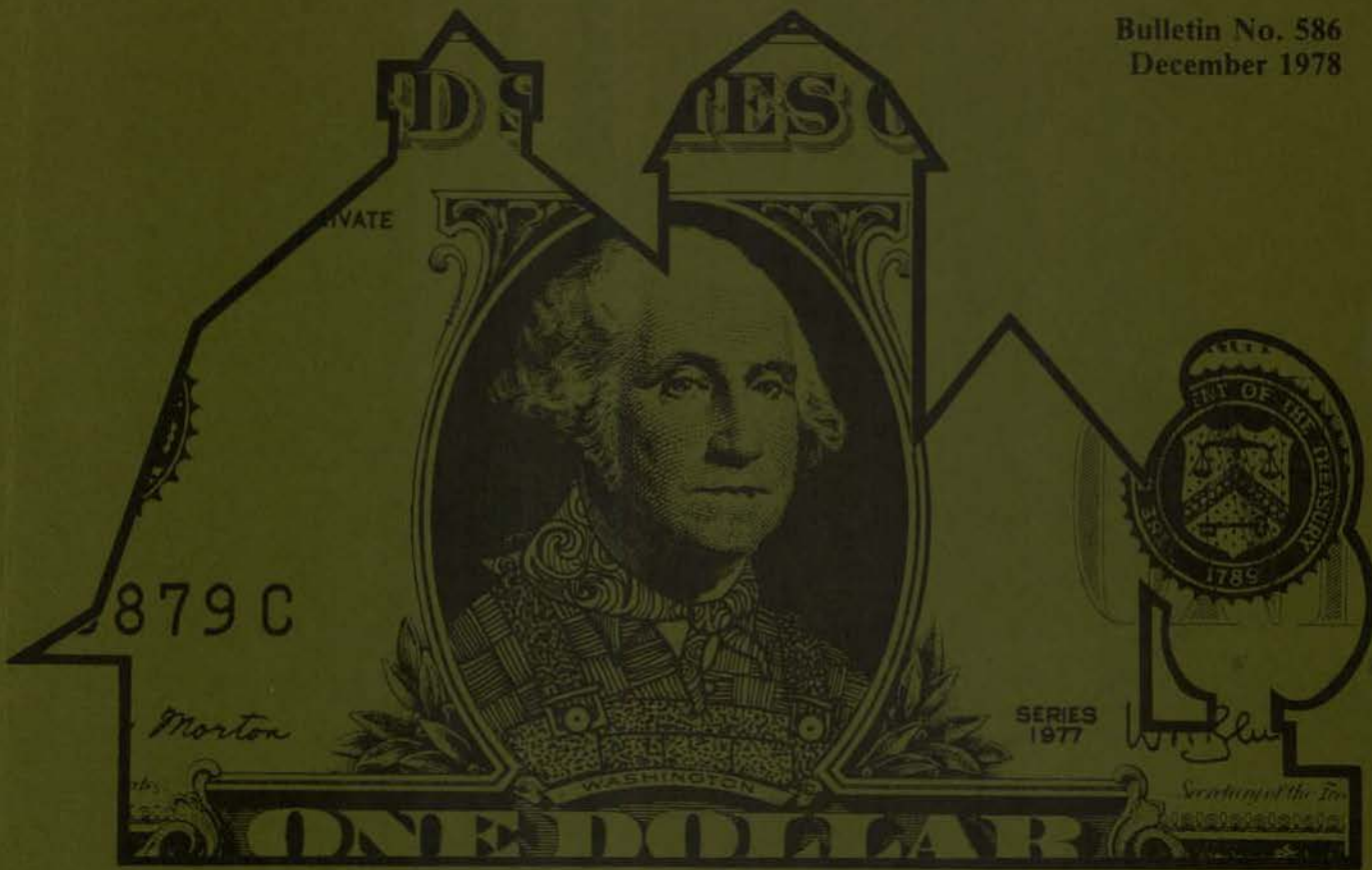


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# An Economic History Of Idaho Agriculture 1950-1977

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*The cooperation of the Idaho Crop and Livestock Reporting Service  
for personally providing some of the data is appreciated.*

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# An Economic History Of Idaho Agriculture 1950-1977

*James P. Wiley*

*Raymond J. Miller*

Agriculture in Idaho and the U.S. has undergone significant changes in the past 25 years, changes that have had both positive and negative effects. This report presents a series of charts and graphs to show some of the changes and their effects, primarily from an economic standpoint. Trends in Idaho agriculture are evident from this information. No conclusions or solutions are offered, however. The reader can draw his own conclusions with the relevant information as a reference.

The changes result from many factors. Idaho agriculture is constantly adjusting to changes in prices, in demand for products, in technology, in government programs, in competition for land and water and in other social values. Demands for agricultural products have changed in response to increases in disposable income, shifts in tastes, population growth, development of domestic and foreign markets and changes in interstate competition.

Data for these comparisons have been selected from a number of sources. Among them are publications of the U.S. Department of Agriculture, the U.S. Department of Commerce and the Idaho Crops and Livestock Reporting Service, USDA-SRS. Sources of data are identified with each figure. Selecting data for comparisons such as these is complicated by a lack of statistical information in some areas and by changes in method of collection or reporting over time. For example, what is a farm?

Between 1950 and 1977, three definitions of a farm have been used by the Census Bureau and other data-collecting agencies. Before 1959, farms were defined as places of 3 or more acres selling \$150 or more of agricultural products, exclusive of home garden products. From 1959 to 1974, farms were defined as any place of 10 acres or less selling \$250 or more of agricultural products, or 10 acres or more selling at least \$50 of agricultural products. The 1974 Census of Agriculture defined a farm as any place selling agricultural products worth \$1,000 or more.

## *Per Capita Income*

Idaho per capita income increased from \$1,295 to \$5,689 between 1950 and 1976 (Fig. 1). This was an increase of 339%. National figures for the same years were \$1,491 and \$6,393. The difference between U.S. and Idaho per capita income remained fairly constant over the period. During the 1970's Idaho ranked 11th nationwide by percent change in total personal income, though total farm income was down 13.5%. Per capita income in Idaho during the 1970's was about 85% of the national average.

## *Farm Population*

Historically, Idaho has had a higher percentage of its population living on farms than in the U.S. as a whole. However, farm populations in both Idaho and the U.S. have steadily decreased since 1950, Idaho at a faster pace since 1960 (Fig. 2). Idaho farm population was about 28% of the total state population in 1950 but only 14.3% in 1970. The actual farm population was about 102,000 in 1970.

