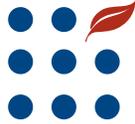




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Agricultural Income and Finance Outlook

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In 2005, net farm income is forecast to be \$71.5 billion, down \$11 billion from the record \$82.5 billion estimated for 2004. After rising 30 percent between 2003 and 2004, net cash income for the average farm business operation is projected to decline from \$71,700 in 2004 to \$69,900 in 2005. The largest decline in average net cash income is for wheat farms. Average farm household income in 2005, which includes off-farm as well as farm income, is expected to continue a 5-year string of annual increases. Average farm household income for 2005 is forecast at \$83,660, up 2.7 percent from 2004.

Farms are expected to contribute \$118 billion in net value added to the U.S. economy in 2005, down from \$126 billion in 2004. High-value crop, cash grain, and soybean farms account for almost half of net value added. Net value added, which is gross value added less capital consumption, is a measure of the U.S. farm sector's contribution to our Nation's annual output of goods and services.

Farm value of production is forecast to be \$271 billion in 2005, down from the record high of \$279 billion in 2004. Livestock production is expected to be relatively unchanged from 2004, while the value of crop production is expected to decline by \$11 billion. Direct government payments are expected to be \$22.7 billion in 2005, up from \$13.3 billion in 2004. Total production expenses in 2005 are projected to be \$221.9 billion, up \$12.2 billion from 2004. The prices of oil and natural gas are big drivers of the increased costs for purchased inputs such as fuels, fertilizers, pesticides, and electricity.

For any given farm household, household income is more likely to decline in 2005, the larger the share of total household income represented by farm income. Operators of commercial farms (with sales greater than \$250,000) are projected to have a 3-percent reduction in household income, given that

commercial farm operations contribute, on average, over 70 percent of total farm household income. Households associated with intermediate farms, for which farming is the primary occupation of the operator and sales are below \$250,000, receive a much larger share of their household income from off-farm sources. Household income on these farms is expected to be 2 percent higher for 2005 than 2004. Household income of rural residence farm operators, for whom farming is not the primary occupation of the operator and sales are below \$250,000, is expected to be 5 percent higher in 2005 than in 2004.

In 2004, average farm operator household income was 19 percent higher than in 2003, reaching a record of \$81,480. The record level reflects increases in both farm and off-farm sources of income. Average farm household earnings from farm activities are estimated to have increased 80 percent, from \$7,884 to \$14,201, achieving a record in the 17 years of U.S. Department of Agriculture's (USDA) collection of farm business and household level data. Income from off-farm sources is estimated to have increased 11 percent, from \$60,713 to \$67,279.

In 2004, the median wealth of farm households (\$460,189) was much higher than the median wealth of all U.S. households (\$92,265). And for every group in the Economic Research Service (ERS) farm typology, including limited-resource farm operators, median wealth is higher than the median wealth of all U.S. households.

Farm business debt is expected to rise almost 3 percent in 2005, following an increase of 4.5 percent in 2004. Real estate debt is expected to rise over 4 percent and nonreal estate debt over 1 percent in 2005. Total farm business debt is expected to be about \$213 billion at the end of 2005. Financial risk does not appear to be a current problem for the overall farm sector. The sector debt-to-asset ratio for 2005 is anticipated to be 0.134, the lowest this indicator has been since 1961. Farm sector business debt in 2005 is anticipated to remain relatively low in comparison to the income farmers have available to service that debt.

In 2004, farm business assets accounted for 63 percent of farm household assets, while farm business debt accounted for 59 percent of farm household debt. Purchase of farmland and farm machinery and equipment accounted for 54 percent of farmer loan volume in 2004.

Farm Sector, Farm Business, and Farm Household Income Forecasts

2005 Earnings of U.S. Farm Sector Forecast To Be \$71 Billion, Down From 2004 but Second Highest on Record

In 2005, net farm income earned sector-wide by all participants sharing in the risks of the farm business is forecast to be \$71.5 billion, down \$11 billion from the record \$82.5 billion estimated for 2004. This was the second consecutive year in which a record was established for net farm income (table 1). The 2-year rise from 2002 to 2004 of \$46 billion in farm sector net income is unmatched in the history of the U.S. farm income accounts.

In 2004, both crop and livestock commodities experienced favorable market and/or production conditions. This was the second consecutive year of high corn production, large harvests for other major crops, and unusually high prices for livestock and milk. This combination generated record earnings for the farm sector, benefiting participants who assumed production risks. In 2004, net farm income, value of production, value added, and net cash income all registered historic highs, exceeding previous highs established in 2003. Net farm income was up 39 percent, value of production up 15 percent, net value added up 24 percent, and net cash income up 19 percent. The farm sector contributed \$126 billion in net value added to the U.S. economy. Record cash receipts for both livestock and crops generated \$241 billion in total receipts. Higher prices for cattle, hogs, poultry, and milk were the key reasons for the \$18-billion rise in livestock receipts over 2003. Prices for program commodities (such as corn, soybeans, and cotton) trended higher in the first half of 2004, allowing producers to sell the remainder of the large harvests from the fall of 2003 at generally favorable prices. A large corn crop in the fall of 2004, along with large harvests of other program crops, contributed to a record value of crop production.

Most Financial Indicators for 2005 Are Forecast To Be Between 2003 and 2004

The value of production in the U.S. farm sector is forecast to be \$271 billion in 2005, following successive years of \$243 billion in 2003 and \$279 billion in 2004. Farms are forecast to contribute \$118 billion in net value added to the U.S. economy in 2005, following successive years of \$101 billion in 2003 and \$126 billion in 2004. Farm operators are forecast to earn net farm income of \$71.5 billion in 2005, following \$59.5 billion in 2003 and \$82.5 billion in 2004.

Total cash receipts are forecast to be \$240 billion in 2005, following \$217 billion in 2003 and \$241 billion in 2004. Net cash income is forecast to be \$83 billion in 2005, following \$72 billion in 2003 and \$85.5 billion in 2004. The value of crop production is forecast to be down by \$11 billion in 2005 from 2004. However, cash receipts from crop sales are forecast down only \$2

Table 1

Value added to the U.S. economy by the agricultural sector, 2002-2005

United States	2002	2003	2004	11/03/05 2005F	Change 2003 to 2004	Change 2004 to 2005
<i>\$ billion</i>						
Value of crop production	98.3	109.4	124.0	113.1	14.6	-10.9
Value of livestock production	93.5	104.9	124.6	125.5	19.6	1.0
Revenues from services and forestry	26.9	28.3	30.5	32.1	2.2	1.7
Value of agricultural sector production	218.7	242.6	279.0	270.7	36.4	-8.3
<i>minus:</i> Purchased inputs	123.1	130.0	136.5	144.4	6.5	7.9
Farm origin	48.3	53.7	57.1	57.1	3.4	0.0
Feed purchased	25.0	27.5	30.0	29.4	2.5	-0.7
Livestock and poultry purchased	14.4	16.8	17.6	17.8	0.8	0.2
Seed purchased	8.9	9.4	9.5	10.0	0.1	0.5
Manufactured inputs	28.5	28.6	31.4	36.5	2.8	5.1
Fertilizers and lime	9.6	10.0	11.4	13.1	1.4	1.7
Pesticides	8.3	8.4	8.5	8.5	0.1	-0.1
Petroleum fuel and oils	6.6	6.8	8.2	11.6	1.4	3.4
Electricity	3.9	3.3	3.2	3.4	-0.1	0.1
Other intermediate expenses	46.4	47.7	48.0	50.8	0.3	2.8
<i>plus:</i> Net government transactions	4.0	9.9	5.8	15.0	-4.1	9.2
+ Direct government payments	11.2	17.2	13.3	22.7	-3.9	9.4
- Vehicle registration and licensing fees	0.4	0.5	0.5	0.5	0.0	0.0
- Property taxes	6.8	6.8	7.0	7.2	0.2	0.2
Gross value added	99.6	122.5	148.3	141.2	25.8	-7.0
<i>minus:</i> Capital consumption	21.0	21.3	22.3	23.2	1.1	0.8
Net value added	78.6	101.2	125.9	118.1	24.7	-7.9
<i>minus:</i> Payments to stakeholders	42.0	41.7	43.4	46.6	1.7	3.2
Employee compensation (total hired labor)	19.1	18.8	20.6	21.1	1.8	0.5
Net rent received by nonoperator landlords	9.8	10.3	9.7	10.4	-0.5	0.6
Real estate and nonreal estate interest	13.1	12.7	13.1	15.1	0.4	2.1
Net farm income	36.6	59.5	82.5	71.5	23.0	-11.1
Gross cash income	221.0	249.5	271.7	280.6	22.2	8.8
Cash receipts	195.0	216.6	241.2	239.6	24.6	-1.6
Crops	101.0	111.0	117.8	115.9	6.8	-1.8
Livestock	94.0	105.6	123.5	123.7	17.9	0.2
Direct government payments	11.2	17.2	13.3	22.7	-3.9	9.4
Farm-related income	14.8	15.7	17.2	18.3	1.5	1.1
<i>minus:</i> Cash production expenses	171.6	177.9	186.2	197.4	8.2	11.2
Net cash income	49.5	71.6	85.5	83.2	14.0	-2.4

F = forecast.

The current forecast and historic information can always be found at <http://www.ers.usda.gov/data/farmincome/finfidmu.htm>Information contact: Roger Strickland, e-mail: rogers@ers.usda.gov

billion as farmers sell large quantities of inventories carried over into 2005. These sales are helping maintain net cash income near the level of 2004.

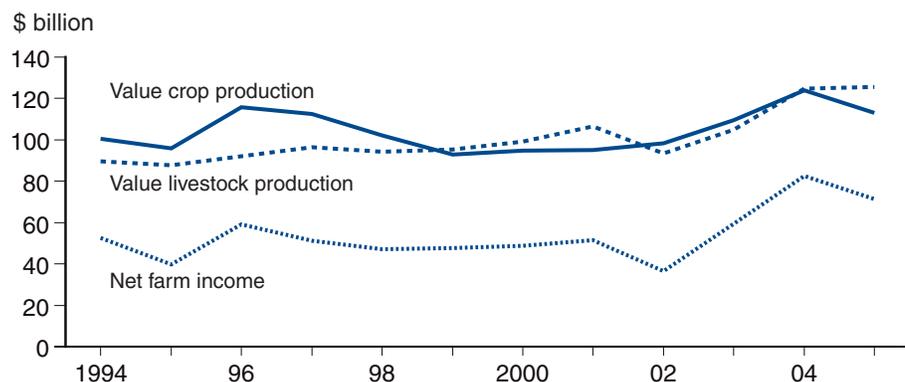
Cash receipts for crops are forecast to be \$116 billion in 2005, down from \$118 billion in 2004 due to a decline in production and downward pressure on market prices in the latter part of 2005. Cash receipts could be down for all field crops except cotton, hay, and peanuts. Cash receipts for corn, the top-ranked field crop, are forecast to be down the most, \$2.7 billion. Cash receipts for greenhouse/nursery (a major growth industry), vegetables, and fruits and nuts are forecast to continue to expand in 2005. Total combined revenues from cash receipts for all crops and government payments are forecast to be \$139 billion in 2005, exceeding \$128 billion in 2003 and \$131 billion in 2004. For crops included under the umbrella of government programs, large supplies have contributed to market prices dropping low enough to trigger government payments to producers. (In 2005 and historically, most government payments are from programs related to crops, with the balance from conservation and other miscellaneous programs). Crop inventories rose \$6 billion in 2004. With indications of smaller harvests in 2005, farmers will likely be able to sell off large beginning-of-year crop inventories.

Value of livestock production is forecast to be \$125.5 billion in 2005, 26 percent higher than its 10-year average (1995-2004) of \$99 billion (fig. 1). Cash receipts for livestock and products are forecast to be \$124 billion in 2005, unchanged from 2004 sales and \$18 billion more than the \$106 billion in 2003. Cash receipts from the sale of all livestock and products (milk, eggs, wool, etc.) in 2005 are forecast to exceed the \$100-billion mark for the fourth time over the past 5 years in the midst of low cattle inventories, high demand, and resulting high prices.

2005 Government Payments Forecast at \$22.7 Billion

Direct government payments are expected to total \$22.7 billion in 2005, up from the final estimate of \$13.3 billion for 2004 (table 2). This payment

Figure 1
Farm sector income indicators, 1994-2005



Note: 2004 estimated and 2005 forecast.

Source: Economic Research Service, USDA.

Table 2

Direct government payments, 2001-2005

Item	2001	2002	2003	2004	2005F	Change 2004 to 2005
	<i>\$ million</i>					
Total direct payments ¹	20,727.5	11,236.3	17,209.2	13,303.6	22,671.3	9,367.7
Production flexibility contract payments ²	4,040.4	3,499.8	-280.0	-3.9	0.0	3.9
Fixed direct payments ³	0.0	367.1	6,703.6	5,242.4	5,045.0	-197.4
Counter-cyclical payments ⁴	0.0	203.4	2,300.7	1,122.0	4,161.0	3,039.0
Loan deficiency payments	5,464.2	1,196.7	576.3	2,859.9	4,579.0	1,719.1
Marketing loan gains ⁵	707.7	459.7	198.1	130.4	512.0	381.6
Net value certificates	n.a.	n.a.	1,242.8	813.9	1,153.0	339.1
Peanut quota buyout payments	0.0	983.0	237.6	24.7	4.0	-20.7
Milk income loss payments	0.0	859.6	913.0	206.0	20.0	-186.0
Tobacco Transition Payment Program ⁶	0.0	0.0	0.0	0.0	952.2	952.2
Conservation program payments ⁷	1,933.7	2,004.6	2,198.9	2,345.5	2,549.1	203.6
Ad hoc and emergency ⁸	8,508.1	1,616.2	3,111.3	557.2	3,690.0	3,132.8
Miscellaneous program payments ⁹	73.3	46.1	6.8	5.4	6.0	0.6

F = forecast. n.a. = not applicable. Numbers may not add due to rounding.

¹ Includes only those funds paid directly to farmers within the calendar year.

² Enactment of the 2002 Farm Act terminated the authority for production flexibility contract payments.

³ For 2005, this is the estimated fixed direct payments to be received for 2005 crops less what CCC reported as advance payments for 2005 crops received in 2004. Also, the 2005 estimate assumes that 17.5 percent of program participants will receive 50 percent of the estimated 2006 crop direct payment as advance payments.

⁴ For 2005, this is the estimated counter-cyclical payments to be received for 2004 crops, less what CCC reported as first partial payments for 2004 crops received in 2004. Also, the 2005 estimate assumes that 95 percent of program participants will receive 35 percent of the estimated 2005 crop counter-cyclical as first partial payments. The rest of the estimated 2005 counter-cyclical payments are assumed to be received by program participants in 2006.

⁵ In publications prior to May of 2001, marketing loan gains were included in cash receipts rather than in government payments.

⁶ The Tobacco Transition Payment Program will provide payments over a 10-year period to quota holders and producers of quota tobacco.

⁷ This category includes all conservation programs. In publications prior to July 2003, this category only included payments to Conservation Reserve Program, Agricultural Conservation Program, Emergency Conservation Program, and Great Plains Program.

⁸ This category includes all programs providing disaster and emergency assistance payments to growers. In publications prior to July 2003, the category Emergency Assistance included only emergency assistance payments attributed to supplemental legislation.

⁹ Miscellaneous programs and provisions vary from year to year. In publications prior to July 2003, this category included some program payments which are now considered as either Conservation or Ad Hoc and Emergency. Also included here are CCP--Fruit and Vegetable Violation, CCP--Late Fees, and CCP--Payment Limitation Over payments which could not be directly linked to either Direct or Counter-cyclical Program payments.

Source: Agricultural Resource Management Survey (ARMS), USDA.

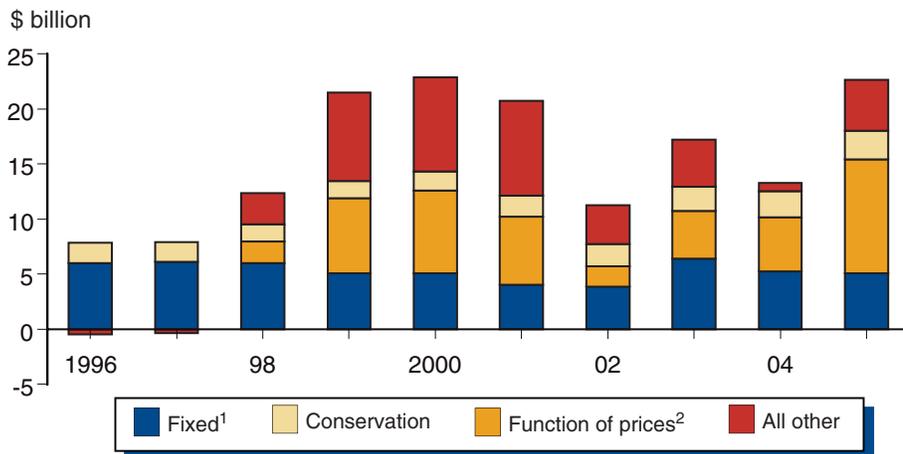
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level is below the previous record of \$22.9 billion received by producers in 2000 (fig. 2), but represents a 33-percent increase relative to the 5-year average (2000-2004) for direct government payments of \$17.0 billion. The largest increases from calendar year 2004 levels are forecast to occur in the ad hoc and emergency program payments, counter-cyclical payments, and loan deficiency payments.

