Canada, 2003**

	Assets	Liabilities	Net worth	Debt asset ratio
<b>Typology</b>	Thousands of dollars per farm			
Retirement	667	45	621	7
Lifestyle	450	75	375	17
Low income	500	77	423	15
Small business-focus	362	47	314	13
Medium business-focus	612	100	512	16
Large business-focus	1,324	276	1,048	21
Very large business-focus	3,579	1,032	2,548	29
<b>All farms</b>	1,067	219	848	21





# C3

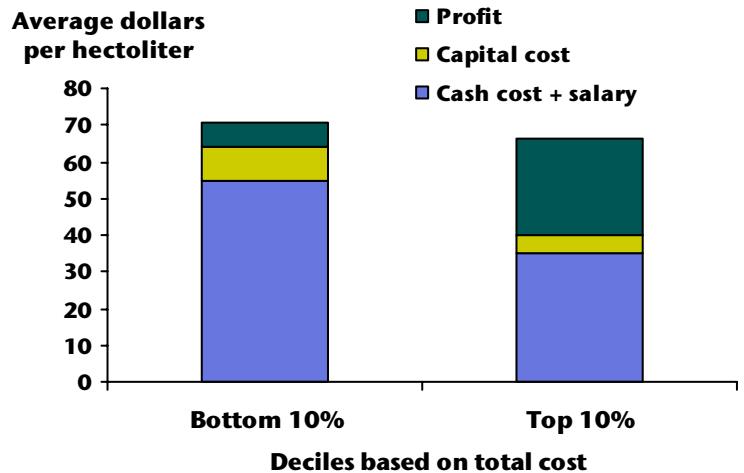
## Farm Level Performance

- All charts in this section show that farm performance varies not only across the range of farm characteristics but also among farms of the same farm type and farm size group. It is illustrated for Quebec dairy farms (Chart C3.1), small Alberta cattle farms (Charts 3.2 to 3.4), and medium-size Saskatchewan grains and oilseeds farms (Charts 3.5 to 3.7).

# Dairy farms in Quebec with the lowest average cost of production are four times more profitable than the farms with the highest average cost of production

- According to data from Quebec farm management clubs, a relatively small per hectolitre difference in cost of production results in a large difference in profitability.
- For the 10% of Quebec dairy farms with the lowest cost of production, the average cost was \$35.15 per hectolitre. This compares to \$54.66 per hectolitre average cost for the 10% of Quebec dairy farms with the highest cost of production.
- The lowest cost Quebec dairy farms generated average profits of \$26.26 per hectolitre. For the highest cost producers, average profits were \$6.36 per hectolitre.
- The main expenses that contributed to the cost of production difference were feed, interest, depreciation, salaries and general expenses.

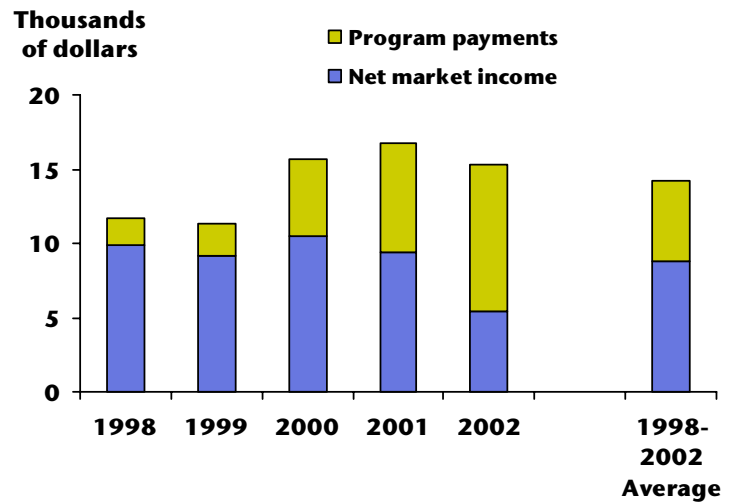
**Chart C3.1**  
**Cost of Production of Quebec Dairy Farms, 2003**