## *Sources of Income and Employment*

The relative importance of farming as a source of employment and income has declined since 1950 although it remains a significant source of both. Farm production declined from 31.8% of total Idaho employment in 1950 to 11.2% in 1977 (Fig. 3).

Agriculture services — consulting, custom, etc. — have contributed a larger share of agricultural employment in recent years. The largest increases have occurred in wholesale and retail trade and professional services.

Farming provided 22.8% of Idaho's total personal income in 1950 but only about 9.4% in 1977 (Fig. 4). The labor share of farm income has remained fairly constant while the proprietors' share decreased. Manufacturing and professional services made the big gains during the period.

The number of Idaho farm workers decreased during the 1950-1977 period. The 1950 yearly average of about 83,000 farm workers declined steadily to about 42,000 in 1975 (Fig. 5A). A slight increase occurred in 1976. The farm wage rate steadily improved from the 1950 average of \$0.74 per hour to about \$2.96 in 1977. (Fig. 5B).

Figs. 6 and 7 show trends in Idaho gross and net income per farm. Note that farm income here includes only income from farm activities, not property income

nor transfer payments. Generally, Idaho has exceeded the national average, particularly in recent years. Although the peak occurred in 1973 for most American farmers, Idaho farm income was greatest in 1974. A dramatic decrease in net income per farm in Idaho has occurred since. From 1950 to 1977 the gross farm income for all of agriculture in Idaho increased from \$337 million to \$1,340 million (Fig. 8).

The major sources of Idaho cash receipts from farm marketings during two periods, 1954-57 and 1973-76, are shown in Fig. 9. Over the past 25 years, crops have contributed a larger share of total cash receipts than livestock — 56.9% vs. 43.1% for 1954-57 and 65.3% vs. 34.7% for 1973-76. However, cattle and calves has been the most important single commodity in recent years, averaging about 23% of the total cash receipts for 1973-76. Potatoes were second in cash value at about 20%, up from 10% in 1954-57. Wheat dropped to third — 14.5% from 20%. Percentage decreases have occurred in sheep and lambs and dairy products. Sugar beets have gained slightly while speciality crops (mint, hops, seed and other fruits and vegetables) have increased to about 12%.

A major change has occurred since 1950 in the distribution of farms by economic class (Fig. 10). From 1950 to 1960, the majority of farms were in the bracket with cash sales of \$2,500 to \$10,000, with nearly equal distribution above and below. By 1974, a large percentage of farms had shifted into the \$10,000+ class (nearly 62%) and most sold \$10,000 to \$40,000 worth of farm products. A considerable number sold products with gross value over \$40,000.

## *Productivity and Efficiency*

Productivity figures aren't available for Idaho but U.S. data should give some indications. Fig. 11 shows that industrial output per man hour was greater than farm output per man hour until 1967. However, farm output has increased at a faster rate during the entire period and passed other industries' index after 1967. Farm output per unit (Fig. 12) has increased steadily since 1950 — from 71 in 1950 to about 119 in 1977.

## *Farm Production Expenses*

Farm production expenses have increased drastically in 15 years. The 1975 Idaho estimate was \$1,043,300,000, the first time Idaho farmers spent over \$1 billion for production expenses. In 1963, the total was only \$376 million. Fig. 13 reveals significant increases since 1971 in the areas of depreciation and

consumption of farm capital, feed purchases, fertilizer and lime and interest on farm mortgage debt. Some increases were over 300% in less than 15 years.

Fig. 14 shows more detail in one area of increased production costs — commercial fertilizer. In the past 10 years Idaho farmers have significantly increased their use of commercial fertilizer. The greatest increase occurred in nitrogen material, from 165,000 tons in 1967 to about 361,000 tons in 1976. Use of phosphate materials increased slightly until 1975 when use actually dropped. Consumption of secondary and micronutrients and potash materials has been fairly constant. Overall, the use of fertilizer more than doubled between 1967 and 1977; the cost has almost tripled.

### *Prices Received vs. Paid*

Idaho figures comparing prices received and paid by farmers are not available but Fig. 15 shows ratios of prices paid and received by U.S. farmers. Until 1968, the index of prices received generally stayed below the 1967 index of 100. It rose rapidly from 1968 until 1974, then dropped off. Prices paid by American farmers have increased constantly from 1950 levels, most sharply after 1972.

The parity ratio showed a constant downward trend until 1972. It increased in 1972-73, then dropped again. The parity ratio — the index of prices received divided by index of prices paid times 100 — is a measure of farmers' relative purchasing power. Generally, the parity ratio indicates purchasing power has been declining. However, since the parity ratio shows only price changes, not productivity or quality changes, it must be interpreted with caution.

### *Farm Sizes and Numbers*

Average farm size in Idaho increased from 334 acres in 1950 to 580 acres in 1977. Total number of farms in Idaho decreased steadily from about 41,900 in 1950 to 26,900 in 1977 (based on 1959 farm definition). The decrease has slowed in recent years, however (Fig. 16). Even though average farm size has increased, the number of acres in farms has remained essentially constant since 1960 (Fig. 17). Harvested acres has increased from less than 4 million in 1958 to about 4.4 million in 1977 (Fig. 17).

On a percentage basis, most Idaho farms are in the 50-to-499 acre class, about 53.8% in 1974. This number is down from 1950 and 1959 (Fig. 18). The percentage of farms in the 500-to-999 acre class increased to 10.6%

in 1974; those in the 1,000+ acre class increased to 12.2% of the total in 1974.

Average farm size varies widely from county to county in Idaho (Fig. 19). Ada County farms averaged only 166 acres in 1977 while those in Clark County averaged 4,817 acres. Farms in 11 of the state's 44 counties averaged 1,000 to 2,000 acres in size; those in 10 others averaged 600 to 800 acres. Statewide, the average in 1977 was 574 acres per farm (Fig. 17).

The value of farm land and buildings has increased steadily since 1950 and dramatically in the past 5 years, as Fig. 20 shows. In 1950, the average value per acre of farm land and buildings was about \$70. This rose to \$112 in 1960 and \$419 in 1977, an increase over the entire period of almost 500%. Value per farm increased from \$22,900 in 1950 to over \$240,000 in 1977. Elmore County farms led in value, averaging \$438,237 per farm.

Figs. 21 and 22 show trends in farm ownership in Idaho. Since 1950, the percentage of operators who own their farms had increased from 49.2% to 61.7% (Fig. 21). Likewise, part ownership increased from 17.1% to 28.5%, while the percentage of tenant operators dropped from 16.5% to 9.8% of all operators.