The forecast increase in ad hoc and emergency program payments, from \$0.6 billion in 2004 to \$3.7 billion in 2005, is primarily attributable to the Crop Disaster Program. Other programs providing ad hoc and emergency payments in 2005 include the Livestock Assistance Program, Noninsured Assistance Program, and the Tree Assistance Program. Ad hoc and emergency payments were low in 2004 because the large payments made in 2003

Figure 2

Government payments, 1996-2005



Note: 2004 estimated and 2005 forecast.

¹Production flexibility contract payments and direct payments, where payment rates are fixed by legislation.

²Counter-cyclical payments, loan deficiency payments, marketing loan gains, and net value certificates; where payment rates vary with market prices.

Source: Economic Research Service, USDA.

under programs such as the Livestock Compensation Program, Apple Market Loss Program, Avian Influenza Indemnity Program, and Crop Disaster Program did not continue in 2004. Also, payments for hurricanes in 2004 that caused major crop damage were primarily realized by producers in 2005.

The second greatest projected increase in 2005 is for counter-cyclical payments under the Direct and Counter-cyclical Program (DCP), which are forecast to increase from \$1.1 billion to \$4.2 billion. From crop year 2004 to crop year 2005, only a small increase is expected in counter-cyclical payments; however, due to the timing of payments within the calendar years, a \$3.0-billion increase in counter-cyclical payments is forecast for calendar year 2005 from the \$1.1-billion estimated payments in calendar year 2004. Partial counter-cyclical payments, which are paid during the calendar year based on the projected payment rate at the time of payment, may result in overpayments that are netted out of payments for the following crop year. The counter-cyclical payment estimate for calendar 2004 is low, in part because it includes offsets for the repayment of 2003 program overpayments received in calendar 2003 for wheat, corn, and sorghum. In contrast, counter-cyclical payments in calendar year 2005 for 2004 program crops are now estimated to be higher than when the first partial 2004 crop counter-cyclical payments were paid in calendar 2004. These results contribute to the large increase in counter-cyclical payments expected in calendar 2005. More than half of the payments in each crop year are to corn producers. About a quarter of the payments are to cotton producers.

The largest disbursement of government direct payments in 2005 is forecast to occur through direct payments, the other program under the Direct and Counter-cyclical Program (DCP). The forecast \$5 billion in 2005 direct

payments represents a 4-percent reduction from 2004. Direct payment rates are fixed in legislation and are not affected by the level of program crop prices. However, changes in enrollment from year to year could affect the level of crop program acres and payment yields that are used to determine crop year program payments. The forecast decline in 2005 is the result of payments received in January 2005 being less than payments received in January 2004.

Marketing loan benefits—including loan deficiency payments, marketing loan gains, and certificate exchange gains—are projected to be up in calendar 2005 to \$6.1 billion from \$3.8 billion in 2004 levels. Lower prices for corn and cotton are expected to result in higher loan deficiency payment rates and higher marketing loan gain rates for corn and cotton. The expected combined increases in marketing loan benefit payments to corn, sorghum, and cotton producers more than offset the declines in payments to wheat and soybean producers. About 65 percent of marketing loan benefit payments is forecast to go to corn producers.

Milk income loss program payments are forecast to decline from \$.2 billion to \$.002 billion as a result of higher milk prices. Also, the authority for payments under this program expired October 1, 2005. The new Tobacco Transition Payment Program is forecast to disburse \$0.9 billion in 2005 as farmers received the first of 10 annual payments.

Conservation programs include all conservation programs sponsored by the Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS) that provide direct payments to producers. Estimated conservation payments of \$2.5 billion in 2005 reflect programs approaching funding levels authorized by current legislation.

Total Production Expenses Are Forecast To Rise 6 Percent in 2005

Total production expenses¹ in 2005 are projected to be \$221.9 billion, up \$12.2 billion (5.8 percent) from 2004 and another record. Since a decline in 2002, expenses have increased \$7 billion or more each year. In 2005, total production expenses stand \$28.6 billion (14.8 percent) higher than in 2002.

Total expenses in 2005 are projected to be \$3.3 billion higher than expected in the August 2005 forecast. Most of the increase since August is due to price increases in three expenses: fuels and oils, fertilizer, and livestock and poultry purchases. Fuel and oil costs are now expected to be \$3.4 billion higher than in 2004, while fertilizer expenses are forecast to be up \$1.7 billion. The third largest increase from 2004 will be in interest expenses, which are forecast to increase \$2.1 billion (15.7 percent) due to a rise from 6.2 to 6.9 percent on the annual average interest rate on outstanding agricultural loans. The only expense component projected to decrease in 2005 is feed purchases, which is attributable to lower prices for feed grains, primarily corn. Since total output is projected to be about 1.4 percent less than in 2004, with crop output decreasing 5.0 percent and livestock output rising about 2.7 percent, input prices will play a significant role in the increase in production expenses in 2005.

¹In the value added table (table 1), total production expenses are the sum of purchased inputs, motor vehicle registration and licensing fees, property taxes, capital consumption, and the elements of payments to stakeholders.

Farm Typology Group Definitions for 2004

Small Family Farms (sales less than \$250,000) ¹	Other Family Farms		
<p style="text-align: center;">Rural residence farms</p> <p>Limited-resource farms. Small farms with sales less than \$102,400 in 2004 and low operator household income. Household income is considered low if it is less than the poverty level for a family of four in both 2004 and 2003, or it is less than half the county median household income both years. Operators may report any major occupation except hired manager.</p> <p>Retirement farms. Small farms whose operators report they are retired.²</p> <p>Residential/lifestyle farms. Small farms whose operators report a major occupation other than farming.²</p> <p style="text-align: center;">Intermediate farms</p> <p>Farming-occupation farms. Small family farms whose operators report farming as their major occupation.²</p> <ul style="list-style-type: none"> ● Low-sales farms. Sales less than \$100,000. ● High-sales farms. Sales between \$100,000 and \$249,999. 	<p style="text-align: center;">Commercial farms</p> <p>Large family farms. Sales between \$250,000 and \$499,999.</p> <p>Very large family farms. Sales of \$500,000 or more.</p> <tr> <th style="background-color: #006633; color: white;">Nonfamily Farms</th> <td style="background-color: #e6f2e6;"> <p>Nonfamily farms. Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.</p> <p>Note: The farm typology focuses on the “family farm,” any farm organized as a sole proprietorship, partnership, or family corporation. Family farms exclude farms organized as nonfamily corporations or cooperatives, as well as farms with hired managers.</p> <p>¹ The National Commission on Small Farms selected \$250,000 in gross sales as the cutoff between small and large.</p> <p>² Excludes limited-resource farms whose operators report this occupation.</p> <p>Source: Structural and Financial Characteristics of U.S. Farms, 2004 Family Farm Report. Economic Research Service, AIB-797, March 2005.</p> </td> </tr>	Nonfamily Farms	<p>Nonfamily farms. Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.</p> <p>Note: The farm typology focuses on the “family farm,” any farm organized as a sole proprietorship, partnership, or family corporation. Family farms exclude farms organized as nonfamily corporations or cooperatives, as well as farms with hired managers.</p> <p>¹ The National Commission on Small Farms selected \$250,000 in gross sales as the cutoff between small and large.</p> <p>² Excludes limited-resource farms whose operators report this occupation.</p> <p>Source: Structural and Financial Characteristics of U.S. Farms, 2004 Family Farm Report. Economic Research Service, AIB-797, March 2005.</p>
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The Impact of Rising Energy Costs Will Not be Fully Felt in 2005

The prices of oil and natural gas are big drivers of the increased costs for purchased inputs. Rising energy costs affect most components of production expenses to some degree, if only through higher transportation costs. However, manufactured inputs (fuels, fertilizers, pesticides, and electricity) are directly affected by rising prices of crude oil and natural gas. They are forecast to rise 15.5 percent in 2005. Manufactured inputs averaged a 15-percent share of total production expenses over the 1999-2004 period. That share is forecast to rise to 16.4 percent in 2005. Fuel and oil purchase costs were about 4 percent of total production expenses of farms in 2004 and will rise to 5 percent in 2005. Thus, while the effects of rising energy costs are significant, the expenses they affect most still account for only about one-sixth of the farm sector's total costs of production.

The effects of the rise in energy costs in calendar year 2005 will be somewhat mitigated by the nature of the farming activities in the last 4 months of the year and farm operators' managerial practices and skills. The principal energy-consuming activities occurring in the final 4 months of the year are the harvesting and drying of crops. A large number of farms, particularly commercial farms, have storage tanks for their fuels on the farm for the convenience of

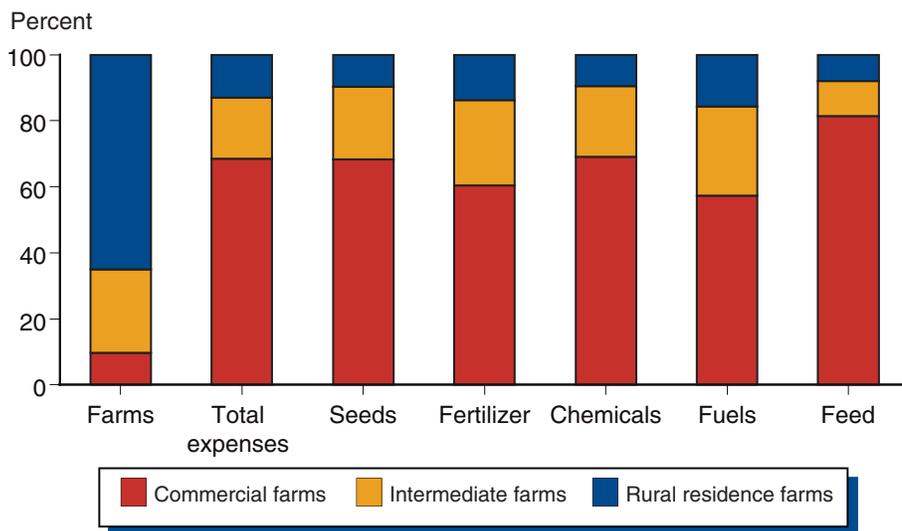
dispensing fuel as required. As a consequence, they purchase fuel in advance in order to have it when needed. Therefore, much of the fuel consumed in the final 4 months of 2005 would have been purchased prior to those months. These tanks also allow farmers to purchase fuels in bulk at prices lower than at the retail pump. So a rise in fuel costs of a specific percentage does not automatically translate into a comparable impact on costs of production in 2005.

The rising price of natural gas is particularly significant as it is an ingredient in the production of nitrogen fertilizer. However, the effects of higher energy costs on fertilizer prices occur with a lag of some months due to the lengthy manufacturing process, and most of the fertilizer applications in 2005 occurred prior to September. Some petroleum products are used in the manufacture of pesticides which were also mostly applied in the earlier stages of the farm production cycle.

The 2002 Census of Agriculture indicated that market value of product sold was highly concentrated, with 6.7 percent of farms accounting for 75 percent of sales. Purchases of farm inputs also tend to be concentrated. Based on the 2004 Agricultural Resource Management Survey (ARMS), the 10 percent of all farms that are commercial farms account for 69 percent of production expenses (fig. 3). Even so, gasoline, diesel, other fuels, and oil purchases are among the most widely used inputs (fig. 4). Over 95 percent of farms reported expenditures for these items in the 2002 Census. As a result, nearly all farmers stand to be affected by price changes for fuels.

Although farm operators use a number of purchasing practices to lessen the cost of inputs, the larger farms that produce most of the farm commodities and consume most of the purchased inputs use the practices shown in figure 5. The two practices used most are locking in input prices (forward purchasing) and negotiating price reductions for many of their purchased inputs by buying large quantities. Nearly 49 percent of commercial farms

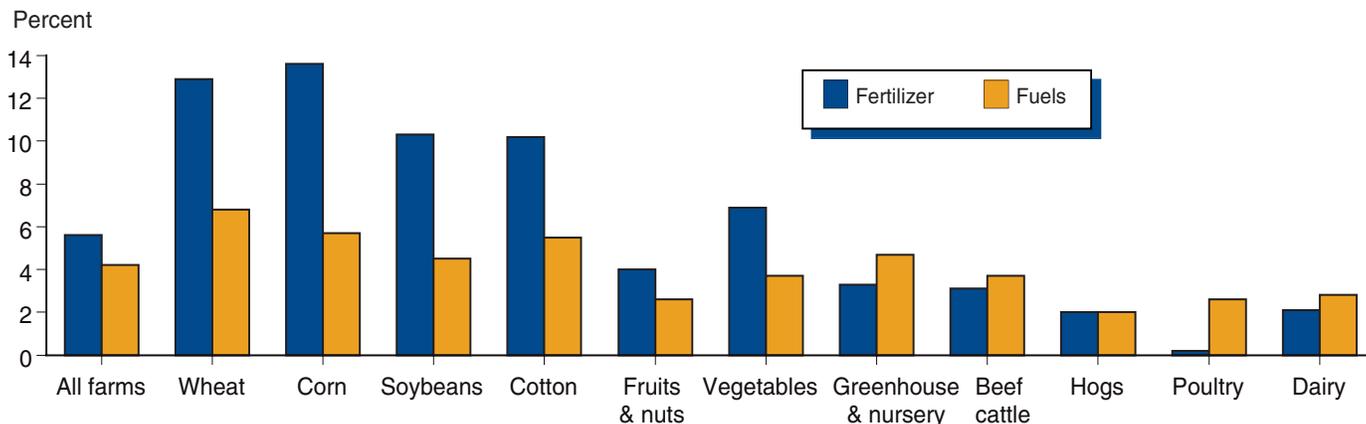
Figure 3
Shares of expenses by farm typology, 2004



Source: 2004 ARMS.

Figure 4

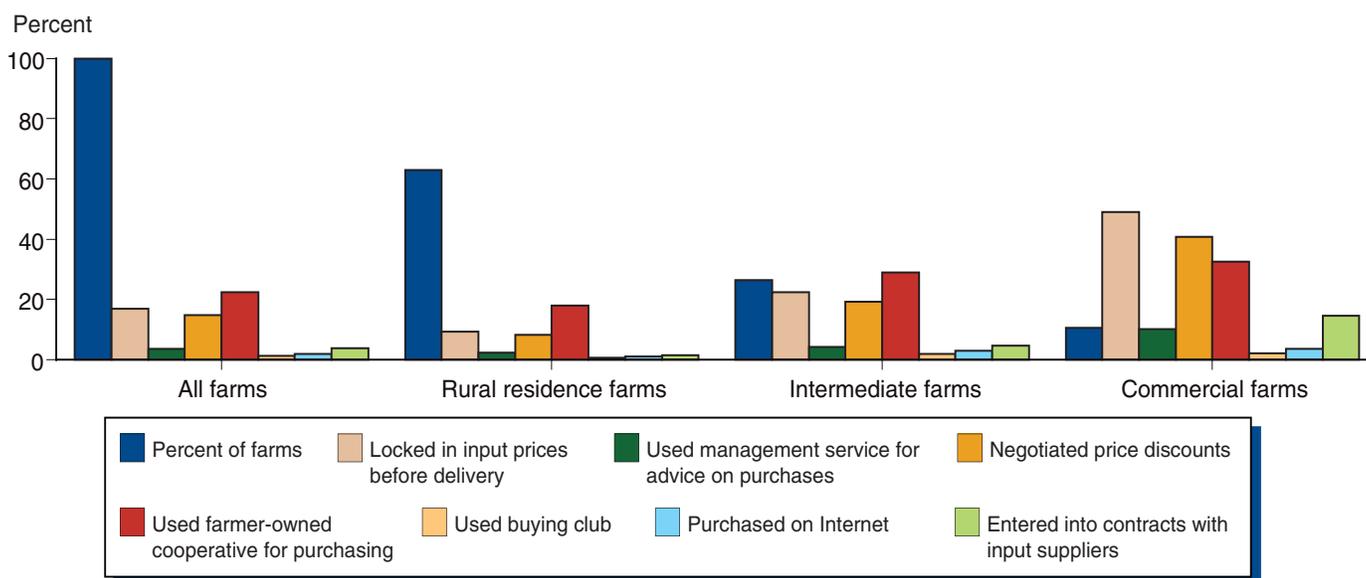
Fertilizer and Fuels: Share of total expenses by farm type, 2004



Source: 2004 ARMS.

Figure 5

Percent of farms using purchasing practices by farm typology, 2004



Source: 2004 ARMS.