# Individual farm performance varies a lot for cattle farms in the same size, class and region ...

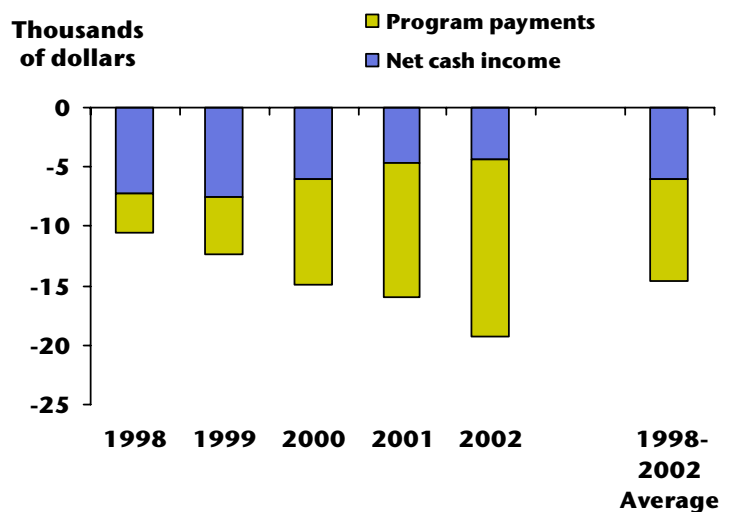
- The top 20% is defined as the group of farms with the highest average net cash income over the period of 1998 to 2002.
- The top 20% of small Alberta cattle farms were consistently profitable even as market conditions varied substantially over this period.

**Chart C3.2**  
**Net Cash Income of Alberta Cattle Farms**  
**with Revenues of less than \$100,000 –**  
**Top 20% of Farms**  
**1998-2002**



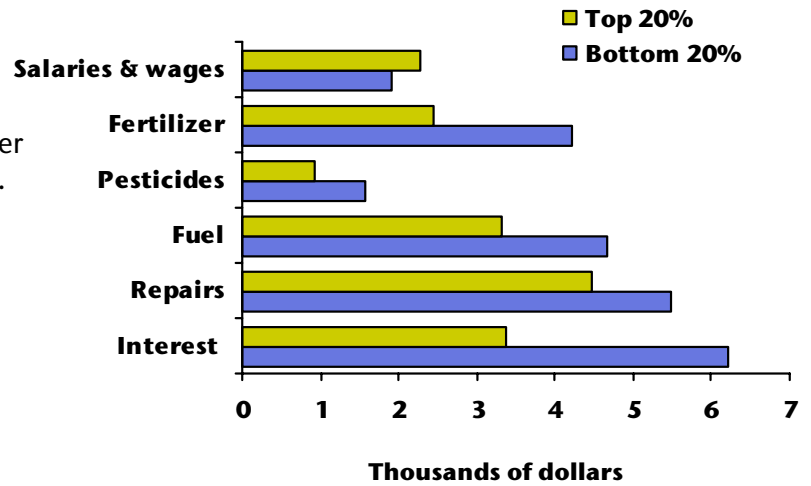
- The bottom 20% is defined as the group of farms with the lowest average net cash income over the period of 1998 to 2002.
- The bottom 20% of small Alberta cattle farms were consistently unprofitable even with larger program payments than the top 20%.
- Net market income is indicated by the bottom line of the bars. Program payments reduce income losses, but not enough to create positive net cash income.

**Chart C3.3**  
**Net Cash Income of Alberta Cattle Farms**  
**with Revenues of less than \$100,000 –**  
**Bottom 20% of Farms**  
**1998-2002**



# ... and cost control is a major driver of the difference

**Chart C3.4**  
**Selected Average Expenses of Alberta Cattle**  
**Farms with Revenues of less than \$100,000,**  
**1998-2002 Average**