About 88% of all farms in Idaho were family-owned in 1974 (Fig. 22), by far the dominant type of legal organization. Partnerships comprised about 8%, corporations 3.7% and other .3%.

### *Summary*

Changes in Idaho agriculture have been and continue to be widespread and dramatic.

Idaho per capita income increased from \$1,295 to \$5,689 between 1950 and 1976, but continues to fall below the U.S. figure of \$6,393 in 1976. Farm population in Idaho dropped from 28% of total population in 1950 to 14% in 1970, a higher percentage than in the U.S. Farming declined in relative importance as a source of income and employment, although both are significant and even though the state gross farm income increased from \$337 million in 1950 to \$1.340 billion in 1977.

Over the last 25 years, cash receipts from crops have increased from 56.9% to 65.3% of total cash receipts from farm marketings compared to 43% and 35% for livestock products. But cattle and calves is still the largest single commodity, contributing 22.7% of the total cash receipts.

Average farm size in Idaho increased from 334 acres in 1950 to 580 acres in 1977, with the number of farms decreasing from 41,900 to 26,900 in the same period. Family-ownership is by far the largest legal organization, owning about 88% of all Idaho farms.

Gross and net farm income hit a high point in 1974, having increased rapidly from 1970. Since 1974, per farm net income in Idaho has declined sharply each year. Production expenses have increased sharply and continuously since 1970.

### *Selected Sources*

#### **U.S. Department of Agriculture, Economic Research Service**

Farm Income — State Estimates  
Farm Income Statistics

#### **U.S. Department of Agriculture**

Agricultural Yearbook, 1950, 1960, 1974  
Agricultural Statistics — 1977  
Agricultural Prices  
Cash Receipts from Major Farm Commodities by State

#### **U.S. Department of Commerce**

Survey of Current Business  
County Business Patterns  
Employment and Earnings — States and Areas  
Local Area Personal Income

#### **Idaho Crop & Livestock Reporting Service, USDA-SRS**

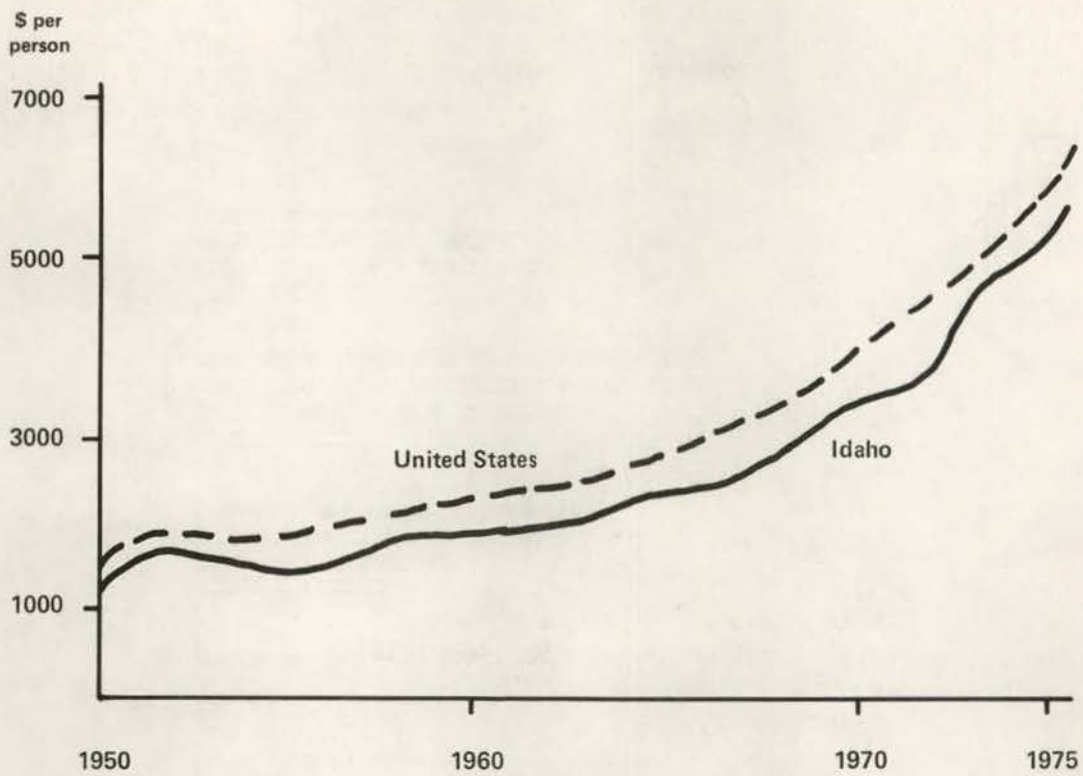


Fig. 1. Trends in per capita income, United States and Idaho, 1950 - 1976. (Source: *Survey of Current Business, Department of Commerce.*)