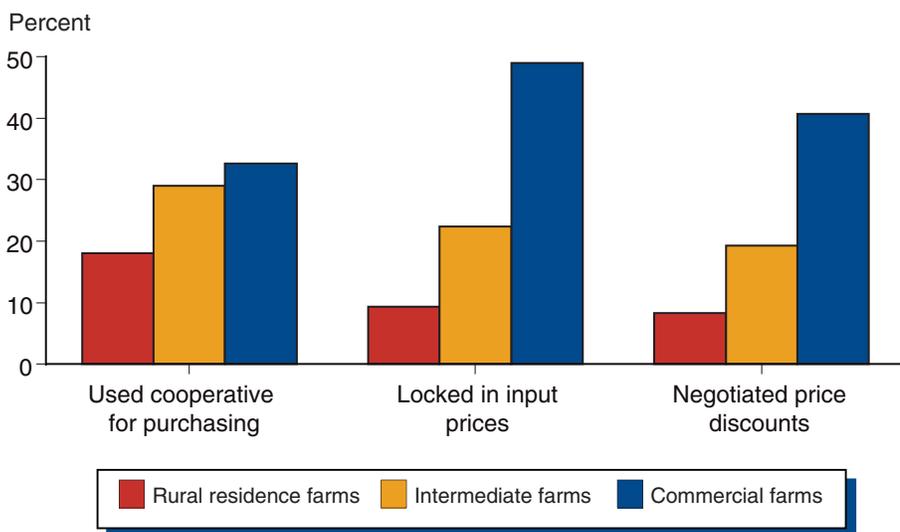
locked in input prices and 41 percent negotiated price discounts for their purchases (fig. 6). Their businesses are also sufficiently large so that they can employ other management practices that can help reduce the prices they pay for inputs and help mitigate market uncertainties.

Income Outlook and Financial Circumstances Varies Among Farms

After rising 30 percent between 2003 and 2004, average farm business net cash income is projected to decline from an average of \$71,700 in 2004 to \$69,900 in 2005 (<http://www.ers.usda.gov/Briefing/FarmIncome/Gallery/businessincome.htm>). This projection is for farms as business establishments and excludes income earned by other entities that share business arrange-

Figure 6

Percent of farms using principal purchasing practices by farm typology, 2004



Source: 2004 ARMS.

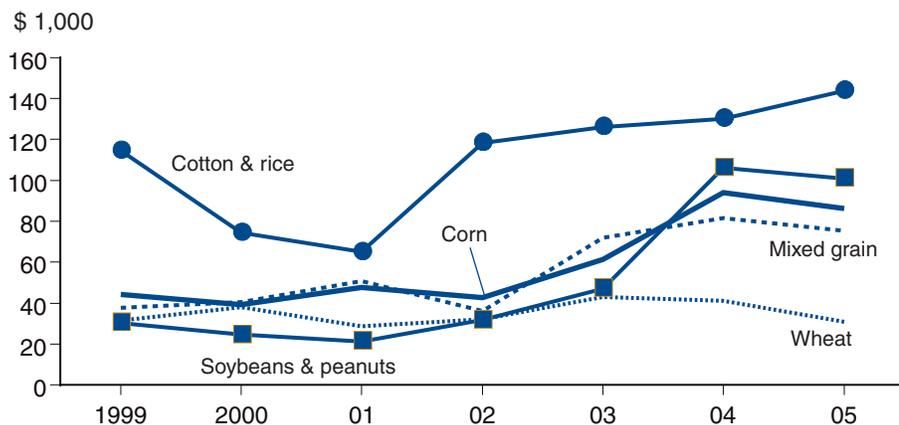
ments with farmers, such as contractors. Key factors that influence income prospects include differences in the value of crop and livestock production, levels of government transfers, and the levels and types of inputs purchased by farmers. These differences are captured, in part, by factors such as farm size, geographic location, and commodities produced.

Farms that specialize in the production of cotton and rice, beef cattle, and dairy are expected to have higher average net cash incomes in 2005 than in 2004. For cotton and rice farms, the forecast is that a small reduction in crop receipts and an 80-percent increase in government payments will more than offset increases in expenses. A continuation of favorable prices is expected to result in a 6-percent increase in the average net cash incomes of farm businesses that specialize in beef production. Average net cash income of dairy farms is slightly higher than 2004 with continued strong prices and increased production providing enough revenue to compensate for higher expenses. The largest decline in average net cash income is projected for wheat farms (fig. 7). Higher government payments more than make up the projected decline in commodity sales, so that gross cash income is projected to be nearly \$7,000 above the level of 2004. Expenses, however, are expected to increase by almost \$17,000 (12 percent), with most of the increase coming from higher energy costs and interest expenses in 2005. Except for wheat and general crop farms, average incomes of other crop farms are expected to decline in 2005 but remain well above average incomes for 2000-2002. Higher input costs also reduce average net cash income of livestock producers, but the effect is mitigated by continued strong growth in receipts. The result is a projected decline in net cash income of less than 3 percent for producers that specialize in hogs and poultry (fig. 8).

Geographic concentration of commodity production explains much of the regional variation in the income outlook for farm businesses. In 2005,

Figure 7

Average net cash income projected higher for cotton and rice farms in 2005

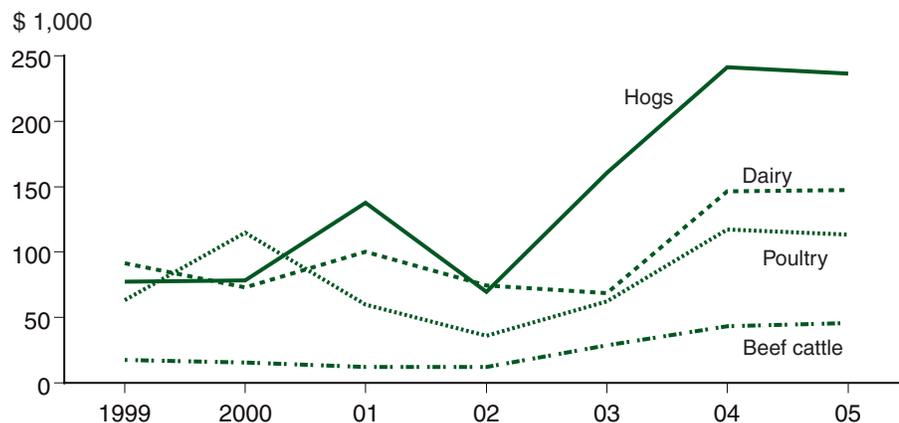


Note: 2005 forecast.

Source: ARMS and Economic Research Service, USDA forecasts.

Figure 8

Average net cash income projected higher for cattle producers in 2005



Note: 2005 forecast.

Source: ARMS and Economic Research Service, USDA forecasts.

average net cash income is projected to decline in most regions except the Prairie Gateway (<http://www.ers.usda.gov/Emphases/Harmony/issues/resourcereions/resourcereions.htm>). But, given that most regions have commodity diversity, average income will remain above the average income for 2000-2002 for all regions except the Basin and Range. Average net cash income in 2005 is essentially unchanged in the Prairie Gateway, which has a high concentration of beef cattle, cotton, and rice production. The largest declines in average net cash income between 2004 and 2005 are expected in the Mississippi Portal (9 percent), Northern Great Plains (8 percent) and Basin and Range (7 percent). In each of these regions, similar factors explain the forecast of lower average net cash income. Average gross cash income is projected to be higher than in 2004, since the decline in crop receipts is more than offset by the increase in government payments.

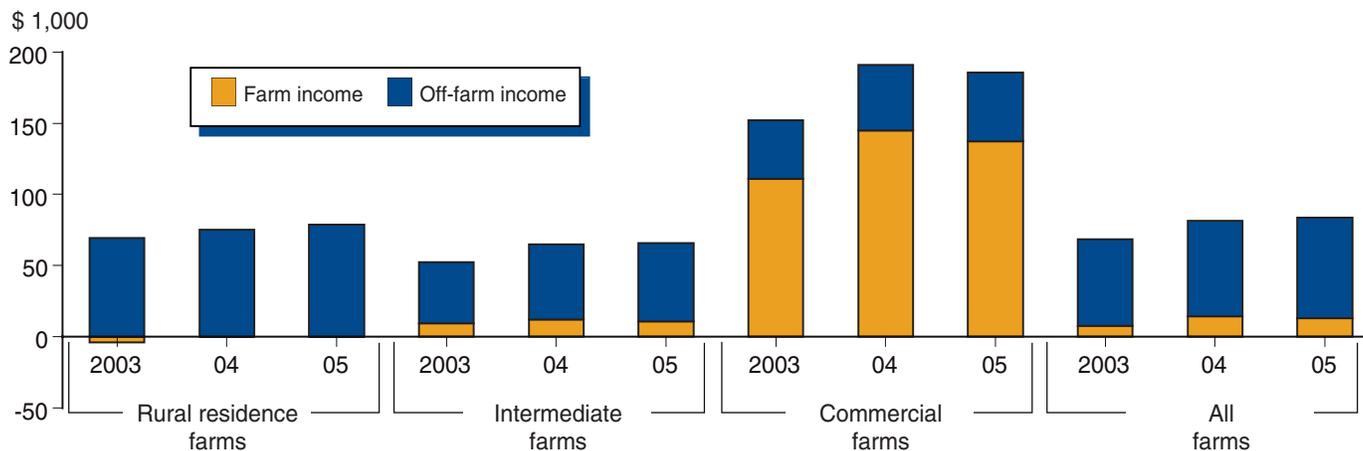
However, the increase in gross income is not enough to compensate for higher expenses. Average expenses in the Mississippi Portal increased by more than \$23,000 in 2005, with most of the increase coming from fertilizer, fuel, and interest. These same inputs were largely responsible for the \$9,000 increase in average expenses in the Basin and Range and a more than \$16,000 increase over 2004 in the Northern Great Plains region.

There is also variation in projected net cash income changes by size of farming operation in 2005. Commercial operations, which represent about 10 percent of farms and 75 percent of production, are expected to experience a 2-percent decline in average net cash income for 2005. Even though declining from 2004's record level, average income of commercial farms will remain well above the 2000-2002 levels. Average net cash income of intermediate farms (primary occupation of farming and gross sales below \$250,000) is forecast to decline by 8 percent in 2005. Two-thirds of U.S. farms are rural residences—operators of which typically earn most of their household income from off-farm sources, in contrast with intermediate and commercial farms. Rural residence farms have for many years averaged a negative net cash income, and 2005 is projected to be no exception.

Farm Operator Households' Incomes Forecast To Continue Rising in 2005

The income earned by farm operator households in 2005 is expected to continue a 5-year string of increases (table 3). Average farm household income for 2005 is forecast at \$83,660, up 2.7 percent from 2004. The 6.6-percent decline in average net cash farm income forecast for 2005 is expected to be more than offset by a 4.6-percent increase in average off-farm income, because off-farm income represents on average 83 percent of total household income for family farms in 2004. For any given farm household, income is more likely to decline in 2005 as share of total household income represented by farm income increases (fig. 9). For example, opera-

Figure 9
Average income of farm operator households by farm typology, 2003-05



Note: 2004 estimated and 2005 forecast.

Source: Agricultural Resource Management Survey, Economic Research Service, USDA.

Table 3

Average Income to farm operator households, 2001-2005¹

Item	2001 ²	2002	2003	2004 ³	2005F	Change 2004 to 2005
<i>————— Dollars per farm —————</i>						
Net cash farm business income ³	14,311	11,331	14,979	20,638	19,640	-998
Less depreciation ⁴	7,609	8,189	7,334	8,085	n.a.	
Less wages paid to operator ⁵	932	758	695	747	n.a.	
Less farmland rental income ⁶	477	621	864	806	n.a.	
Less adjusted farm business income due to other household(s) ⁷	1,083	1,248	1,344	2,909	n.a.	
<i>————— Dollars per farm operator household —————</i>						
Equals adjusted farm business income	4,211	516	4,742	8,091	n.a.	
Plus wages paid to operator	932	758	695	747	n.a.	
Plus net income from farmland rental ⁸	n.a.	n.a.	n.a.	n.a.	n.a.	
Equals farm self-employment income	5,143	1,273	5,437	8,838	n.a.	
Plus other farm-related earnings ⁹	396	2,199	2,447	5,363	n.a.	
Equals earnings of the operator household from farming activities	5,539	3,473	7,884	14,201	13,258	-943
Plus earnings of the operator household from off-farm sources ¹⁰	58,578	62,285	60,713	67,279	70,401	3,122
Equals average farm operator household income comparable to U.S. average household income, as measured by the CPS	64,117	65,757	68,597	81,480	83,660	2,180
<i>————— Dollars per U.S. household —————</i>						
U.S. average household income ¹¹	58,208	57,852	59,067	60,528	n.a.	
<i>Percent</i>						
Average farm operator household income as percent of U.S. average household income	110.2	113.7	116.1	134.6	n.a.	
Average operator household earnings from farming activities as percent of average operator household income	8.6	5.3	11.2	16.9	15.3	-1.6

F = forecast. n.a. = not available.

¹ This table derives farm operator household income estimates from the Agricultural Resource Management Survey (ARMS) that are consistent with Current Population Survey (CPS) methodology. The CPS, conducted by the Census Bureau, is the source of official U.S. household income statistics. The CPS defines income to include any income received as cash. The CPS definition departs from a strictly cash concept by including depreciation as an expense that farm operators and other self-employed people subtract from gross receipts when reporting net cash income.

² Prior to 2000, net cash income from operating another farm and net cash income from farmland rental were included in earnings from farming activities. However, because of a change in the ARMS design in 2001, net cash income from another farm and net cash income from farmland rental are not separable from total off-farm income. Estimates of farm self employment income, other farm related earnings, earnings of the farm from farming activities, and earnings of the farm from off-farm sources are not strictly comparable to those from previous years. In 2002, net cash income from operating another farm is once again included as earnings from farming activities. In 2003, net cash income from farmland rental is once again included.

³ Starting in 2004, farm operator household income specifically excludes net capital gains/losses.

⁴ A component of farm sector income.

⁵ Consistent with the CPS definition of self-employment income, reported depreciation expenses are subtracted from net cash income. The ARMS collects farm business depreciation used for tax purposes. Wages paid to the operator are subtracted here because they are not shared among other households that have claims on farm business income. These wages are added to the operator household's adjusted farm business income to obtain farm self-employment income.

⁶ Gross rental income is subtracted here because net rental income from the farm operation is added below to income received by the household.

⁷ More than one household may have a claim on the income of a farm business. On average, 1.1 households share the income of a farm business.

⁸ Includes net rental income from the farm business. Also includes net rental income from farmland held by household members that is not part of the farm business. From 2000 through 2002, net income from farmland rental is considered as part of off-farm income (see footnote 2). Starting in 2003, net income from farmland rental is considered as a part of other farm-related earnings.

⁹ Wages paid to other operator household members by the farm business and net income from a farm business other than the one being surveyed. This also includes the value of commodities provided to household members for farm work. In 2000 and 2001, net cash income from another farm is included in off-farm income (see footnote 2). Starting in 2003, this category includes net income from farmland rental.

¹⁰ Wages, salaries, net income from nonfarm businesses, interest, dividends, transfer payments, etc. In 2000 and 2001, also includes net cash income from another farm and net cash income from farmland rental. In 2002, also includes net cash income from farmland rental (see footnote 2).

¹¹ From the CPS.

Sources: U.S. Dept. of Agriculture, Economic Research Service, 2001, 2002, 2003, and 2004 Agricultural Resource Management Survey (ARMS) for farm operator household data. U.S. Dept. of Commerce, Bureau of the Census, 2001, 2002, 2003, and 2004 Current Population Survey (CPS) for U.S. average household income.

tors of commercial farms (with sales greater than \$250,000) are projected to see a 3-percent reduction in household income because commercial farm operations contribute, on average, over 70 percent to total farm household income. Households associated with intermediate farms, for which farming is the primary occupation of the operator and sales are below \$250,000, receive a much larger share of their household income from off-farm sources. Household income on these farms is expected to be 2 percent higher for 2005 than 2004. In contrast, the income of rural residence farm households, for which farming is not the primary occupation of the operator and sales are below \$250,000, is expected to be 5 percent higher in 2005 than in 2004.

Value Added to the U.S. Economy by America's Agricultural Sector

Net value added is a measure of the U.S. farm sector's contribution to national output. Value added to the U.S. economy by its agricultural sector is the difference between the value of inputs created at earlier stages in the production process and the economic value of those commodities and services produced by the farm sector.

Agriculture's total value of production is the sum of the value of commodity (crop and livestock) production and revenues from services and other income. Net government transfers are direct government payments to farmers less payments by farmers to government (property taxes, motor vehicle registration and licensing fees, but not income taxes). Hence net government transfers can either increase or decrease net value added. Purchased inputs represent factors purchased from the manufacturing sector, the farm sector, and other intermediate inputs. Depreciation on buildings and machinery, also known as capital consumption, reflects the annual loss in value to agriculture's capital stock. Gross value added and net value added represent the agricultural sector's equivalent to U.S. Gross Domestic Product and U.S. Net Domestic Product (fig. 10).