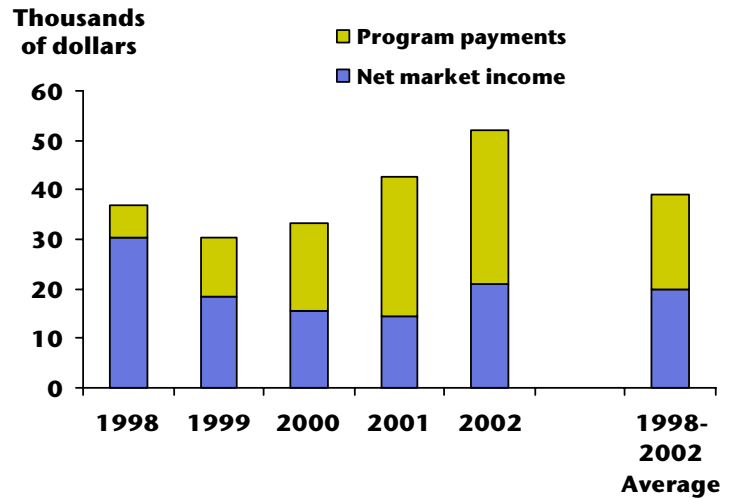


- The bottom 20% of farms have greater expenses for all inputs except labour.

# Individual net cash income per farm varies also among medium-size Saskatchewan grains and oilseeds farms ...

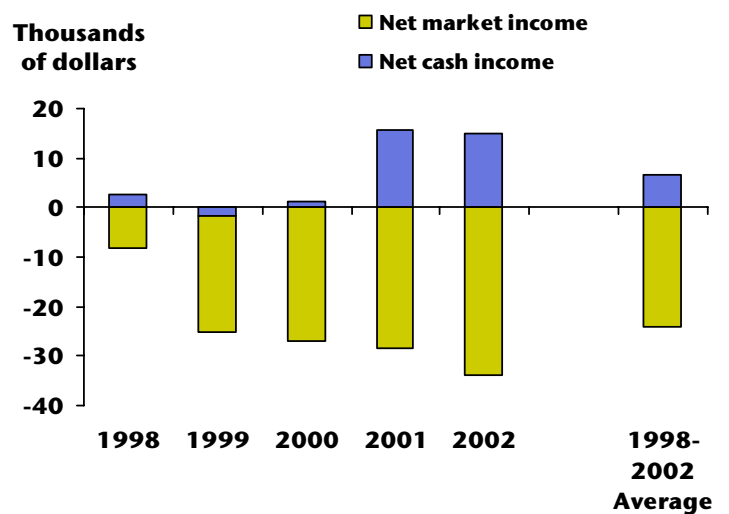
- The top 20% is defined as the group of farms with the highest average net cash income over the period of 1998 to 2002.
- The top 20% of medium-size Saskatchewan farms had positive net market income even as market conditions varied considerably over this period.

**Chart C3.5**  
**Net Cash Income of Saskatchewan Grains and Oilseeds Farms with Revenues of \$100,000 to \$250,000 - Top 20% of Farms, 1998-2002**



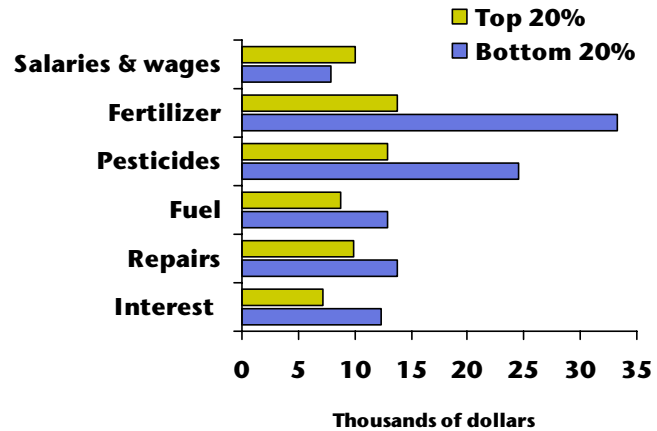
- The bottom 20% is defined as the group of farms with the lowest average net cash income over the period of 1998 to 2002.
- The bottom 20% of farms consistently had significant negative market income. Program payments created positive net income in all years except 1999 with larger program payments than the top 20%. (Net market income is indicated by the bottom line of the bars in chart C3.6.)