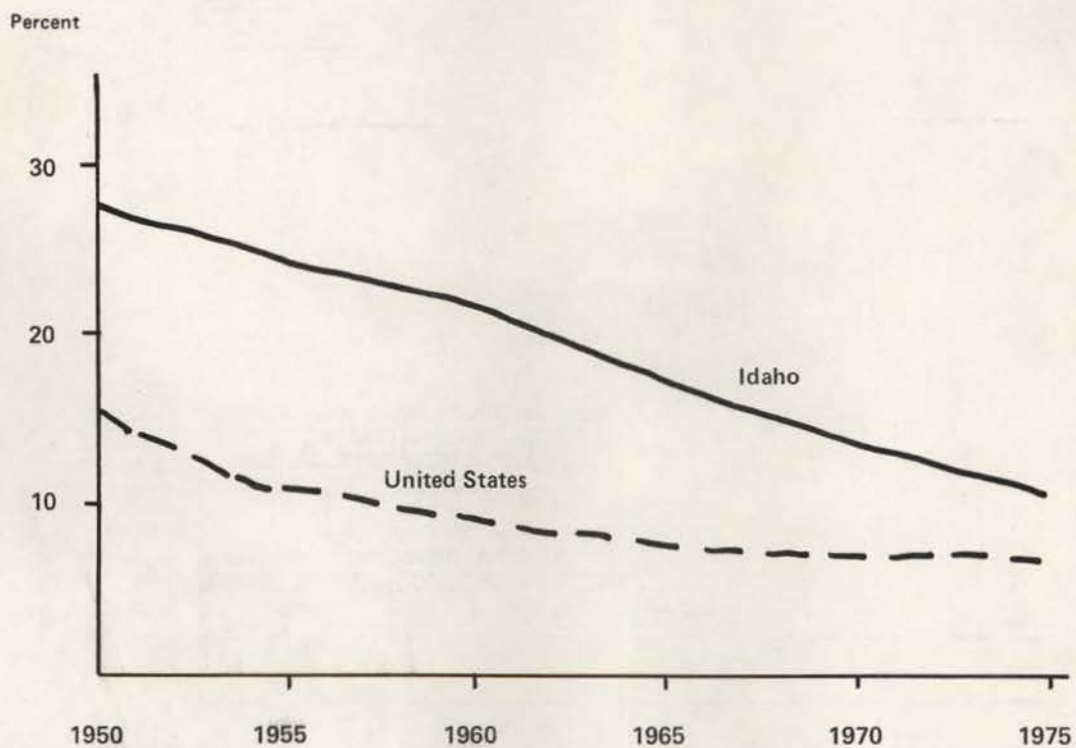


Fig. 2. Percent of population living on farms, United States and Idaho, 1950 - 1976. (Source: *Economic Report of the President, USDA, 1978.*)

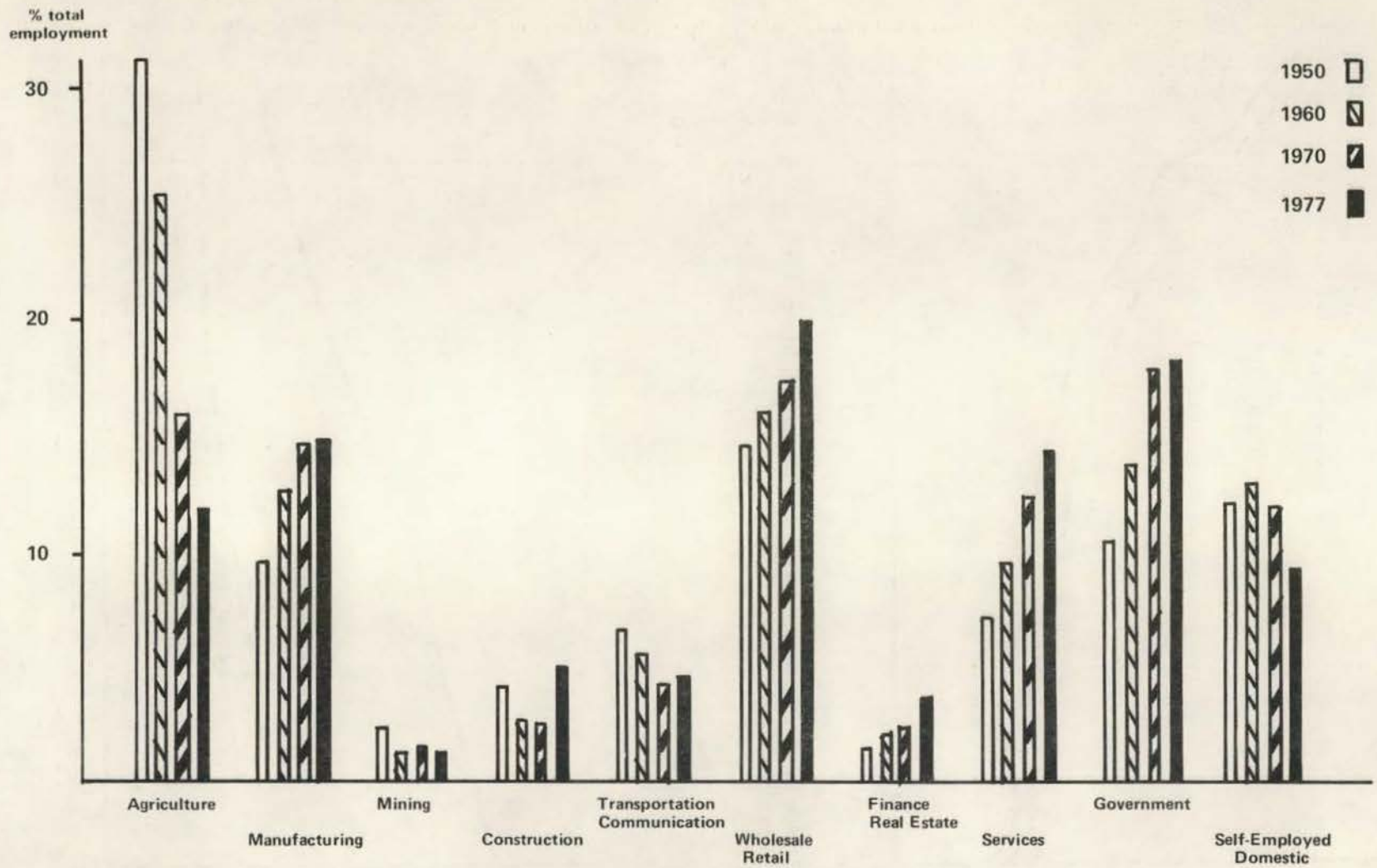


Fig 3. Trends in sources of employment in Idaho, 1950 - 1977. (Source: Idaho Department of Employment, Special Collections.)