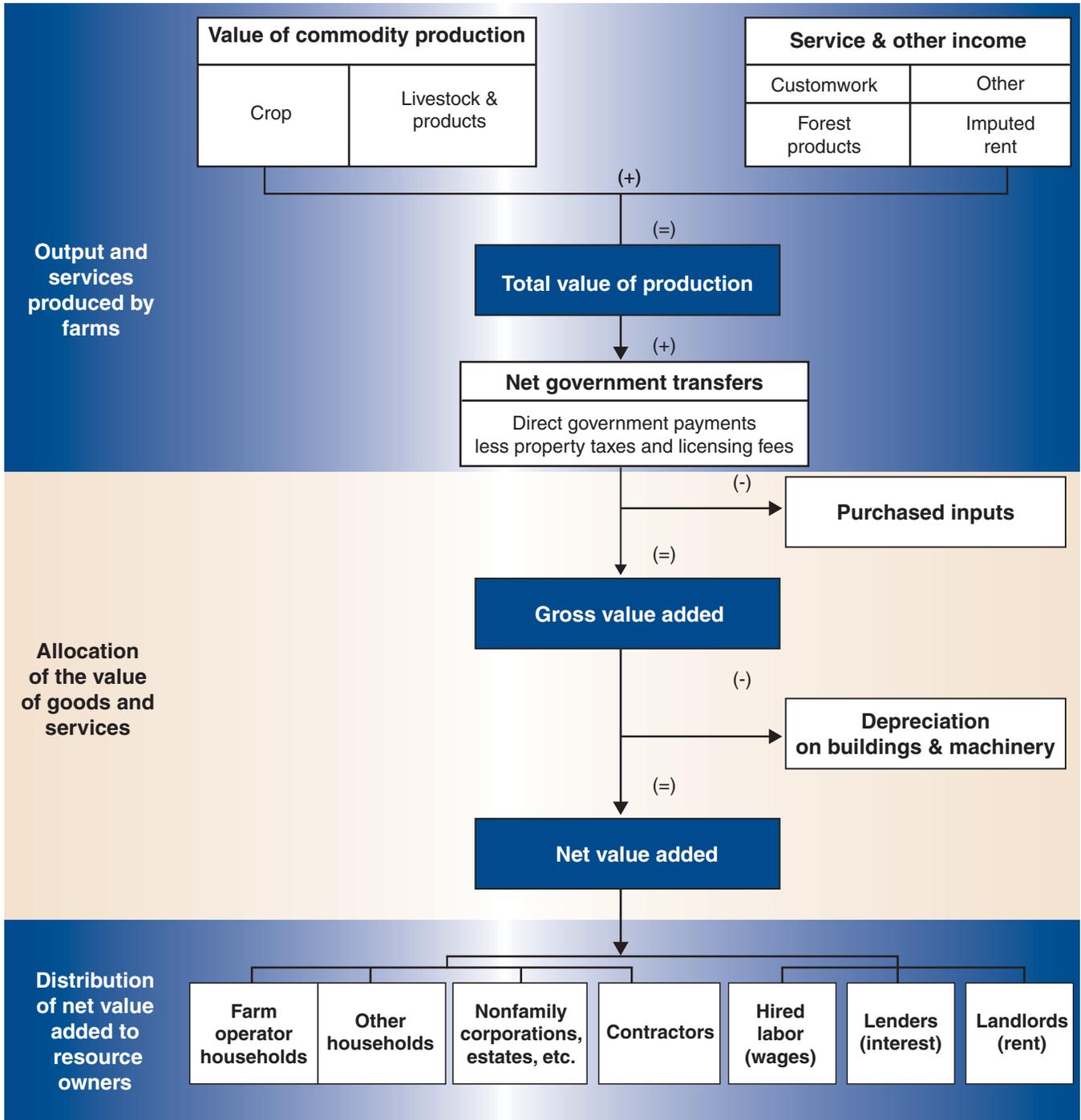
Long-term trends in the different components of farm value of production demonstrate how its distribution to farm equity holders, stakeholders, and others has changed over time (fig. 11). Value of production by the agricultural sector has increased from \$55 billion in 1970 to over \$279 billion in 2004. This more than five-fold increase was due to increases in both crop and livestock production, which accounted for about 93 percent of farm production in 1970 and about 89 percent in 2004. Net value added has increased from \$23.7 billion in 1970 to \$124.9 billion in 2004, while net farm income increased from \$14.4 billion to \$82.5 billion over the same period. The widening gap over time between value of production and gross value added shows that the suppliers of purchased inputs have received more of the increase in the growth in farm value of production than have farm equity or stakeholders. Purchased inputs include short-term assets such as purchased seed, electricity, and contract labor but not longer-term assets such as farmland and farm machinery and equipment. Farm equity-holders are those who own all or a part of the farm operation through sole proprietorships, partnerships, family corporations, nonfamily farmers, and as contractors. Stakeholders consist of hired labor, lenders to agriculture, and nonoperator landlords.

Net farm income continues to closely track net value added over time (fig. 12). The three stakeholder lines (net rent, interest, and hired labor compensation) show the stability of stakeholder shares over time. This year-to-year stability reflects that payments to stakeholders are independent to changes in net value added. However, the return to farm equity-holders rise and fall with the rise and fall of agriculture's net value added, reflecting their position as risk-takers.

Net value added is the sum of the earnings (net farm income) of its equity-holders and its stakeholders. Table 4 highlights changes in the distribution

Figure 10

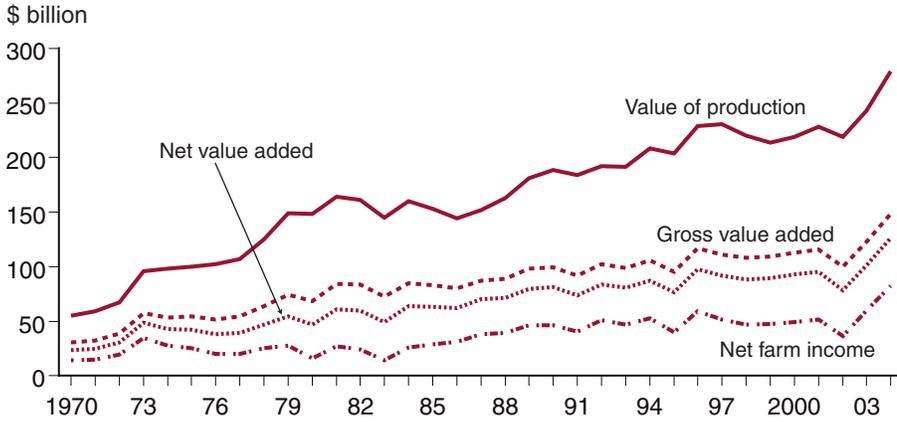
Components of value added among sources and earners



Source: Economic Research Service, USDA.

Figure 11

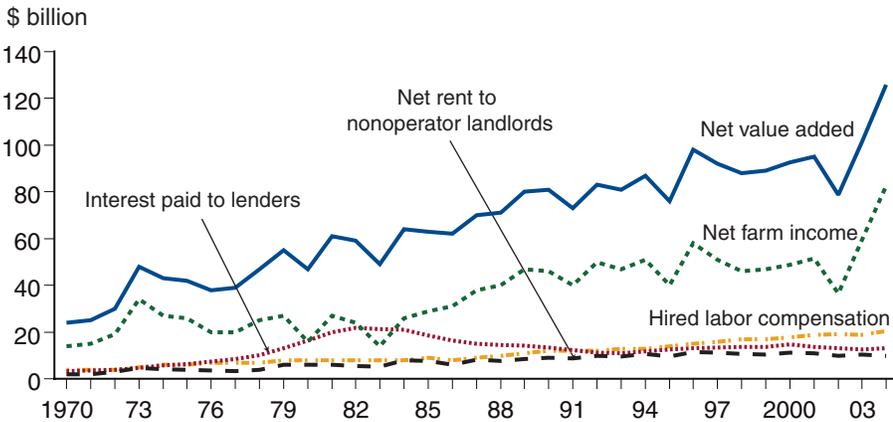
Growth of farm sector value added components, 1970-2004



Source: Economic Research Service, USDA.

Figure 12

Net value added and factor shares, 1970-2004



Source: Economic Research Service, USDA.

Table 4

Shares of net value added by farms distributed to claimants

Net value added claimant	2003	2004
	<i>Percent</i>	
Proprietors, partnerships, & family corporations	46.4	44.6
Nonfamily farms	4.7	7.5
Hired labor	19.8	17.6
Contractors	7.8	11.6
Lenders	10.9	8.5
Nonoperator landlords	10.4	10.2
Total	100.0	100.0

Source: ARMS, USDA.

of net value added among these groups in 2003 and 2004. Equity holders saw their share of net value added increase from almost 59 to 63.7 percent. This increase arose mostly from share increases for nonfamily farm operators and contractors. The equity holders' shares represent increases from 2001 (51.4 percent) and 2002 (45.3 percent).

Table 5 shows the distribution of the various components of value added among farm operators, landlords, and contractors for 2004. Farm operators received about 82 percent of total net farm income in 2004, with about 79 percent coming from their farm operations and about 3 percent from their role as landlords to other farm operations. Over 18 percent of net farm income in 2004 went to contractors.

ARMS data allow observing how farm sector net value added is distributed among ERS farm resource regions and farm types (<http://www.ers.usda.gov/Emphases/Harmony/issues/resourceregions/resourceregions.htm>). The Heartland and Fruitful Rim regions of the United States accounted for almost half of net value added among the nine ERS farm resource regions in 2004 (fig. 13). High-value crop farms and cash grain and soybean farms accounted for almost half of U.S. agriculture's net value added in 2004 (fig. 14).

Table 5

Components of value added, 2004

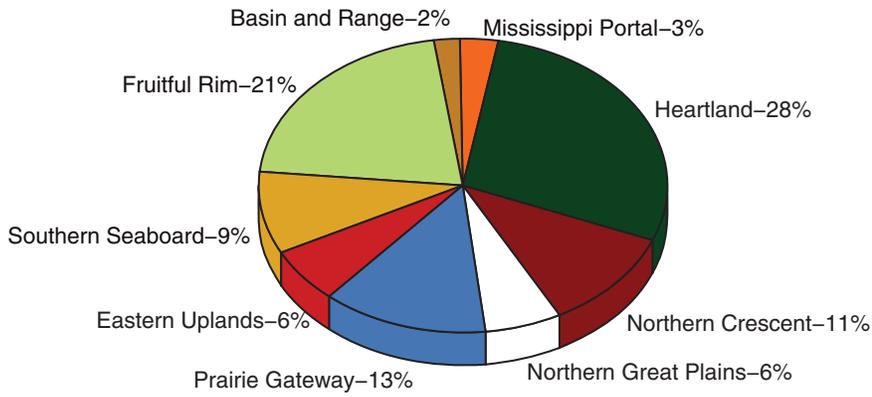
Component	Proprietors, partnerships, & family corporations	Nonfamily farms	Landlords	Contractors	ARMS total
	<i>Percent of total</i>				
Value of agricultural production	67.9	11.1	6.5	14.5	100.0
Purchased inputs	70.0	10.7	0.9	18.4	100.0
Net government transactions	119.3	-2.2	-17.0	-0.1	100.0
Gross value added	67.0	11.2	12.1	9.7	100.0
Capital consumption	79.8	6.8	13.4	0.0	100.0
Net value added	64.4	12.1	11.9	11.6	100.0
Payments to stakeholders	84.9	14.9	0.1	0.1	100.0
-- employee compensation	75.4	24.5	0.0	0.1	100.0
-- interest	94.1	5.7	0.2	0.0	100.0
-- rent to nonoperator landlords	94.0	6.0	0.0	0.0	100.0
Net farm income	67.7	11.4	2.7	18.2	100.0

Note: Landlord column accounts for operator and nonoperator landlords for rows "value of agricultural production" through "net value added". Starting with the row "payments to stakeholders", the column accounts solely for operator landlords.

Source: Agricultural Resource Management Survey (ARMS), USDA.

Figure 13

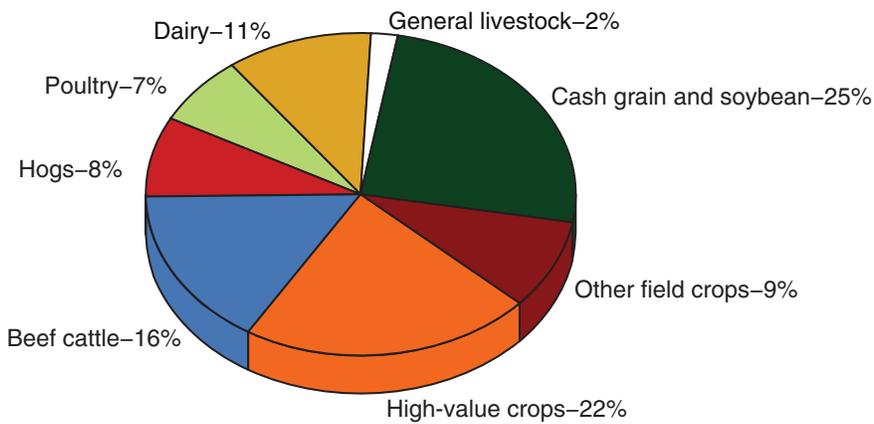
Net value added by farm resource region, 2004



Source: 2004 ARMS.

Figure 14

Net value added by farm commodity specialization type, 2004



Source: 2004 ARMS.

Farm Operator Household Income and Wealth

Both Farm and Off-Farm Earnings Sources Contribute To Record Farm Household Income

The discussion of economic performance of farm operator households in this section by definition covers family farms only—since nonfamily farms do not have a clearly defined household linked to their operation.

(Nonfamily farms include farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.) In 2004, family farms represented about 97 percent of all farms and produced about 86 percent of total value of production. In this chapter, the term “farm” is to be understood to refer to family farms.

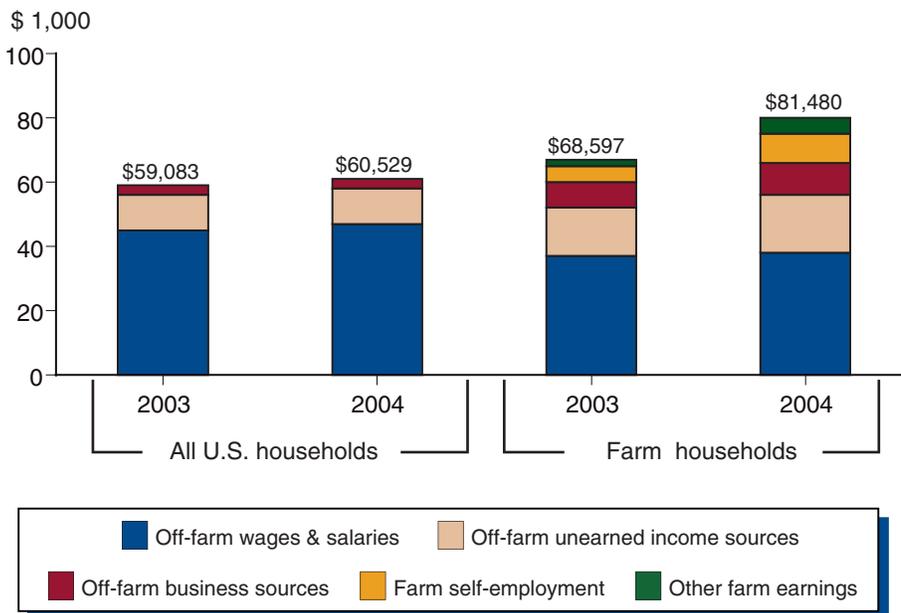
Average farm operator household income was 19 percent higher in 2004 relative to 2003, reaching a record of \$81,480 (fig. 15). The record level reflects increases in both farm and off-farm sources of income. Average farm household earnings from farm activities are estimated to have increased 80 percent, from \$7,884 to \$14,201, achieving a record in the 17 years of USDA collection of farm business and household level data. Income from off-farm sources is estimated to have increased 11 percent², from \$60,713 to \$67,279 (table 3).

Figure 16 illustrates the shares each income component contributes, on average, to total household income for U.S. farm operators in 2004. Farm sources provide 17 percent and off-farm sources 83 percent. Among the

²If we include realized capital gains in 2004 unearned income, the rate of increase is 16 percent. [Realized capital gains were explicitly identified as a component of income for the first time in 2003, but in combination with other components of income. For 2004, realized capital gains were collected separately and are not included in household income, consistent with the income definition in CPS.]

Figure 15

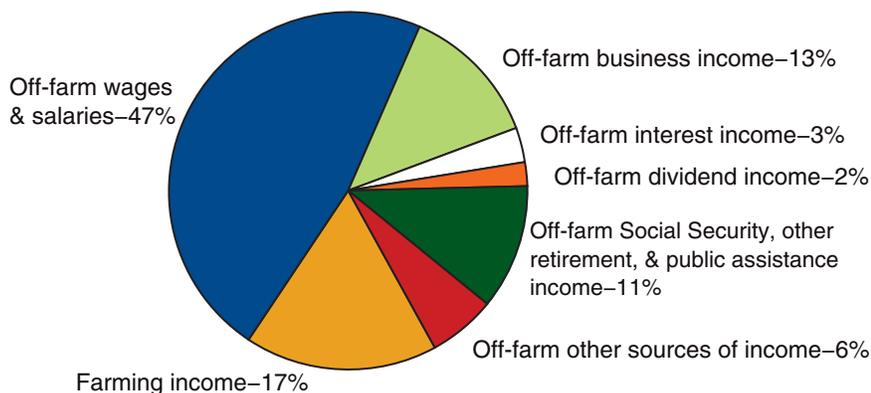
Average household income for farm and all U.S. households, by source, 2003-2004



Source: Economic Research Service, USDA.

Figure 16

Shares of household income by source for farm operator households, 2004



Source: 2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

off-farm sources, wages and salaries provide 47 percent of total household income, off-farm business income provides 13 percent, and unearned sources (interest income, dividend income, social security, other retirement, public assistance payments, and other off-farm income sources) provide 23 percent.