**Chart C3.6**  
**Net Cash Income of Saskatchewan Grains and Oilseeds Farms with Revenues of \$100,000 to \$250,000 - Bottom 20% of Farms, 1998-2002**



## ... and the variation within that group of farms is correlated with differences in costs

**Chart C3.7**  
**Selected Average Expenses of Saskatchewan**  
**Grains and Oilseeds Farms with Revenues**  
**of \$100,000 - \$250,000,**  
**1998-2002 Average**



- Fertilizer and pesticide costs were significantly higher for the bottom 20% of farms.

# **Section D**

## **Farm Family Finances**

- D1. Farm and Off-Farm Income of Farm Families
- D2. Farm Family Well-Being





# D1

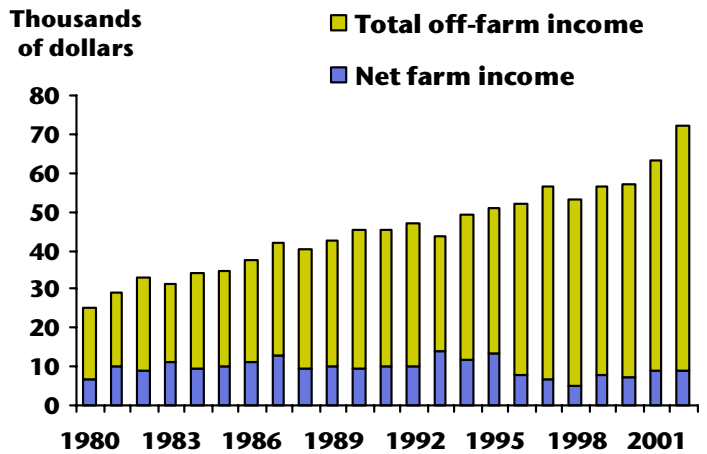
## Farm and Off-Farm Income of Farm Families

- Charts D1.1 and D1.2 show that off-farm income has been accounting for an increasing share of total family income of farm families since 1980 and how the share of income earned from off-farm sources varies by farm type.
- Chart D1.3 provides an international comparison of the amount of off-farm work of farm families.

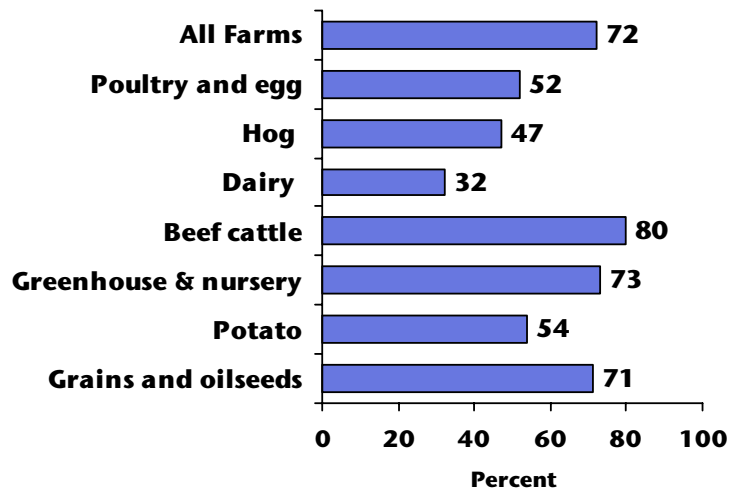
# The income of farm families has trended upwards since 1980 as a result of increasing off-farm income

- Off-farm income has increased from \$18,136 in 1980 to \$63,160 in 2002. Over this period, net farm income has remained relatively unchanged.
- The share of off-farm income as a percent of total income increased from 72% in 1980 to 87% in 2002.

**Chart D1.1**  
Income of Farm Families by Source in Canada, 1980-2002



**Chart D1.2**  
Off-farm Income as Percentage of Total Family Income by Farm Type in Canada, 2001



- Off-farm income is the least important for farm families operating dairy farms and the most important for those operating beef cattle farms.