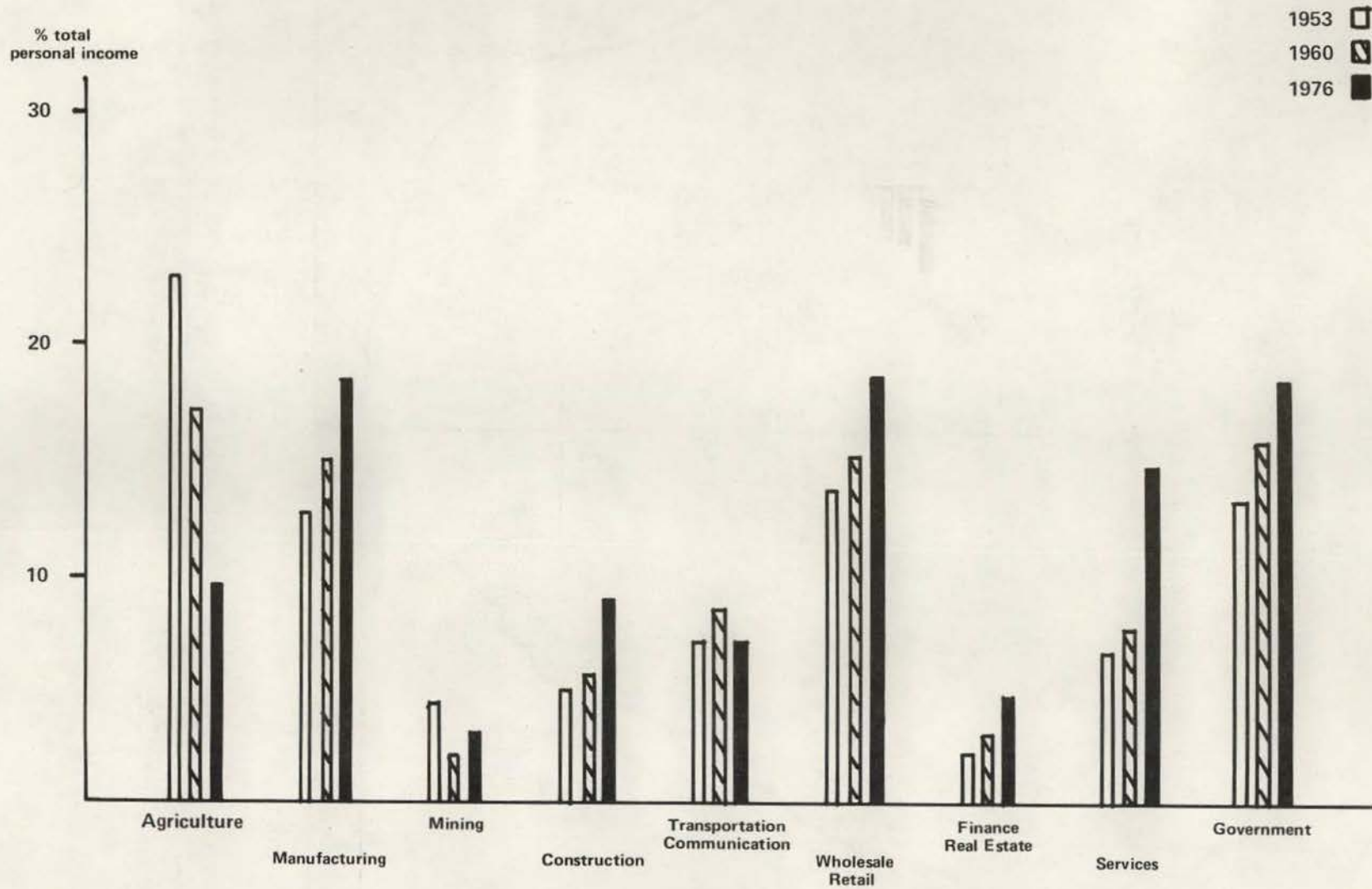


Fig. 4. Trends in sources of personal income in Idaho, 1950 - 1976, excluding property income and transfer payments. (Source: Idaho Department of Employment, Special Collections.)

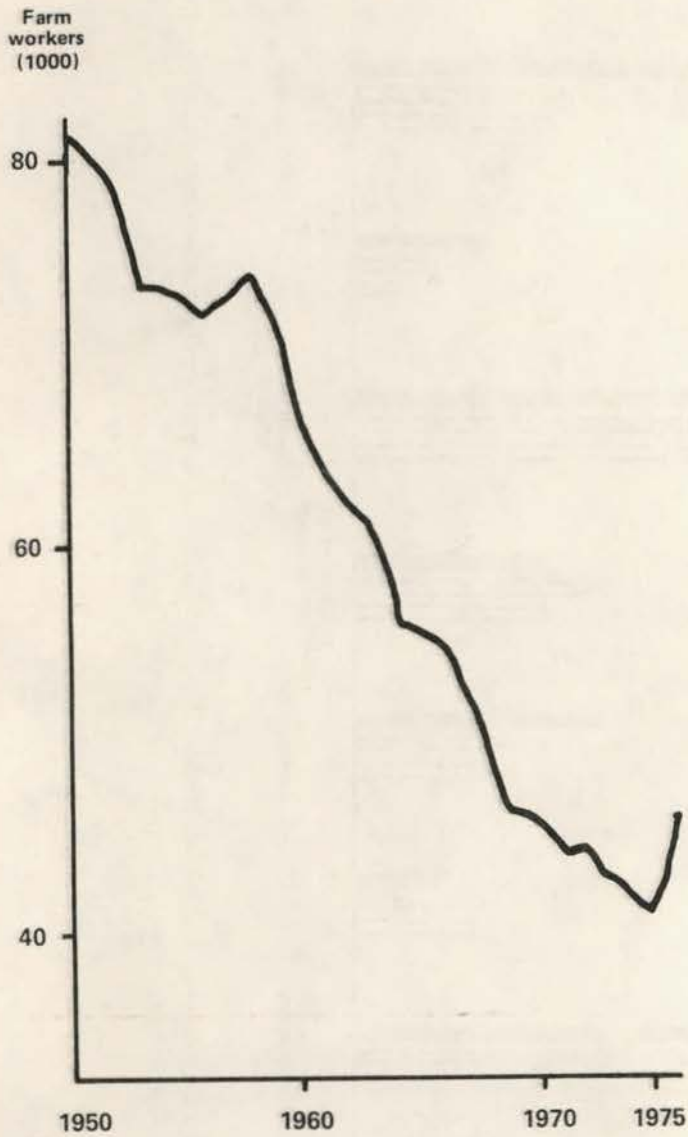


Fig. 5A. Total Idaho workers on farms, yearly average, 1950 - 1976. (Source: Idaho Crop and Livestock Reporting Service.)