Farm and off-farm sources each contributed about half of the total increase from 2003 to 2004. Though farm earnings increased at a much higher rate than off-farm sources, off-farm income represents on average 83 percent of total farm household income in 2004—and the two factors counterbalance one another.

In contrast, average income for all U.S. households increased only 2.4 percent from 2003 to 2004. As a result, average farm household income in 2004 exceeded average income for all U.S. households by \$20,951 or 35 percent. In 2003, average farm household income exceeded average income for all U.S. households by \$9,514 or 16 percent (table 3). Among the individual components, off-farm unearned sources contributed the greatest amount to the difference. For farm households, unearned income grew at 24 percent, adding about \$3,600; in contrast, for all U.S. households, unearned income grew at 3 percent, adding less than \$500 to average U.S. household income in 2004 relative to 2003 (table 6). Farm households also had greater earnings from business sources—both farm and nonfarm—than all U.S. households. For farm households, income from off-farm business sources and other farm-related earnings (than self-employment income) increased more than \$5,000, relative to a negligible change in business sources for all U.S. households. The self-employment income from farming numbers are consistent between the two groups—the apparently smaller increase in farm self-employment income averaged across farm households only relative to across all U.S. households (\$2 vs. \$3,401) is approximately proportional to the 1-percent farm household share of all U.S. households.

Figure 17 illustrates that average income of farm operator households has been comparable with average income for all U.S. households since the late 1960s, though farm household income has been more variable. For every

Table 6

Average household income for farm households and all U.S. households, by source, 2003 and 2004

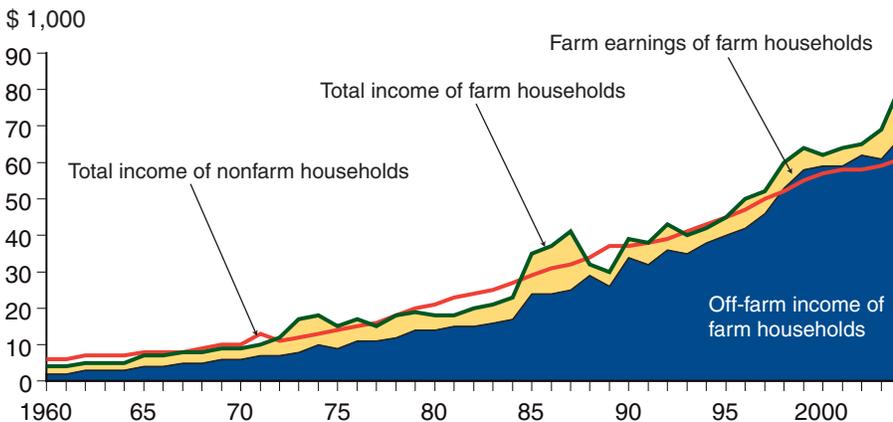
	All U.S. households				Farm operator households			
	2003	2004	Diff. 03 to 04	% chg. 03 to 04	2003	2004	Diff. 03 to 04	% chg. 03 to 04
	—— Dollars ——				—— Dollars ——			
Off-farm wages and salaries	45,344	46,529	1,185	3	37,674	38,416	742	2
Off-farm unearned income sources ¹	10,578	10,936	358	3	14,870	18,461	3,591	24
Off-farm business sources	2,918	2,819	-99	-3	8,169	10,402	2,223	27
Farm self-employment	243	245	2	1	5,437	8,838	3,401	63
Other farm-related earnings ²	--	--	--	--	2,447	5,363	2,916	119
Total	59,083	60,529	1,446	2	68,597	81,480	12,883	19
Ratio of average income for farm operator households to average income of all U.S. households:					1.16	1.35		

¹ Includes interest and dividends, public transfers (e.g., Social Security, public assistance, veterans payments, disability income), and private transfers (e.g., retirement income, alimony, and child support).

² For farm operator households, includes net rental income from the farm business and net rental income from farmland held by household members that is not part of the farm business; for all U.S. households, all rent is included in off-farm unearned income sources. Income from other farm-related businesses is included in off-farm business sources.

Sources: U.S. Dept. of Agriculture, Economic Research Service, 2003, and 2004 Agricultural Resource Management Survey (ARMS) for farm operator household data. U.S. Dept. of Commerce, Bureau of the Current Population Survey (CPS) Census, 2003, and 2004 for U.S. average household income.

Figure 17

Average household income for farm households and all U.S. households, 1960-2004

Source: Economic Research Service, USDA.

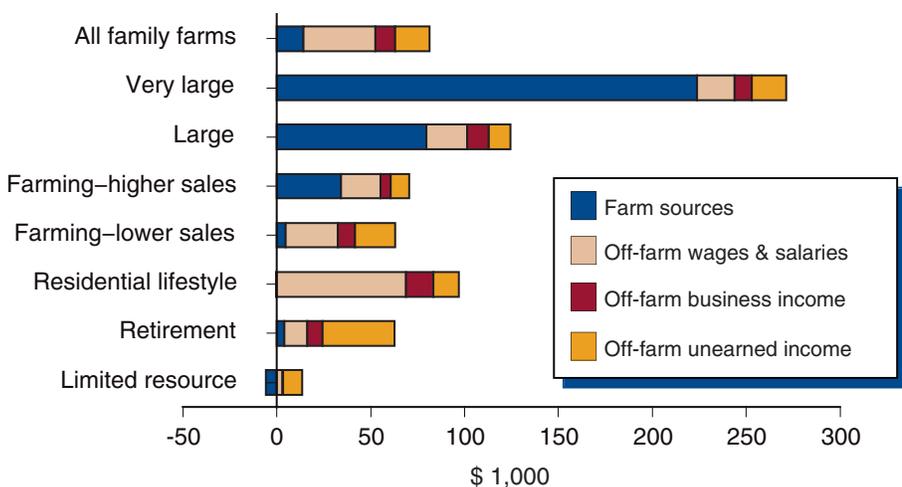
year since 1996, average income for farm households has exceeded average U.S. household income; during the period 1996-2003, the average difference was 12 percent. Increasing farm household participation in off-farm sectors has been a key factor in the increase in relative economic performance of farm households relative to all U.S. households. Among the approximately two million family farms, the share of farm operators declaring farming or ranching as their primary occupation had declined to 37 percent by 2004 from around half in 1996—though their farms produced 87 percent of 2004 total value of farm production. In 42 percent of farms, the operator identifies an occupation other than farming or ranching as their primary occupation; and on 18 percent of farms, the operators consider themselves to be retired.

The increases in farm and in off-farm income from 2003 to 2004 were broadly distributed across all of the farm typology groups (table 7). For example, residential-lifestyle farms, the largest group (41 percent of all farms) and the ones most integrated into the off-farm economy, experienced an increase in average farm income from -\$4,476 in 2003 to a negligible negative amount in 2004. Retirement farms (16 percent) experienced a similar increase in average farm earnings from a negligible positive amount in 2003 to \$4,136 in 2004. For large and very large farms, farm earnings increased 27 percent, from \$62,775 to \$79,516 and from \$176,938 to \$223,791, respectively.

Figure 18 illustrates the differences across farm typology classes in the relative contributions of the different sources of income in 2004. From the analogous data reported in table 7 for 1997-2004, we can see that the patterns are fairly consistent through time. On average, households operating limited-resource and residential/lifestyle small farms reported losing money from farming activities, and retirement farm operators reported relatively low levels of income from farming. However, total household income levels are widely disparate across these three categories of farm households. Compared with average 2004 farm household income of residential/lifestyle farms of \$96,498, average household income is estimated to be \$7,702 for limited resource households and \$62,554 for retirement farm households in 2004. Whereas residential/lifestyle farm households rely more on earned income (off-farm wages and salaries, and off-farm business income), limited resource and retirement farm households obtain most of their off-farm income from unearned income (net income from interest, dividends, Social Security, retirement, and other public programs, and other sources).

As gross sales of farms increase, both the average level and share of off-farm earned income declines, and the average share of income from farming increases. Whereas farming-occupation/lower-sales farms averaged 8 percent of their total household income from farming activities, very large farms averaged an 83-percent farm share.

Figure 18
Average household income varies by farm typology, 2004



Source: 2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

Table 7

Selected components of farm household income by farm typology, 1996–2004

Item	1996	1997	1998	1999	2000 ¹	2001 ¹	2002	2003	2004
Number family farms									
All	1,961,659	2,011,571	2,022,422	2,147,575	2,121,585	2,091,919	2,114,826	2,084,715	2,060,822
Limited-resources	291,661	195,570	150,270	127,738	127,247	*88,136	106,047	234,302	198,629
Retirement	261,423	304,296	290,941	297,566	319,436	232,286	395,636	305,687	337,785
Residential/lifestyle	537,183	811,749	834,318	931,265	913,083	976,191	851,194	889,964	837,542
Farming occupation/ lower-sales	524,819	396,695	422,199	479,918	455,983	483,883	450,895	366,457	395,772
Farming occupation/ higher-sales	192,265	178,217	171,472	175,371	172,722	164,472	160,429	136,314	133,299
Large	95,486	79,230	91,937	77,313	78,258	84,402	86,303	85,257	86,087
Very large	58,821	45,815	61,284	58,406	54,857	62,550	64,323	66,734	71,708
Farm earnings									
All	7,904	6,205	7,104	6,178	3,064	*5,899	*3,477	7,884	14,201
Limited-resources	*-2,954	-3,229	*-3,230	-3,571	*-2,978	*-2,986	-5,062	-7,238	-5,946
Retirement	@134	@1,157	@-1,499	*-1,434	*-1,303	@-741	*-1,892	@394	*4,136
Residential/lifestyle	-4,395	-3,668	-4,309	-4,106	-5,842	-5,631	-5,803	-4,476	@-381
Farming occupation/ lower-sales	@-1,289	@1,215	*-2,414	@-338	*-2,068	@-1,892	@-2,033	*2,317	#4,804
Farming occupation/ higher-sales	25,709	22,040	21,463	26,335	14,195	*25,976	16,966	29,248	*34,319
Large	53,267	45,231	59,287	50,561	44,478	*38,798	39,828	62,775	79,516
Very large	158,778	169,065	175,769	164,533	139,278	*186,116	129,588	176,938	223,791
Off-farm earned income									
All	31,740	34,552	39,149	44,658	43,269	43,057	46,521	45,843	48,818
Limited-resources	6,635	5,226	7,035	5,861	5,917	#5,491	6,221	*5,686	3,449
Retirement	*15,422	8,609	16,444	11,254	11,982	10,078	13,967	16,742	20,305
Residential/lifestyle	69,563	63,034	67,753	79,963	75,579	74,950	77,431	78,882	83,548
Farming occupation/ lower-sales	22,272	22,871	21,469	22,409	25,015	*16,614	37,555	31,745	36,951
Farming occupation/ higher-sales	21,142	14,654	20,762	19,195	20,645	*18,683	32,074	19,904	26,241
Large	16,946	24,889	31,062	24,015	23,493	19,316	27,682	29,892	33,238
Very large	26,459	22,662	21,638	23,371	25,482	21,405	28,301	30,307	29,320
Off-farm unearned income									
All	10,714	11,806	13,480	13,330	15,959	15,115	15,764	14,870	18,461
Limited-resources	6,952	6,607	6,119	7,247	8,064	5,148	7,462	8,562	10,200
Retirement	25,170	30,748	30,713	30,736	32,474	38,796	34,345	32,823	38,113
Residential/lifestyle	6,504	6,393	8,638	7,855	8,746	*9,058	9,201	11,229	13,331
Farming occupation/ lower-sales	10,528	10,047	15,717	17,517	23,397	20,555	17,931	15,891	21,168
Farming occupation/ higher-sales	*12,329	*14,263	7,957	7,430	10,599	#8,031	9,058	10,471	9,769
Large	5,463	9,576	16,201	10,574	16,083	*14,044	7,931	9,383	11,633
Very large	8,481	13,636	11,604	12,211	13,034	*13,749	14,055	13,726	*18,114

See footnotes at end of table.

—Continued

Table 7

Selected components of farm household income by farm typology, 1996–2004—Continued

Item	1996	1997	1998	1999	2000 ¹	2001 ¹	2002	2003	2004
Average farm operator household income									
All	50,359	52,563	59,733	64,167	62,292	64,071	65,761	68,597	81,480
Limited-resources	10,633	8,605	9,923	9,537	11,004	7,653	8,621	7,011	7,702
Retirement	40,727	40,515	45,658	40,556	43,153	48,133	46,420	49,959	62,554
Residential/lifestyle	71,672	65,758	72,082	83,712	78,483	78,377	80,828	85,635	96,498
Farming occupation/ lower-sales	31,512	34,133	34,772	39,589	46,345	35,276	53,453	49,953	62,923
Farming occupation/ higher-sales	59,180	50,957	50,182	52,960	45,440	*52,690	58,098	59,623	70,330
Large	75,677	79,696	106,550	85,150	84,054	72,158	75,441	102,050	124,386
Very large	193,718	205,363	209,010	200,115	177,793	*221,270	171,945	220,971	271,225
Median farm operator household income									
All	27,298	34,001	40,181	43,786	43,525	43,886	46,490	47,692	53,595
Limited-resources	10,875	*9,360	11,366	10,835	12,100	8,872	11,013	10,896	10,300
Retirement	27,015	28,237	31,481	29,864	32,754	33,800	34,828	36,010	46,586
Residential/lifestyle	44,900	47,151	51,604	58,013	56,080	*54,885	59,654	61,457	69,247
Farming occupation/ lower-sales	23,104	25,705	26,006	28,925	31,272	28,846	36,905	40,056	38,657
Farming occupation/ higher-sales	47,758	39,908	45,225	50,084	44,370	47,343	47,834	53,743	61,293
Large	64,953	68,251	85,346	73,260	69,217	*75,895	71,043	80,962	98,653
Very large	120,332	113,813	106,465	114,459	97,400	121,099	99,983	126,932	154,773

¹ Estimates on version 1 only, not the official estimate of household income.

* indicates that the standard error of the estimate is greater than 25 percent and less than or equal to 50 percent.

indicates that the standard error of the estimate is greater than 50 percent and less than or equal to 75 percent.

@ indicates that the standard error of the estimate is greater than 75 percent.

Source: 1996–2004 USDA Agricultural Resource Management Survey.

Off-farm Employment Contributions of Operators and Spouses

Across all farms, operators earned about 61 percent of all wages and salaries, spouses earned about 36 percent, and other household members earned the additional 3 percent (table 8). But that breakdown is driven by the distinctive pattern in residential-lifestyle (R/L) farms, which represent 41 percent of all farms. On R/L farms, off-farm earnings in wages and salaries and other businesses are greater than for all other groups—and the contribution of operators relative to their spouses is greater. Consequently, spouses on R/L farms earn only 29 percent of mean earned off-farm income, compared with earning over 50 percent for other typology groups (with the exception of limited resource farm operator households).

Operators and spouses who worked off the farm were each asked to specify their two main reasons for seeking off-farm employment from a list of 10 potential reasons. The most common response given by the operator, irrespective of farm type, was to increase the income of the farm household (fig. 19). While spouses primarily offered increased income as the primary reason also, again irrespective of farm type, a number alternatively cited health insurance or personal satisfaction as the primary reason for seeking off-farm employment (table 8). All three factors ranked high on the list of secondary reasons.

Table 8

Off-farm wages and salary income and selected reasons for working off-farm, by farm typology, 2004

Item	Farm typology						
	Limited resource	Retired	Residential/ lifestyle	Farming occupation/ low sales	Farming occupation/ high sales	Large	Very large
<i>Dollars per household</i>							
Off-farm wages and salaries	2,837	11,934	68,715	27,660	20,844	21,857	19,949
Household	2,837	11,934	68,715	27,660	20,844	21,857	19,949
Operator	*1,601	4,237	47,653	*11,572	5,266	7,570	6,577
Spouse	*925	6,536	*19,700	14,822	14,467	13,455	12,477
<i>Percent selecting reason</i>							
Primary reasons for working off-farm ² :							
Operator reason							
Increase family income	50	45	67	41	58	45	35
Health insurance	d	2	4	*5	4	*5	*6
Personal satisfaction	20	12	6	*5	*7	10	8
Spouse reason							
Increase income	*45	60	63	46	50	45	44
Health insurance	40	*9	12	*14	30	30	23
Personal satisfaction	*8	*8	7	*10	*5	*10	*13

d = indicates value is not available due to insufficient information.

* = indicates that the standard error of the estimate is greater than 25 percent and less than or equal to 50 percent.