# Canadian farm operators report more Off-Farm work than U.K. and French farm operators, but less than U.S. farm operators

**Chart D1.3**  
**Distribution of Farmers According to Their Participation in Off-Farm Work by Country**

Country	Participation in off-farm work		
	None	Minor	Major
Canada (2000)	55	9	36
U.S. (2001)	45	16	39
UK (2000)	63	12	25
Germany (2000)	54	6	40
France (2000)	75	6	19

- In Canada, 45% of farm operators were engaged in some off-farm work in 2000. In the U.S., 55% of principal farm operators (of all farms) had some off-farm work. Among selected EU countries, the share of sole holder-managers with off-farm work ranged from 25% in France to 46% in Germany.

**Note:** Definitions vary slightly by country. The operator sample is all operators, principal operator of all farms, and sole holder-manager for Canada, the U.S., and the EU countries respectively. Minor participation is less than 20 hours per week in Canada, less than 200 days per year in the U.S. and “Subsidiary Other Gainful Activity” versus “Major Other Gainful Activity” for the EU countries.



# D2

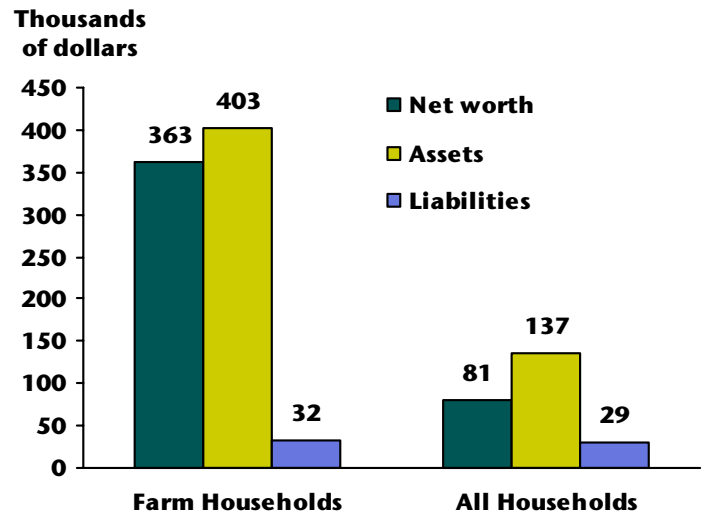
## Farm Family Well-Being

- Chart D2.1 compares the median net worth of farm households with that of all households while Chart D2.2 compares the after-tax income of farm families with that of rural and urban non-farm families.
- Charts D2.3 and 2.4 compare the incidence of low income for farm families to that of rural and urban families.
- Chart D2.5 shows how farm operators rate their standard of living compared to families living in nearby urban centers.

# Net worth of Canadian farm families exceeds that of all Canadian households but the income of farm families is lower than that of urban families

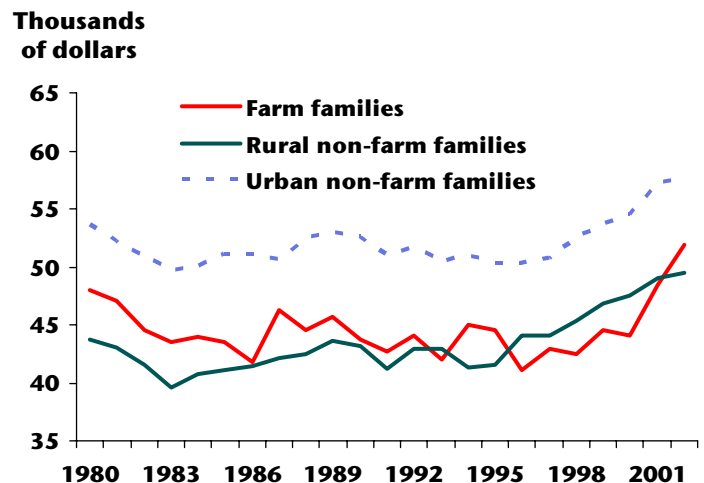
- The net worth of farm families is significantly higher than the net worth of all Canadian households. Employer-sponsored registered pension plans are not included in household assets.