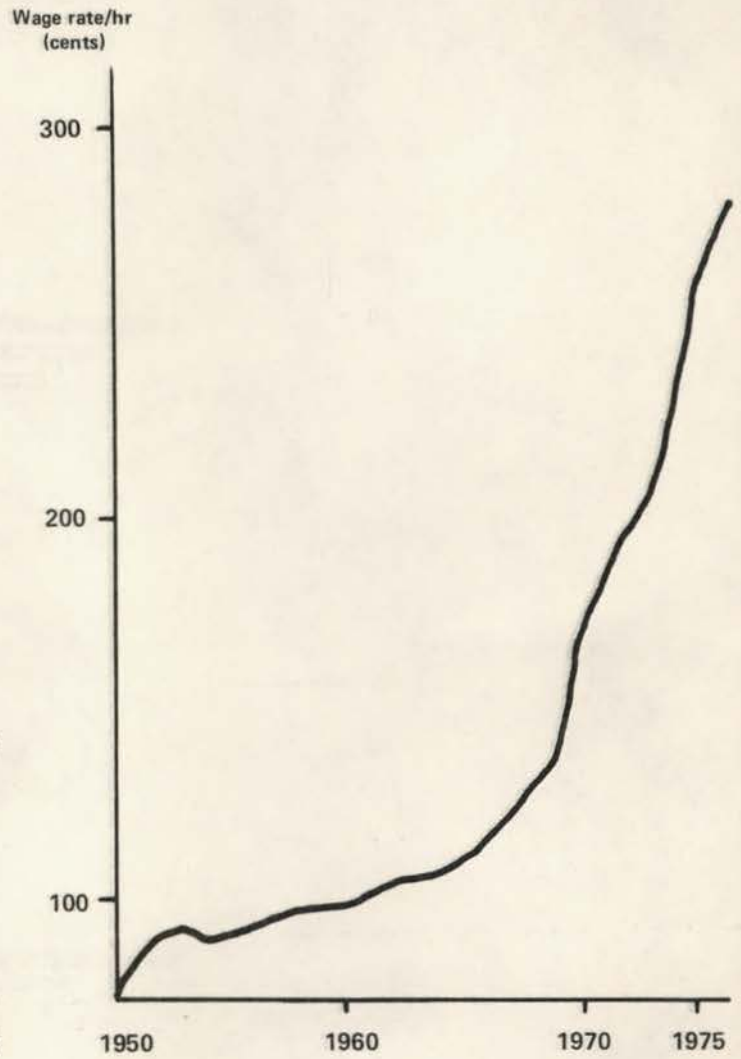


Fig. 5B. Idaho farm wage, yearly rate per hour, 1950 - 1976. (Source: Idaho Crop and Livestock Reporting Service.)

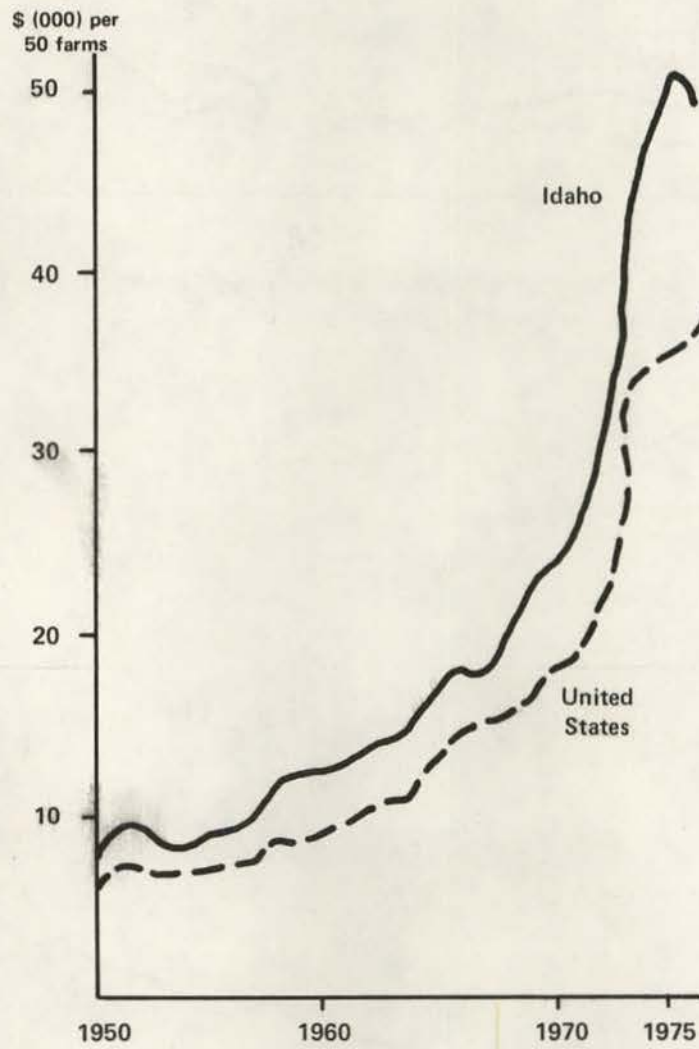


Fig. 6. Gross income per farm (current dollars), Idaho and United States, 1950 - 1976. (Source: *Farm Income Statistics, USDA-ERS.*)

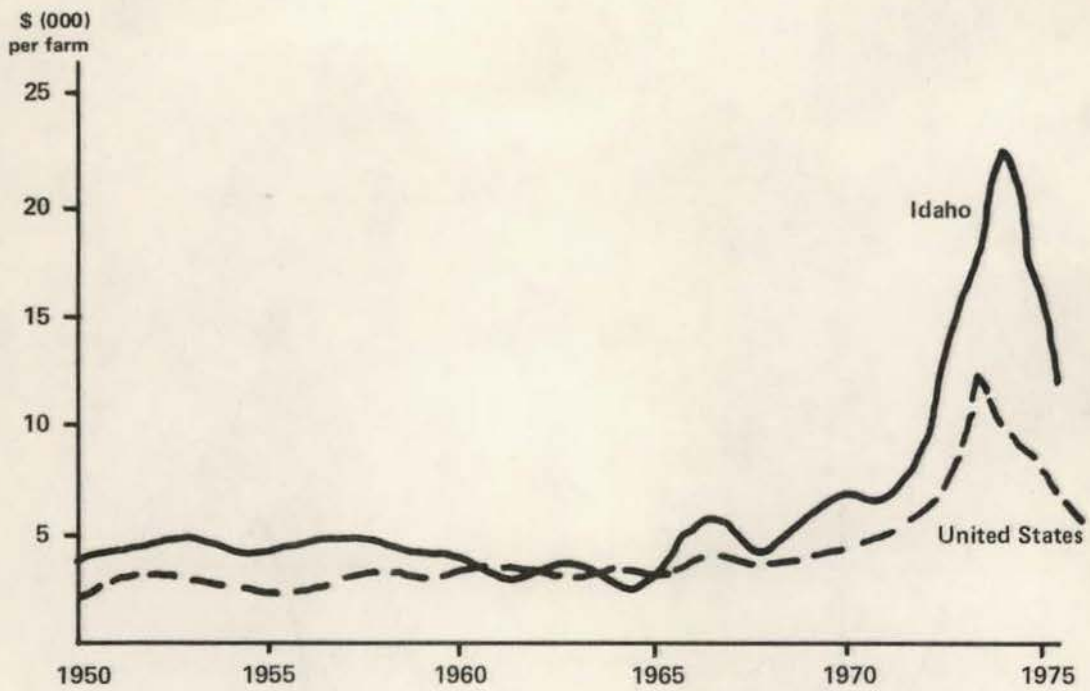


Fig. 7. Net income per farm (current dollars), Idaho and United States, 1950 - 1976. (Source: *Farm Income Statistics, USDA-ERS.*)