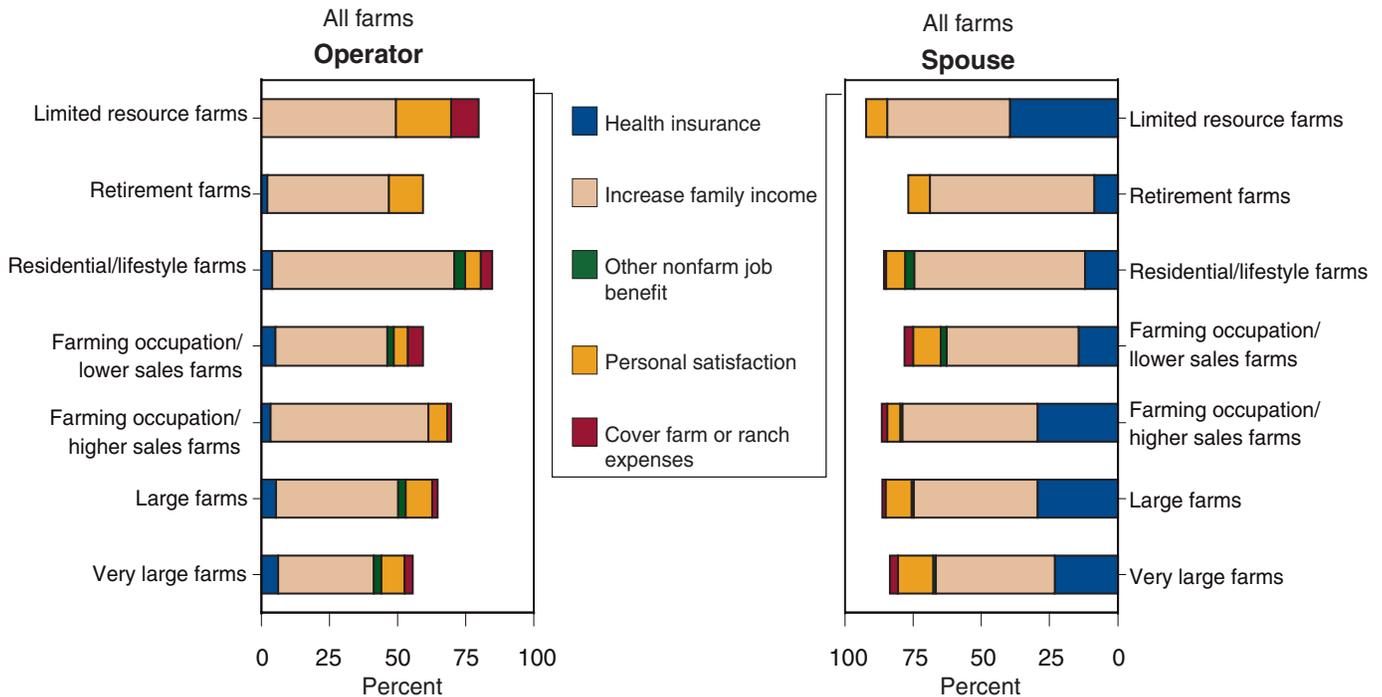
¹ Earned income comes from off-farm self-employment or wage and salary jobs.

² Respondents were offered 10 choices: using skills; health insurance; other nonfarm job benefits; increase family income; extra time available; diversification of income sources; personal satisfaction; opportunity to get discounts on inputs; cover farm expenses; and repay farm debt.

Source: USDA, Economic Research Service, 2004 Agricultural Resource Management Survey, Phase III.

Figure 19

Primary reason for operators and spouses working off-farm by farm typology, 2004



Source: 2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

Average Household Income Varies Across Farm Commodity Specializations, Regions, and States

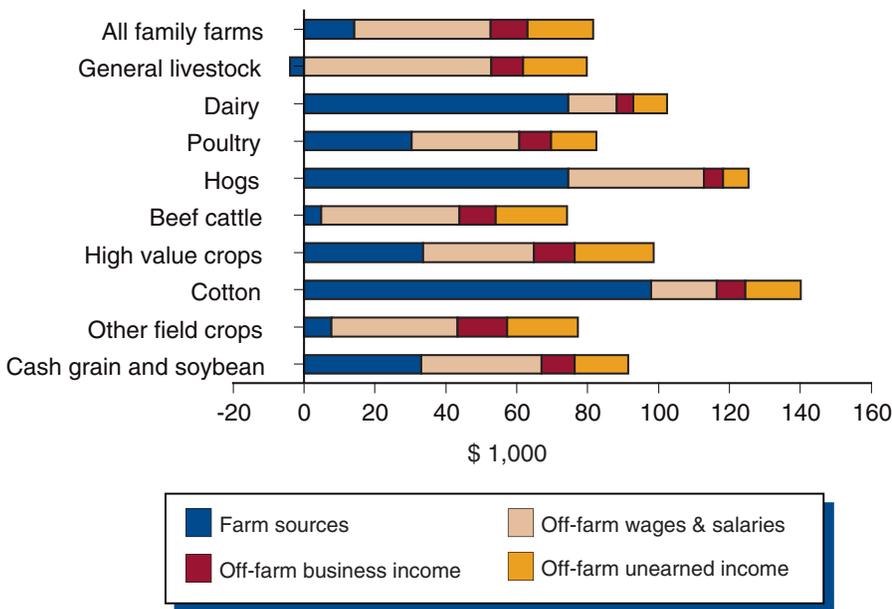
Commodity specialization farm type

ERS defines a farm as “specialized” if one commodity or group of commodities makes up at least 50 percent of the farm's total value of agricultural production. Using this definition, about half of all U.S. farm operator households can be classified as a particular commodity type. The other farms produce a mix of commodities, none of which accounts for at least 50 percent of total production value. Because this definition depends on yearly prices and quantities, an individual operation may be classified as one type one year and another type another year.

In 2004, cotton farm households (less than 1 percent of all farm households) earned the highest estimated average household income, at \$140,162, with 70 percent of this income attributed to farming (fig. 20). They received the largest average government payments. About 43 percent of cotton farms are in the Prairie Gateway.

More farms (35 percent) are classified as beef cattle than any other type of farm. Operators of beef/cattle farms continued to realize the lowest average household income in 2004 (\$74,200). With little income from their farming enterprises (\$4,835), beef farm households rely primarily on income from off-farm sources. About 23 percent of surveyed beef farms were located in the Eastern Uplands, and 20 percent in the Prairie Gateway.

Figure 20
Average household income varies by farm type, 2004



Source: 2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

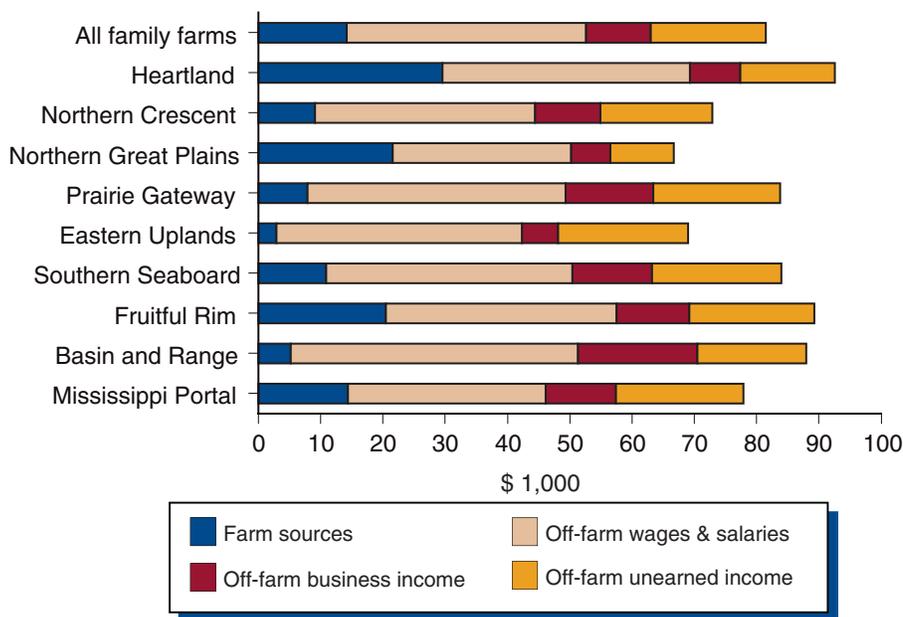
The average income of households that operated cash grain and soybean farms (15 percent of all family farms) was \$91,392 in 2004, with 36 percent of this income attributed to farming activities (fig. 20). About 54 percent of cash grain and soybean farms are located in the Heartland.

The average household incomes of hog farm operators and dairy farm operators are estimated to be the second and fourth highest in 2004, respectively. In 2004, hog farm operators reported an average household income of \$125,332, with 60 percent attributed to farming. About 39 percent of the hog farms are located in the Heartland and another 14 percent in the Southern Seaboard. Dairy farm operators reported an average household income of \$102,412 in 2004, with 73 percent of this income attributed to farming activities. About 60 percent of dairy farms are located in the Northern Crescent.

Regions

In 2004, the Heartland region had the largest share (21 percent) of farm operator households, as well as the highest average farm household income (\$92,596), 14 percent above the national average of farm operator households. Heartland farm households also had the highest net earnings from farm activities (\$29,610) (fig. 21). Nearly 40 percent of the farms in the Heartland specialized in cash grains and soybeans, 24 percent in other field crops, and 22 percent in beef cattle. Resulting from the significant increase in farm income, about 32 percent of regional average household income was attributed to farm sources. This is a jump from 2003, when only 18 percent of household income came from farm sources.

Figure 21
Average household income varies by resource region, 2004



Source: 2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

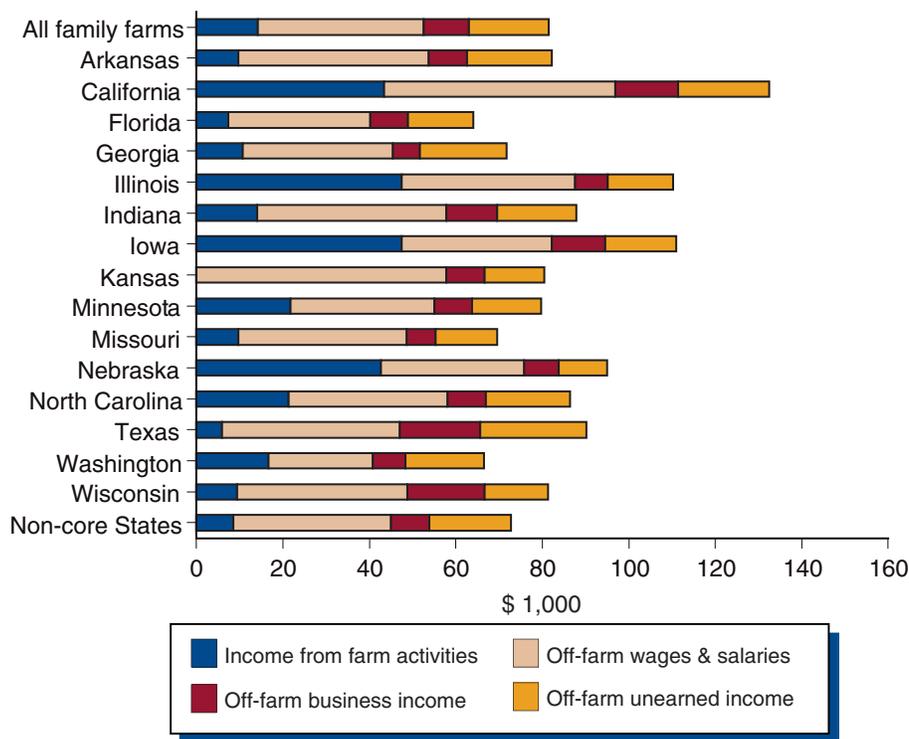
Featured agricultural States

Starting with 2003 data collection, the number of farms included in the sample for the ARMS was increased to allow estimation of farm and household income indicators for 15 agricultural States (fig. 22). Previous surveys did not provide sufficient information in order to generate statistically reliable estimates at the State level. In 2004—as in 2003—farms in California realized the highest average farm household income (\$132,412), which reflects about an 8-percent increase over the previous year’s average. They also realized the highest average off-farm income, two-thirds from off-farm wages and salaries and the remainder from off-farm businesses. Still, 33 percent of total household income was from farm sources. High-value crop farms comprised nearly half of all California farms (relative to 3 percent of all farms in the 48 States) and high-value crop production contributed 65 percent of California total value of production. Florida was the State with the lowest average household income in the group of 15 (\$64,030), with about 12 percent coming from farming activities. About two-thirds (68 percent) of farms in Florida were classified as beef cattle or general livestock farms, and another 23 percent were classified as high-value crop farms.

Across all the States, Texas has the most farms (11 percent). About 63 percent of the total value of production of Texas farms was attributed to livestock. Average household income for these farms was \$90,144, with about 6 percent coming from farming activities. Texas farm households realized the second highest average off-farm income among the featured States.

Figure 22

Average household income varies by State, 2004



Source: 2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

Farm Household Wealth

Across all U.S. households, the major share of household wealth is in houses and other real estate. In contrast, farm households have the major share of their wealth in farm business wealth. (Wealth, or net worth, is derived by subtracting debts from assets.) (fig. 23).

Comparison of the median levels of household wealth reveals that in 2004 the median wealth of farm households (\$460,189) was much higher than the median wealth of all U.S. households (\$92,265). And for every group in the ERS farm typology, including limited-resource farm operators, median wealth is higher than the median wealth of all U.S. households.

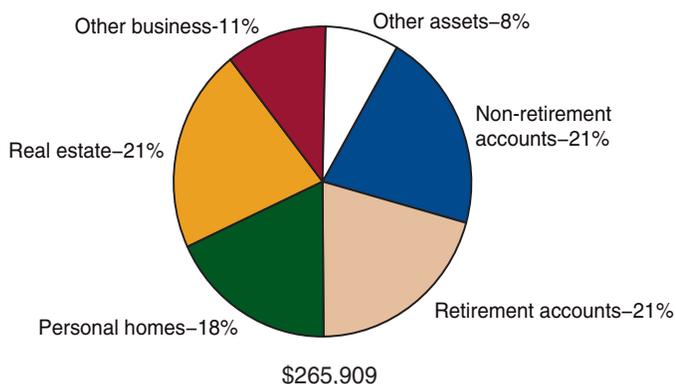
The distribution of wealth among farm households is less concentrated than it is for all U.S. households. Among all U.S. households in 2001 (the most recent year for Survey of Consumer Finance data), the bottom 50 percent of households accounted for 3 percent of total wealth while the top 1 percent accounted for about 33 percent of total wealth. In contrast, among all farm households in 2001, the bottom 50 percent accounted for 14 percent of wealth, and the top 1 percent accounted for 8 percent of total wealth. As entrepreneurs, farm households own business assets for the farm, with farmland, currently representing 60 percent of their wealth. In recent years, land has appreciated in value, especially in locations close to urban centers.

In 2004, the average (mean) wealth of farm households was \$747,413, with farm net worth comprising 73 percent of this total. This represents a 10-percent increase in average wealth over the previous year, with increases in both farm and nonfarm net worth.

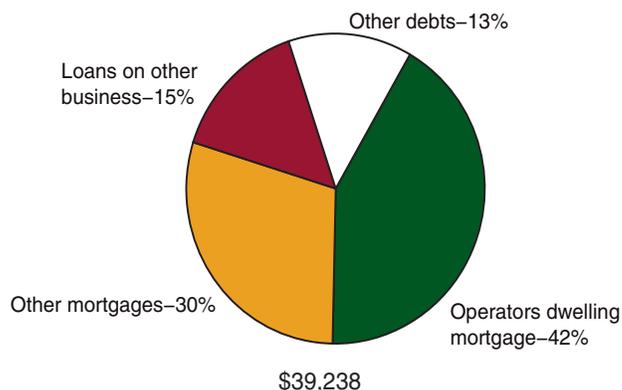
The distribution of wealth by farm typology illustrates the differences that exist in the distribution of wealth among farm households (fig. 24). Operators of limited resource farms realized the lowest average household net worth, household farm net worth, and household nonfarm net worth. On the other hand, very large farms held 10.3 percent of total farm household net

Figure 23

Components of nonfarm assets of farm households, 2004



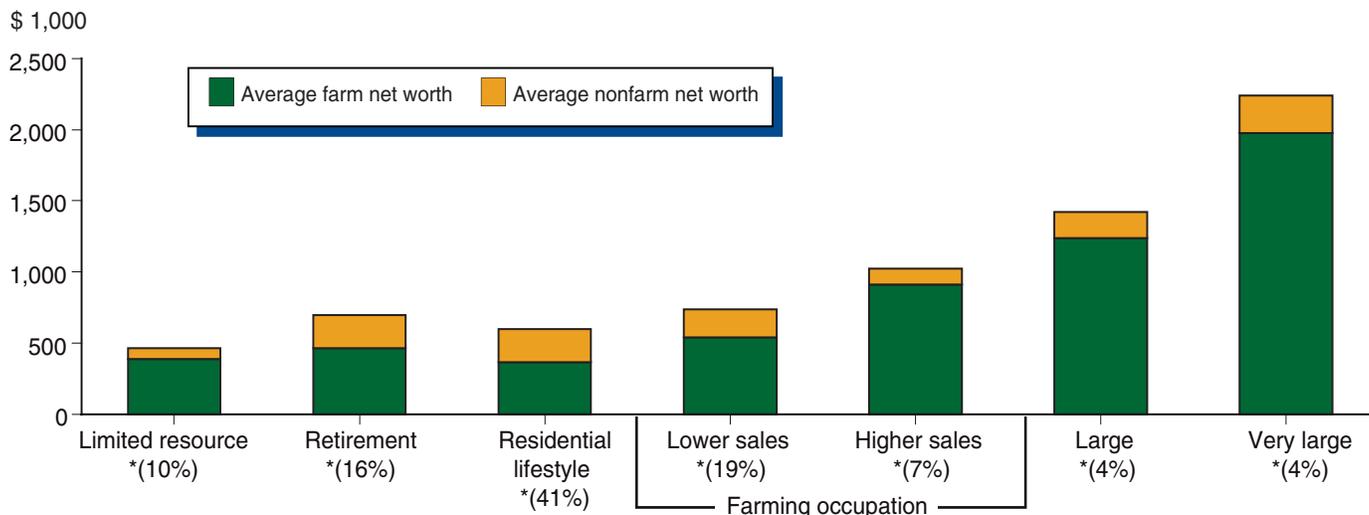
Components of nonfarm debt of farm households, 2004



Source: 2003 and 2004 ARMS, USDA.