**Chart D2.1**  
Median Net Worth of Households by Type of Household in Canada, 1999



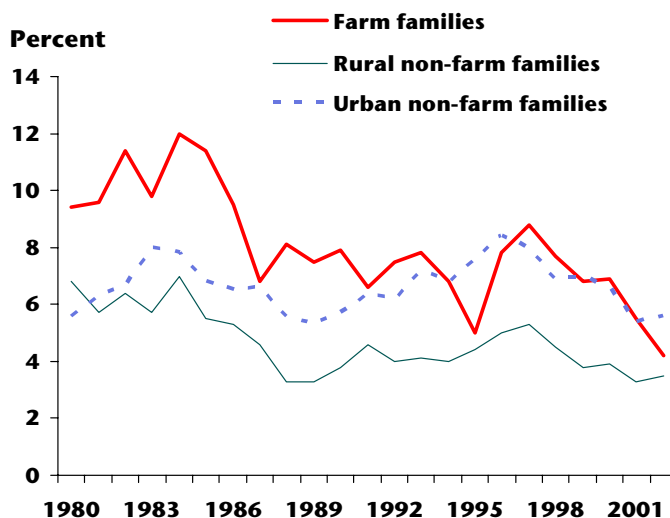
- Between 1980 and 1995 the income of farm families averaged 5% more than rural families and 16% less than urban families.
- During the economic recovery period beginning in 1996, farm family income was on average 4% less than rural families and almost 20% less than urban families.
- In 2002, farm families reported income 4% higher than rural families and 10% lower than urban families.

**Chart D2.2**  
Median After-Tax Income by Type of Family in Canada, 1980-2002 (2002 Dollars)



# The incidence of Low Income for farm families has declined from a peak of approximately 11% in the mid 1980s to just over 4% in 2002

**Chart D2.3**  
**Percentage of Families with Income Below the LICO (After-Tax) in Canada 1980-2002**



- Statistics Canada has established Low Income Cut-offs (LICO) which are used to distinguish 'low income' family units from 'other' family units. A family unit is considered 'low income' when its income is below the cut-off for its family size and its community.
- Since 1991 the low income rate for farm families has been similar to that of urban families. The low income rate for urban families has held steady between 5% and 7% since 1980.
- The low income rate for rural families has also been on a downward trend beginning at close to 6% in 1980 and dropping to between 3% and 4% beginning in the 1990s.

**Chart D2.4**  
**Low income Cut-Offs (After-Tax) in Canada, by Population and Family Size, 2002**

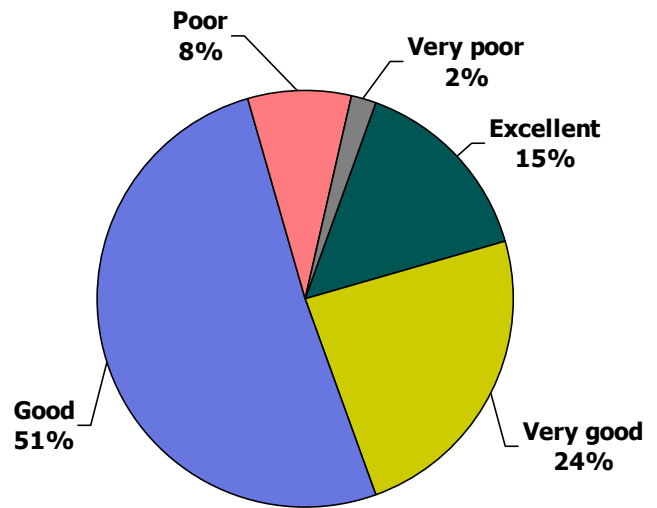
- LICOs are approximately 50% higher in large urban areas compared to rural areas.
- A family of four people living in a rural area in 2002 would have needed at least \$20,000 to cover basic needs (food, clothing and shelter) in large urban areas the cost of living is higher: families living in these areas would have required \$30,500 in 2002.