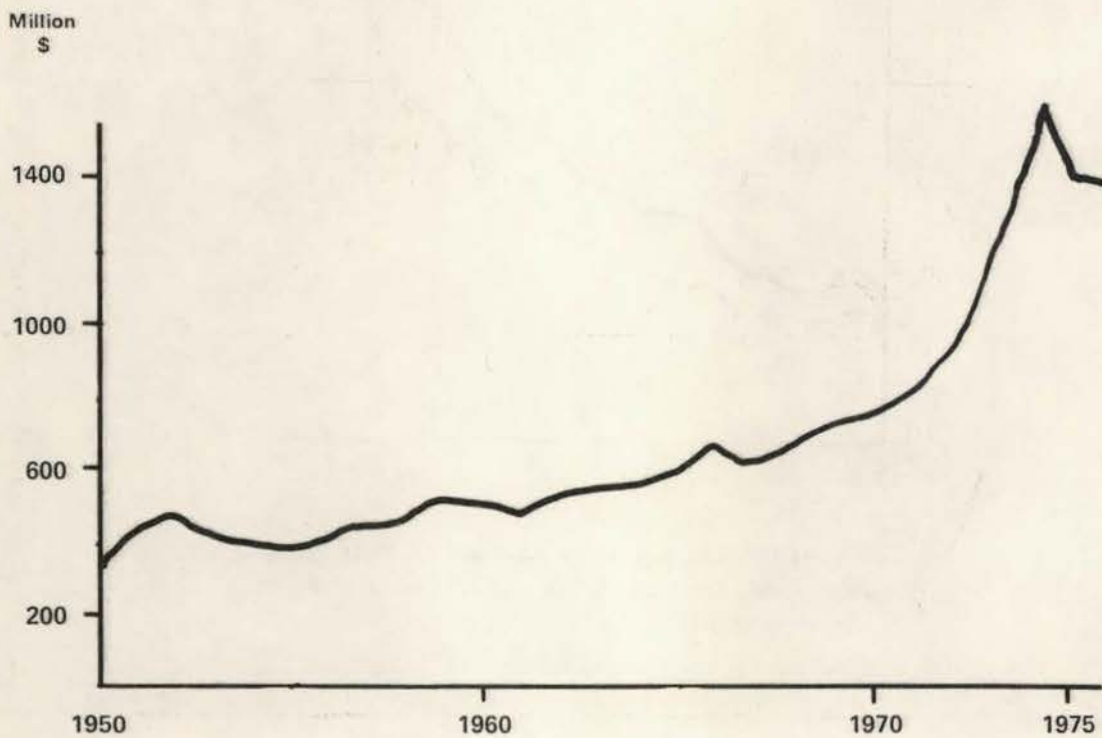


Fig. 8. Gross farm income, Idaho, 1950 - 1977. (Source: *Idaho Agricultural Statistics and Farm Income.*)