Figure 24

Average net worth of farm households by farm typology, 2004



* = Share of total farms.

Source: USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

worth. Operators of these farms had the highest average household net worth, household farm net worth, and household nonfarm net worth. Residential/lifestyle farms, which represent about 41 percent of all farms, held 33 percent of total farm household net worth.

Economic Well-being of Farm Households: Joint Income and Wealth Outcomes

Gauging the economic well-being of a farm household based on income is incomplete—farm households have more highly variable income but also higher wealth than all U.S. households. Movements in commodity prices and production shortfalls due to weather contribute to farm income variations from year to year. When income declines temporarily, access to financial or other relatively liquid assets (such as inventories) can help forestall a reduction in household consumption. However, in 2004 farm households have lower average consumption expenditures than other U.S. households—despite having higher incomes and greater wealth (table 9).

Since average comparisons can be misleading in assessing economic well-being, we divide farm households into four groups, separating them into low and high levels of income, and low and high levels of wealth, with the median levels of U.S. household income or wealth as the dividing lines between low and high. The distribution of farm households in each income/wealth group has been relatively consistent over time (fig. 25).

The big difference between farm and other U.S. households is in the pattern of wealth, not in income: only 5 percent of all farm households—in contrast to 50 percent of all U.S. households— have wealth less than U.S. median household wealth. The 95 percent of farm households with high wealth are split into two groups, with 56 percent having income higher than the U.S. median and 39 percent having income lower than the U.S. median.

Table 9

Characteristics of farm operator households by well-being classification of family farms based on U.S. median income and U.S. median wealth, 2004

Item	Lower income and lower wealth	Lower income and higher wealth	Higher income and lower wealth	Higher income and higher wealth	U.S. total
Number of family farms	63,355	803,343	39,687	1,154,437	2,060,822
Percent of family farms	3.1	39.0	1.9	56.0	100.0
Percent of total value of production	1.2	24.1	1.6	73.2	100.0
Distribution of value of production					
Percent crop value of production	*36.1	49.4	46.3	49.2	49.1
Percent livestock value of production	63.9	50.6	53.7	50.8	50.9
Distribution by farm typology					
Limited-resources	44.0	21.3	d	d	9.6
Retirement	na	19.7	d	14.8	16.4
Residential/lifestyle	33.1	22.0	67.1	53.1	40.6
Farming occupation/lower sales	*10.9	26.8	*13.3	14.6	19.2
Farming occupation/higher sales	*3.0	6.1	*4.6	7.0	6.5
Large	d	2.5	#3.5	5.5	4.2
Very large	*1.1	1.7	2.9	4.9	3.5
Farm size (operated acres)	131	485	#410	449	452
Percent of acres	1	42	*2	56	100
Average government payment	1,301	3,643	*3,537	5,846	4,803
Percent of payments	1	30	1	68	100
Farm location					
Northeast	d	7.7	d	5.6	6.4
Midwest	26.8	37.6	46.0	38.0	37.6
South	53.7	40.4	46.0	43.5	42.7
West	*13.3	*14.3	*7.8	#12.9	#13.3
Farm income	-6,324	-9,873	21,877	31,816	14,201
Off-farm income	21,660	25,977	75,753	98,232	67,279
Off-farm wages and salaries	15,311	12,229	57,040	57,267	38,416
Off-farm business income	*424	1,900	7,797	16,955	10,402
Unearned income	5,924	11,849	10,916	24,010	18,461
Farm operator household average income	15,336	16,104	97,630	130,048	81,480
Farm operator household median income	13,461	23,171	69,533	85,781	53,595
Farm operator household average expenditures	18,732	26,074	44,390	42,874	35,612
Farm operator household median expenditures	*15,500	24,250	40,881	37,500	31,093
Farm operator household average net worth	26,289	627,911	@-18,108	896,462	747,413
Farm operator household median net worth	52,031	397,700	42,675	571,823	460,189
Farm operator household average farm net worth	44,130	513,802	69,695	613,785	546,819
Farm operator household median farm net worth	50,654	290,500	50,662	349,808	306,689
Farm operator household average nonfarm net worth	*-17,841	114,109	*-87,803	282,678	200,593
Farm operator household median nonfarm net worth	250	63,000	-1,500	145,163	94,250

* indicates that the standard error of the estimate is greater than 25 percent and less than or equal to 50 percent.

indicates that the standard error of the estimate is greater than 50 percent and less than or equal to 75 percent.

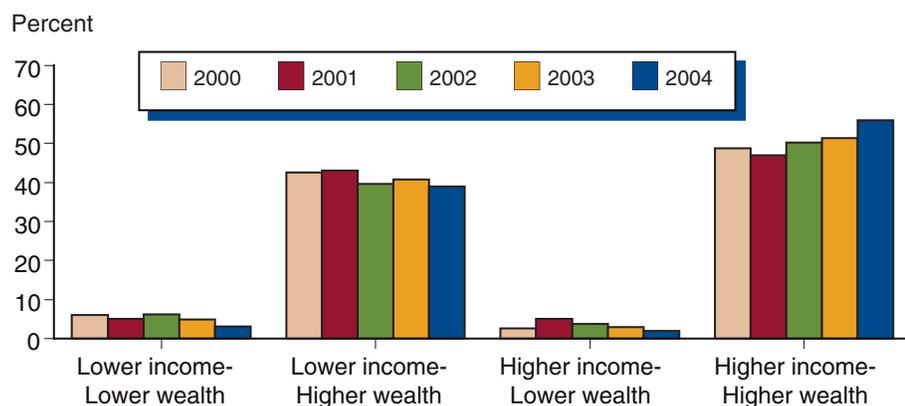
@ indicates that the standard error of the estimate is greater than 75 percent.

d indicates value is not available due to insufficient information.

Source: 2004 USDA Agricultural Resource Management Survey.

Figure 25

Distribution of farm households by measures of economic well-being, 2000-2004



Note: Income and wealth levels for farm households are compared with the median levels of income and wealth of all U.S. households.

Source: 2000-2004 USDA Agricultural Resource Management Survey, Economic Research Service, USDA.

The major difference appears to be that, on average, the low-income/high wealth group tends to have incurred farm losses in the year, and their off-farm income is not sufficiently high to offset it.

The remaining 5 percent with mean wealth levels lower than the U.S. median are split between two distinct groups of the households. The high-income/low-wealth households are more focused, on average, on the off-farm sector for employment, with high average off-farm income levels (that offset small average loss in farm income). These farm households report substantial losses in their off-farm wealth, likely due to unrealized capital losses. In contrast, the low-income/low-wealth group has a larger share of farm operators for whom farming is their primary occupation (48 percent), and on average low off-farm earnings, a small loss in farm income, and losses in their off-farm wealth, again likely due to unrealized capital losses.

Higher income-higher wealth

In 2004, 56 percent of farm households had both higher incomes and greater wealth than the average U.S. household, up from 50 percent in 2003 due to the greater increase in average household income for farm households relative to all U.S. households in 2004. This group of farms reported average net worth of \$896,412 in 2004 (higher than the \$868,413 reported in 2003), of which one-third was household assets not owned by the farming operation. On average, income exceeded consumption expenditures by \$87,174, and further, 96 percent reported farm household income exceeded consumption expenditures.

This group of higher income-higher wealth households include disproportionate shares of large and very large farm operations as well as farm operators who reported a primary occupation other than farming. Representing 56 percent of all farm households, this group on average accounted for 73

percent of farm output and drew 68 percent of government payments. These operators had the highest educational attainment (about a fifth of farm operators had a college degree) and were on average older (about half of the farm operators were 55 or older) than farm operators in the other three categories.

Lower income-higher wealth

Nearly 39 percent of farm households reported lower incomes but greater wealth than the median income and wealth of U.S. households in 2004. For many households in this category, farm-derived income is often negative (an average loss of nearly \$9,873 in 2004). On average, farm household expenditures (\$26,074) exceeded current total household income (\$16,104) in 2004. In fact, in 2004 approximately 50 percent of farm households in this category were not able to meet their consumption expenditures with their current income stream. The households in this group did not have sufficient current household income to meet expenditures in 2004. To meet their consumption expenditures, farm households can borrow against or draw down wealth by accessing their accumulated assets. The lower income-higher wealth farms hold a vast majority (\$513,802) on average of their net worth in business assets, such as land, machinery, and crop and livestock inventories. Nonfarm net worth accounted for 18 percent of the household wealth portfolio.

This group is very similar to the higher income-higher wealth group, except that these farm households lost substantial income from farming in 2004. Compared with other income-wealth groups, this group contains a disproportionate share of midsize farms (farming as main occupation/lower sales) and of farms with operators self-reported as retired. Nearly 39 percent of farms in this category specialized in beef cattle operations. About 36 percent of lower income-higher wealth households report receiving government payments, averaging \$3,643 in 2004 (about 30 percent of total government payments). About two-thirds of farm operators are 55 years or older and many have only attended or completed high school.

Higher income-lower wealth

About 2 percent of farm households had higher income than U.S. median household income and lower wealth than median household wealth in 2004. Most of these farm households are almost entirely focused on off-farm activities, with 67 percent reporting a primary occupation other than farming. These operators are younger than average (38 percent are below 44 years), with more than average (about a third) having attended or completed college. Farm households in this group gained most from rising commodity prices in 2004 compared with average farm households during the same period. The average farm income of these farm households increased from \$16,396 in 2003 to \$21,877, an increase of 33 percent. But still, off-farm income was a dominant (about 77 percent) share of total household incomes. Further, their total household income exceeds consumption expenditures by a wide margin (\$53,240). A significant feature of this group is that the average farm household had negative total wealth or net worth, which is primarily driven from losses in their nonfarm net worth. This group of farm households showed a substantial loss in nonfarm net worth (an

average loss of \$87,803) in 2004, which could be a reflection of unrealized capital losses either in financial or real estate investments. On average, this group of farm households accounted for only 2 percent of total U.S. farm output, with more than half of their agricultural output coming from livestock production.

Lower income-lower wealth

About 3 percent of farm households had both lower incomes and lower wealth than the median income and wealth of U.S. households in 2004. From 2000 to 2004 the share of farm households in this category has been relatively stable. The typology groups with the largest representations are limited-resource farms (44 percent) and residential/lifestyle farms (33 percent). However, only 14 percent of limited-resource farm households are in this category, since the limited resource definition does not take into account household wealth. Surprisingly, more than 48 percent of farm operators in this category reported farming as their primary occupation in 2004. The average household in this category has a thin margin between farm household income and consumption expenditures. In fact, average expenditures (\$18,732) were higher than the average household income (\$15,336). Nearly 43 percent of these farm households reported income less than consumption expenditures in 2004, compared with nearly 32 percent in 2000. Farm households in this group had substantially lower levels of wealth (net worth) compared with average farm households. In fact, like farm households in the higher income-lower wealth group, the farm households in lower income-lower wealth showed loss in nonfarm net worth (an average loss of \$17,841), again which could be a reflection of unrealized capital losses either in financial or real estate investments. Moreover, their small asset base may be insufficient to meet any unexpected shortfall in farm household earnings.

Farm households in this category produce 1 percent of the agricultural output. Many of these farm households specialize in beef cattle (31 percent) and general livestock (22 percent) operations, and as a result more than 64 percent of their agricultural output is from livestock production. Nearly 79 percent of farm households did not receive any payments from the government farm programs. However, farm households received an average of \$1,301 in government payments, about 1 percent of total government payments in 2004. More than half of the farm households in this category are located in the Southern region. Generally, operators of these farm households have less education. For example, more than 60 percent of farm operators in this category have the lowest levels of education—having a high school degree or less.

Financial Position and Debt Repayment Condition of Farms

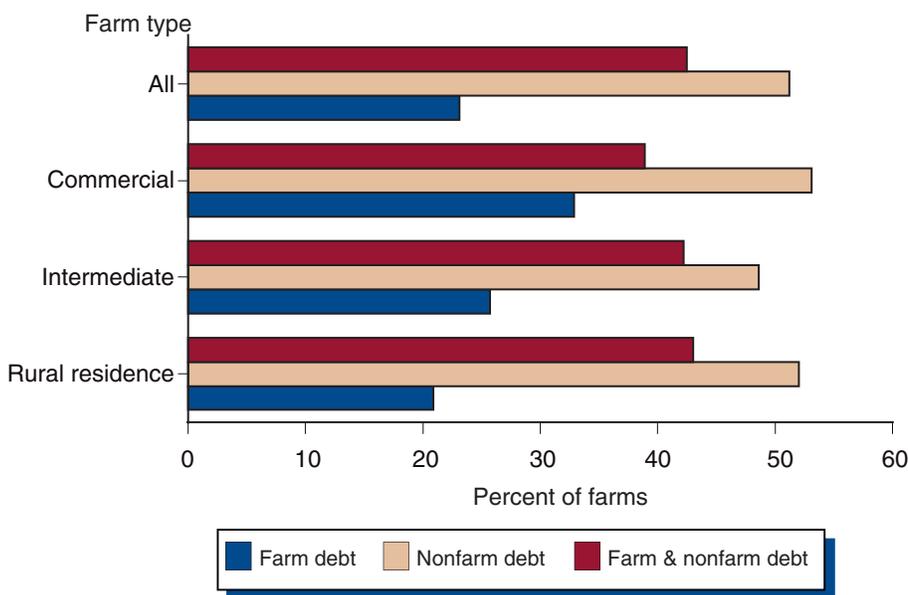
Farm households often hold ownership interests in farm business assets, operator dwellings, and various nonfarm assets. Farm households also incur debt secured by farm business assets as well as nonfarm assets. In 2004, farm business assets accounted for 63 percent of family farm household assets, 27 percent came from nonfarm assets, and 10 percent came from the operator dwelling value. Fifty-nine percent of family farm household debt resulted from the farm business, while 41 percent was from nonfarm debt. In 2004, operator dwelling values averaged \$95,000. Family farm household assets of commercial farms had a higher percentage of farm business assets, while rural residence farms had a larger percentage of nonfarm assets.

More farm households report end-of-the-year debt for nonfarm than farm purposes. Almost 23 percent of farm operator households reported debt balances for their farm business operations at the end of 2004, while 51 percent reported debt for nonfarm purposes (fig. 26). Commercial farmers are more likely to report end-of-year debt (both farm and nonfarm) than either intermediate or rural residence farmers.

ARMS data indicate that 54 percent of all farms took out loans for the purchase of land, machinery, or equipment in 2004 (fig. 27). Loans to refinance existing loan balances, with no additional cash borrowed, accounted for about 15 percent of debt in 2004. Refinanced loans with some cash taken out accounted for over 4 percent of all farm loan balances in 2004. From 2002 to 2004, ARMS data indicate that loans taken for other purposes increased from 17 percent to 25 percent. These “cash out” refinance loans

Figure 26

Share of farm households reporting farm and/or nonfarm debt, by farm typology, 2004



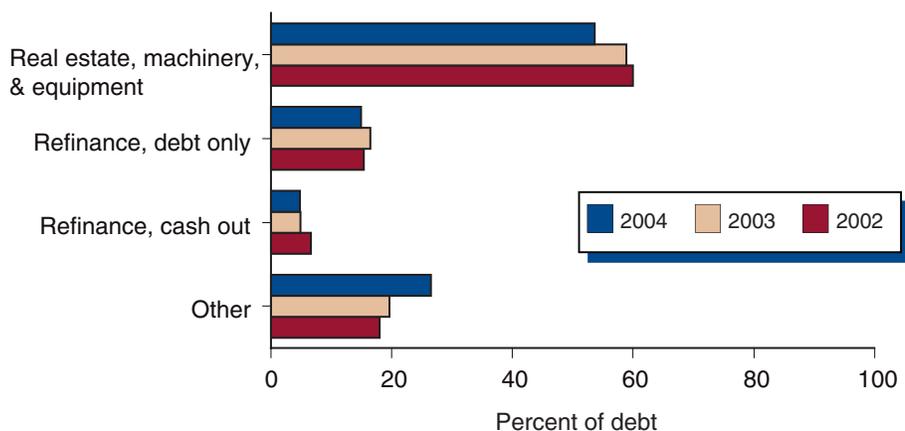
Source: Economic Research Service, USDA.

may be used to finance farm business capital improvements or may be used for nonfarm purposes.

The purpose of farm borrowing in 2004 was similar for all farm typology groups. Debt incurred to finance the purchase of land and/or machinery was the leading purpose for all farm typologies, accounting for 54 percent of loan volume (fig. 28). Refinancing (both with and without cash out) accounted for about 20 percent of the purpose of farm borrowing while other purposes accounted for about 26 percent.