	Rural areas	Urban areas 30,000 to 99,999	Urban areas, 500,000 and over
	<i>Dollars</i>		
1 person	10,429	13,192	15,907
2 persons	12,726	16,097	19,410
3 persons	16,096	20,360	24,550
4 persons	20,047	25,358	30,576
5 persons	22,407	28,341	34,174

# Despite the challenges of agriculture, farm families rate their standard of living as high

- 90% of farm families in Canada believe their standard of living is as good or better than that of people living in nearby urban centers.
- In the spring of 2003, 1/2 of farm operators rated their standard of living as good. Another 24% rated their standard of living as very good, 15% as excellent. 10% rated their standard of living as poor or very poor.
- The response to this question did not vary significantly by farm type or typology.
- Note that the data was collected before the discovery of BSE in Canada in May 2003.

**Chart D2.5**  
**Standard of Living Rating of Canadian Farm Operators, Spring 2003**



**Question: How would you rate the standard of living of your household compared to people living in nearby urban centers?**



## Sources/Notes for Charts

<b>Chart</b>	<b>Sources and Notes</b>
A1.1 - A1.7	Statistics Canada, Census of Agriculture.
A1.8	Statistics Canada, Whole Farm Data Base.
A2.1	Cattle carcass weights: Canadian Beef Grading Agency; Pork production per sow: Statistics Canada. Note: Data for pork began in 1987.
A2.2	Statistics Canada, Agriculture Division.
A2.3	AAFC-AAC.
A2.4	Statistics Canada, Productivity Performance of Canadian Industries. Note: Agriculture consists of the crop and animal production sectors.
A2.5	Statistics Canada, Historical Labour Force Statistics 1971, 1979 and CANSIM Table 282-000811,13 - Labour Force Survey Estimates (LFS).
A2.6	Statistics Canada, Labour Force Survey. Note: Agriculture industry is defined according to North American Industry Classification System (NAICS) (sub sectors 111-112 and industry groups 1151-1152), "Employees, private sector" are defined as those who work as employees of a private firm or business.
A2.7 – A2.8	Statistics Canada, Historical Labour Force Statistics 1971, 1979; CANSIM table 282-000811,13; US: USDA Agricultural Statistics 1950, 1954, 1970, 1984. EU: European Commission, Eurostat, Economic Accounts for Agriculture.
A3.1 – A3.4	Statistics Canada, Whole Farm Database.
A3.5	Statistics Canada, Census of Agriculture, special tabulation.
A4.1 – A4.3	Statistics Canada, CANSIM tables 001-0011, 003-00018, and special tabulation, Agriculture Division.
A4.4 – A4.5	Statistics Canada, Agriculture Division.
A4.6 – A4.7	AgLink.
A4.8 – A4.9	Statistics Canada, CANSIM tables 380-0056, 002-0001, 176-0064; USDA/ERS, Bureau of Economic Analysis.
B1.2 - B1.12	Statistics Canada, CANSIM tables 002-0001, 002-0004, 002-0007, 002-0009, 326-0002.
B2.1 - B2.8	Statistics Canada, Whole Farm Database and 2004 Farm Financial Survey.
B2.9	Office of the Superintendent of Bankruptcy.

## Sources/Notes for Charts

<b>Chart</b>	<b>Sources and Notes</b>
B3.1 - B3.4	Statistics Canada, CANSIM tables 002-0001,002-0009,002-0005; ERS/USDA, U.S. and State farm income data; EUROSTAT, Economic Accounts for Agriculture - long series.
B3.5 - B3.8	Statistics Canada, CANSIM tables 002-0007,002-0008,002-0009; USDA/ERS, U.S. and State farm income data.
B3.9	OECD, Producer and Consumer Support Estimates OECD Database 1986-2002.
B3.10 - B3.12	Statistics Canada, Taxfiler Data; ERS/USDA, ARMS; E.U. Commission, FADN Public Database; Australian Bureau of Agricultural and Resource Economics (ABARE), Farm Survey Data. Note: 2003 taxfiler data are preliminary.
B3.13, B3.14	Statistics Canada, Farm Financial Survey; ERS/USDA, ARMS.
C1.1 - C1.5	Statistics Canada, Whole Farm Database. Note: 2003 data are preliminary.
C2.2 - C2.6	Statistics Canada, 2004 Farm Financial Survey.
C3.1	Agritel Database 2003. Note: The lowest cost decile averaged 53 cows and 83.77 hectolitres/cow; the highest cost decile averaged 61 cows and 72.9 hectolitres/cow.
C3.2 - C3.7	NISA Database. Note: The NISA database denotes net cash income after depreciation.
D1.1	Statistics Canada, Survey of Consumer Finances (1980-1995) and Survey of Labour and Income Dynamics (1996-2002). Note: A farm family is an economic family with the major income earner reporting non-zero net farm income; 1996-2002 values exclude unattached individuals and lone-parent families.
D1.2	Statistics Canada, Whole Farm Database. Note: Unincorporated sector only.
D1.3	Statistics Canada, Census of Agriculture; USDA, 2002 Census of Agriculture; Eurostat, "Other gainful activity in sole holder holdings by agricultural area size classes".
D2.1	Statistics Canada (1999), <i>Survey of Financial Security</i> , custom calculations.
D2.2 - D2.4	Statistics Canada, Survey of Consumer Finances (1980-1995) and Survey of Labour and Income Dynamics (1996-2002). Note: families are economic families of 2 or more persons, excluding lone-parent families; farm families are families reporting non-zero net farm self-employment income; urban families are families living in an area with a population of at least 1,000 and population density of at least 400 per sq. km; rural families are families living outside of an urban area.
D2.5	AAFC estimates based on 2003 Farm Financial Survey.

# Links to Farm Income Data

## **Canada:**

Aggregate Data     Statistics Canada  
<http://www.statcan.ca>  
Farm Level Data     Farm Financial Survey, AAFC-AAC  
[http://www.agr.gc.ca/spb/fiap-dpraa/pub\\_e.php](http://www.agr.gc.ca/spb/fiap-dpraa/pub_e.php)

## **U.S.:**

Aggregate data     ERS/USDA, U.S. and State farm income data  
<http://www.ers.usda.gov/Data/FarmIncome/finfidmu.htm>  
Farm Level Data     ARMS  
<http://www.ers.usda.gov/data/arms/app/farm.aspx>

## **EU:**

Aggregate Data     EUROSTAT  
<http://europa.eu.int/comm/eurostat>  
Farm Level Data     FADN  
[http://europa.eu.int/comm/agriculture/rica/dwh/index\\_en.cfm](http://europa.eu.int/comm/agriculture/rica/dwh/index_en.cfm)

## **Australia:**

Farm Level Data     ABARE  
<http://agsurf.abareconomics.com>

# Description of Data Sources

## **Agriculture Economic Statistics Program**

- Statistics Canada's Agriculture Economic Statistics Program measures the aggregate earnings of farmers from the production of agricultural goods in each province. Three aggregate measures of net farm income are developed which include net cash income, realized net income and total net income. This agricultural data is also used in the Canadian System of National Accounts.

## **Census of Agriculture**

- The Census of Agriculture provides a complete enumeration of all farm operations in Canada every five years. The definition of a census farm as "an operation producing agricultural products with the intent to sell them" is all-inclusive. There is no minimum sales requirement. Data is collected on a wide range of farm and farm operator variables, including gross farm receipts and farm operating expenses.

## **Farm Financial Survey**

- The Farm Financial Survey is administered by Statistics Canada on behalf of Agriculture and Agri-food Canada (AAFC). The objective of the survey is to gather financial information on Canadian farms in order for AAFC to administer programs and to inform the general public. The survey collects information on assets, liabilities, revenues, expenses, capital investments and capital sales for the reference year. Crop and livestock information is also collected to measure physical characteristics of the farm. The 2004 survey, which collects information based on 2003, had a survey sample of approximately 20,500 farms and excludes farms with less than \$10,000 in sales from agricultural activities.

## **Tax Data**

- Statistics Canada's Taxation Data Program uses samples of both incorporated and unincorporated farm tax filer records to estimate a range of financial variables, including detailed revenue and expenses, additions and disposal of assets, and off-farm income of operators and their families. The incorporated sector includes incorporated farms with sales over \$25,000 per year, at least 51% of which come from agricultural activities.

## **Note of appreciation:**

- Canada owes the success of its statistical system to a long-standing cooperation between Statistics Canada, the citizens of Canada, its businesses and governments. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.