Figure 27

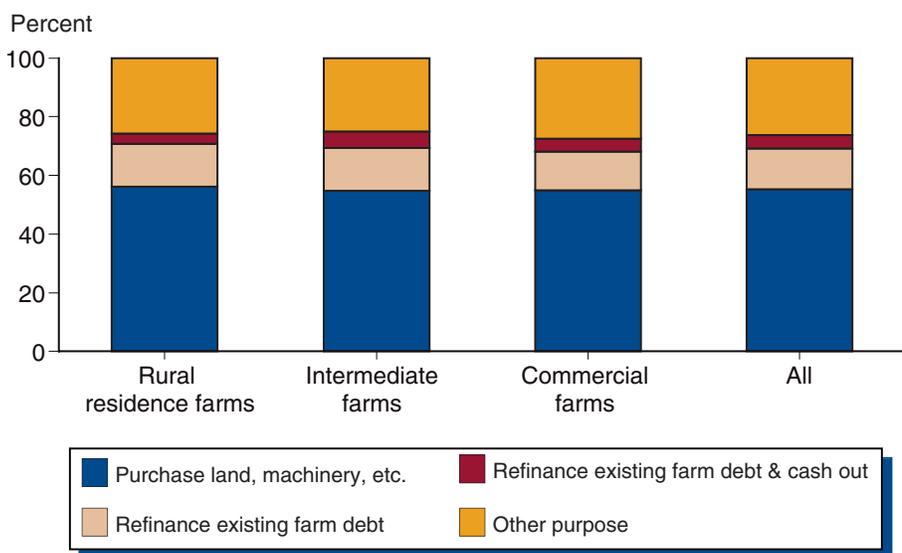
Share of farm debt for various purposes, 2002-2004



Source: 2002, 2003, 2004 ARMS, USDA.

Figure 28

Loan purpose by farm typology, 2004



Source: ARMS, USDA.

Farmers' Financial Position Improves

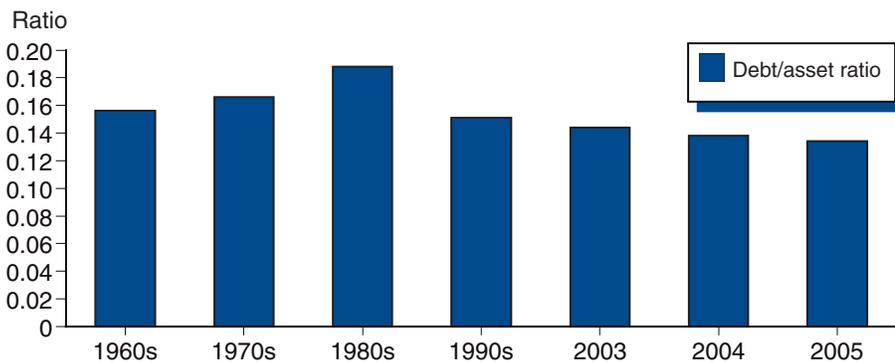
The financial position of the U.S. farm sector, as measured by total farm liabilities relative to total farm asset values, has improved relative to 2000-2002 and the most recent four decades (fig. 29). In 2005 the sector-wide debt-to-asset ratio, which measures the relationship between claims on a business, or debt capital, and assets of the business, is estimated to be 0.134. The last time that the sector-wide debt-to-asset ratio was at this level was in 1961. Knowing the amount and proportion of debt in a farm's capital structure provides an indication of how difficult it might be for operators to obtain additional credit to operate their businesses. Interest rates charged on debt may also be higher for farms with relatively high debt burdens. Relatively high levels of debt-to-asset values may also make the farm more vulnerable to changes in asset values, particularly reductions in value.

Data from the 2004 ARMS showed that 9.4 percent of farms had debt equal to 40 percent or more of asset values. A 1985 survey showed that 21 percent of farms had debts of this magnitude. More highly indebted farms also held a smaller share of debt in 2005 than in 1985, 44 percent of debt compared with 66 percent. At the lower end of the debt/asset measurements, a larger share of farms held debt below 10 percent of asset values in 2005, about 73 percent in 2005 compared with 55 percent in 1985 (fig. 30).

Debt-free farming also appears to be more common than two decades ago. In 2005, 60 percent of farms reported having no outstanding debt at year-end 2004. For comparison, about 40 percent of farms reported having no debt in 1985. Farms that reported having no debt tend to be smaller than farms with debt and, as a group, accounted for a fourth of total value of production. Farms with no year-end debt also had smaller operations, on average, 259 acres compared with 747 acres, and a much larger share of no-debt farms were full-owner operations (fig. 31). Full-owner operations refer to farms which own all the land used by the farm operation. Seventy percent of no-debt farms were full-owner operations while 48 percent of farms with some debt were fully owned. A larger share of debt-free farms were operated by older farmers, with the average age for debt-free farmers being 59 years and for farms with debt being 52 years (fig. 32).

Figure 29

Farm sector assets have grown in value relative to farm debt owed, 1960-2005

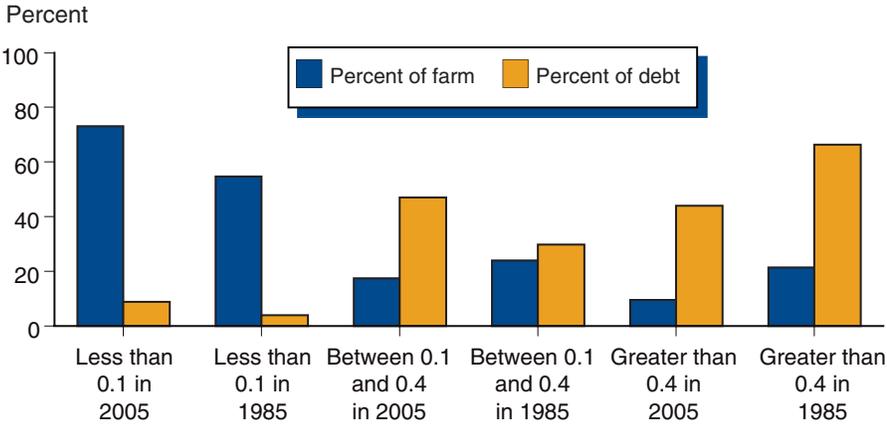


Note: 2005 forecast.

Source: Economic Research Service, USDA.

Figure 30

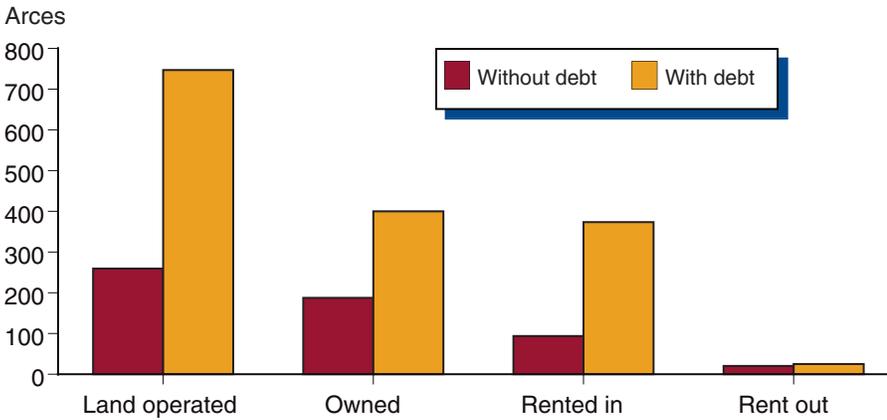
A smaller share of farms have debt/asset ratios over 0.4 in 2005 compared with 1985



Source: 2004 ARMS and 1985 Farm Costs and Returns Survey.

Figure 31

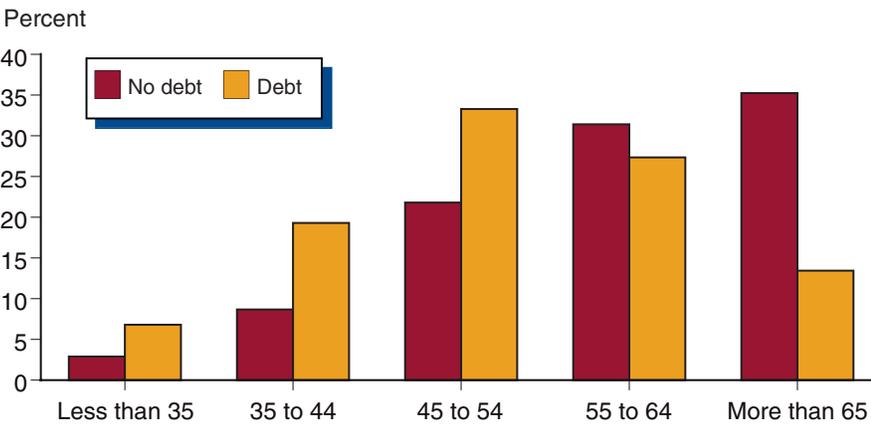
Land operated by debt classification, 2004



Source: ARMS, USDA.

Figure 32

Debt classification by operator age, 2004



Source: ARMS, USDA.

Farm sector debt

Farm business debt is expected to rise 2.9 percent in 2005, marking 12 consecutive years of growing farm debt balances. This anticipated gain follows an increase of 4.5 percent in 2004. While debt has been rising in recent years, the 2005 growth rate slowed from rates sustained during 2001-2004. Total farm business debt is expected to approach \$213 billion at the end of 2005. According to ARMS in 2004, commercial banks provided over 54 percent of all farm credit, while the Farm Credit System supplies another 19 percent.

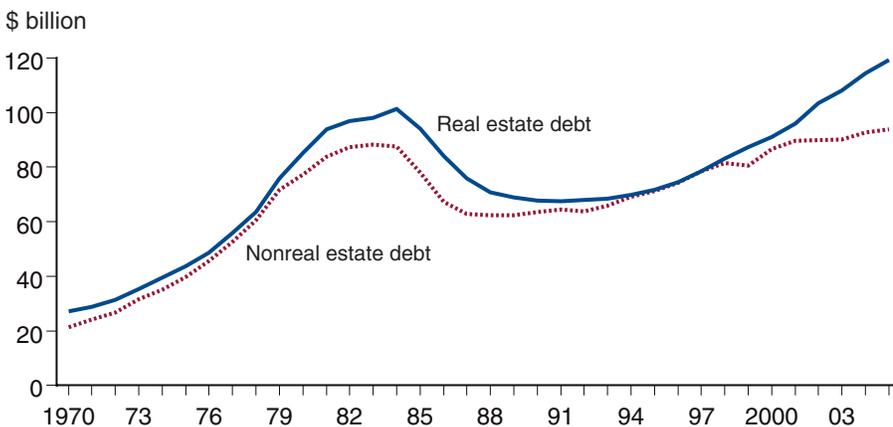
Real estate debt is anticipated to rise over 4 percent in 2005, following an almost 6-percent rise in 2004. Nonreal estate loan balances are expected to increase just over 1 percent in 2005 following an almost 3 percent gain in 2004 (fig. 33). During 2001-2004, real estate debt rose at an annualized rate of almost 5 percent, while nonreal estate loans grew about 1 percent. Since 2001, farm real estate debt has grown at a faster pace than farm nonreal estate debt. Farm real estate debt is expected to exceed nonreal estate debt by \$25 billion in 2005.

Farm sector financial risk exposure

One measure of farm sector financial distress is debt repayment capacity utilization (DRCU). DRCU combines net cash income, debt levels, and interest rates on farm debt into a single statistic that measures actual debt relative to the maximum debt load that farmers could service with current income. Higher estimates of DRCU indicate higher exposure to financial risk. Since 1970, DRCU has ranged from a low of 35.8 percent in 1973 to 104.1 percent in 1981 (fig. 34). DRCU has been relatively stable since 1987, averaging about 50 percent, and is expected to be 48.9 percent in 2005. Farm sector business debt is anticipated to remain relatively low in comparison with the income available for debt service.

Figure 33

Farm business debt, 1970-2005

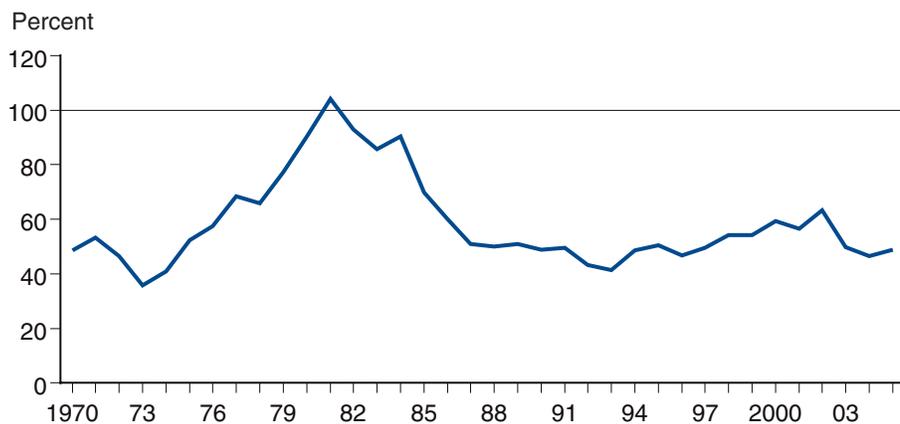


Note: 2005 forecast.

Source: Economic Research Service, USDA.

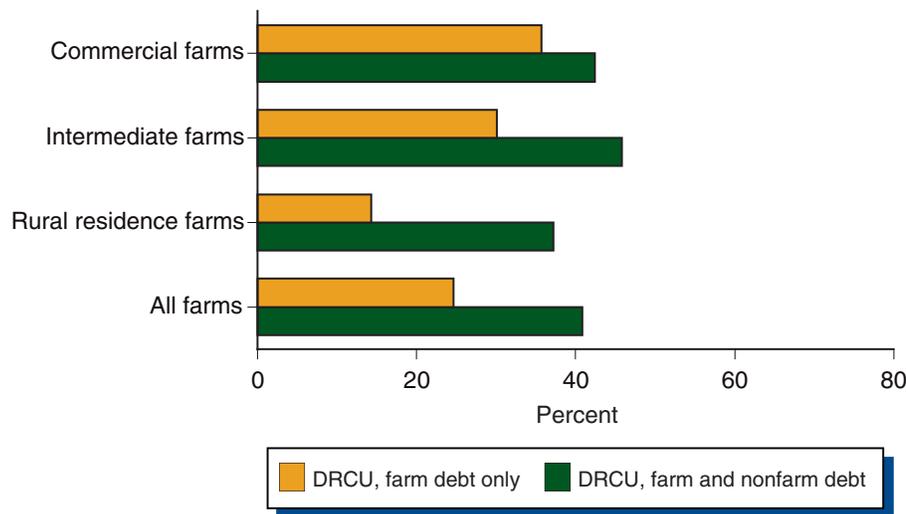
Including nonfarm debt in the analysis of farm operators' use of debt repayment capacity reflects the relative importance of nonfarm debt on the household balance sheet. Figure 35 shows that nonfarm debt's biggest proportionate impact on DRCU is for rural residential farms and least for commercial farm households. Debt repayment is considered to become especially burdensome when DRCU exceeds 120 percent. A DRCU equal to 120 percent indicates farm households owe 20 percent more debt than they can service with current income. Nonfarm debt's impact on DRCU decreases as farm operation size increases (fig. 36).

Figure 34
Debt repayment capacity utilization, 1970-2005



Note: 2005 forecast.
 DRCU = Actual debt / Debt that could be repaid from current income.
 Source: Economic Research Service, USDA.

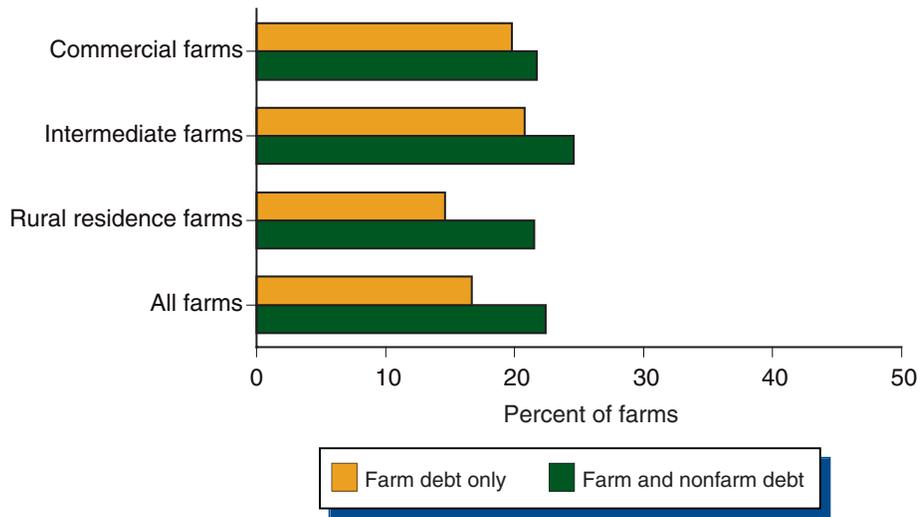
Figure 35
Impact of nonfarm debt on debt repayment capacity utilization, by farm typology, 2004



Source: 2004 ARMS, USDA.

Figure 36

**Share of farms with potential debt repayment problems, 2004
(based on DRCU > 120 percent)**



Source: 2004 ARMS, USDA.

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