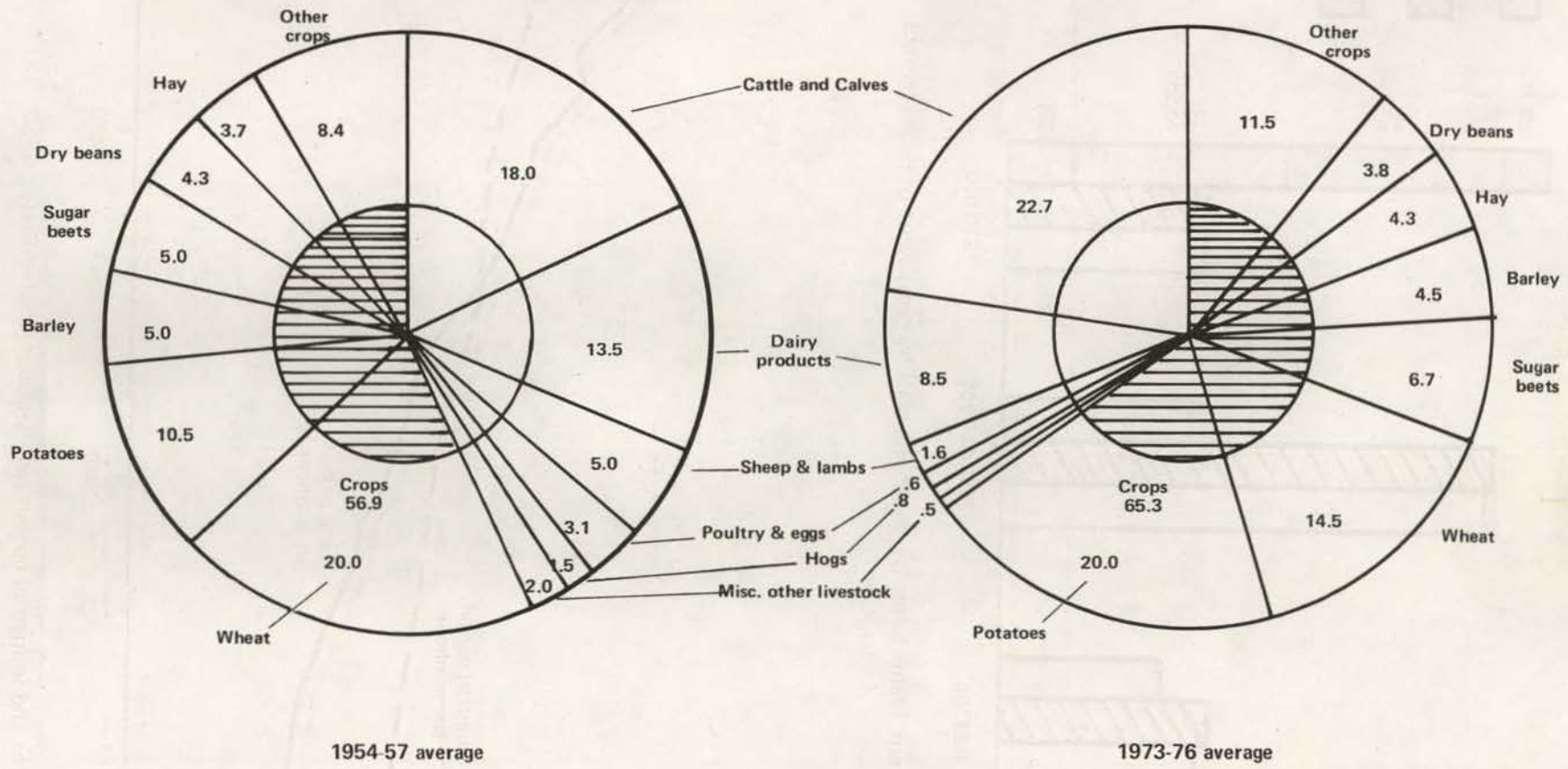


Fig. 9. Average percent contributions of various crops and livestock to total cash receipts for 1954-57 and 1973-76, Idaho. (Source: Farm Income Statistics, USDA-ERS.)

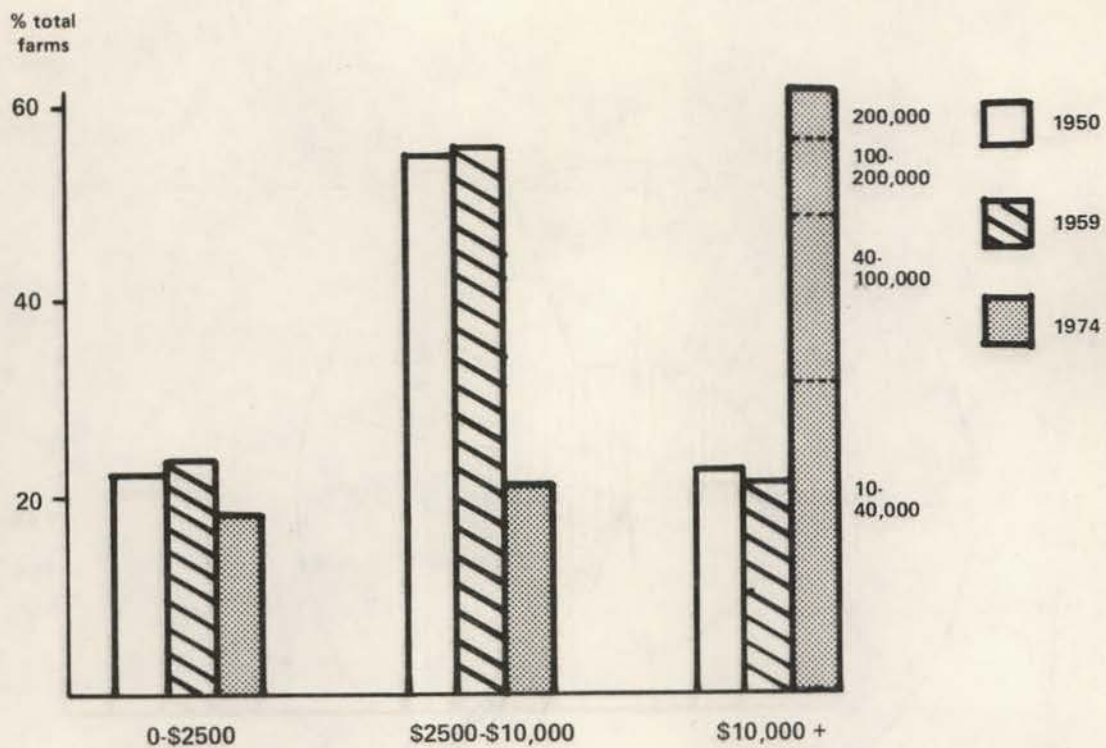


Fig. 10. Percent Idaho farms by economic class by gross value of products sold. (Source: Census of Agriculture, 1974.)

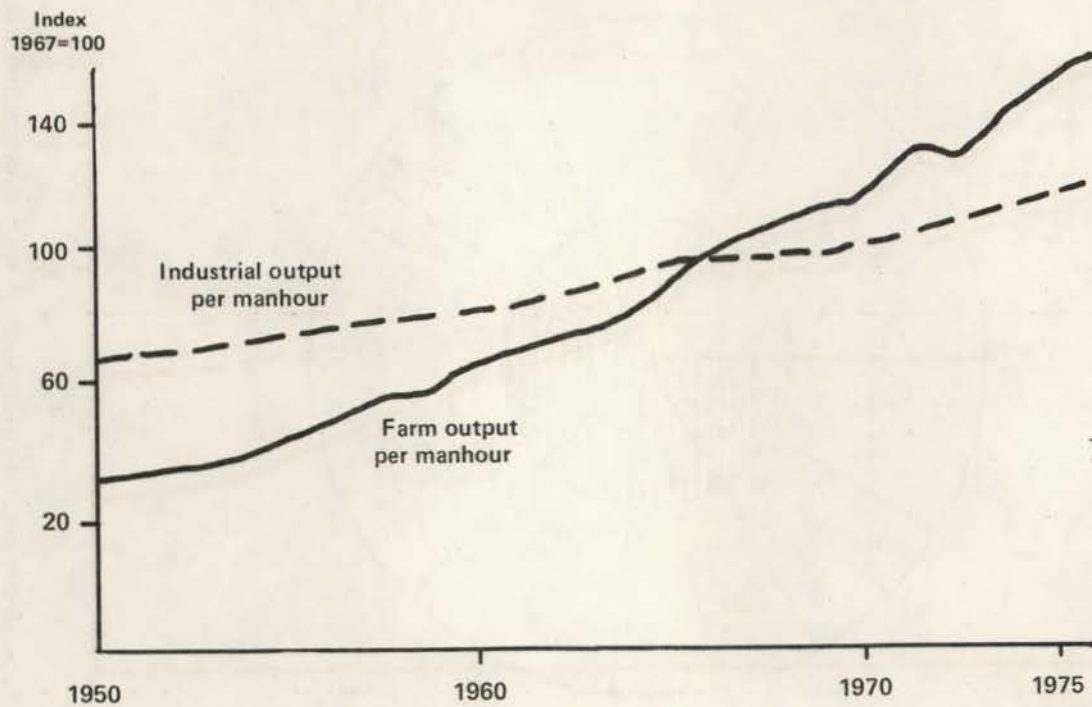


Fig. 11. Farm and industrial output per manhour, United States, 1950 - 1977. (Source: Economic Report of the President, 1978.)

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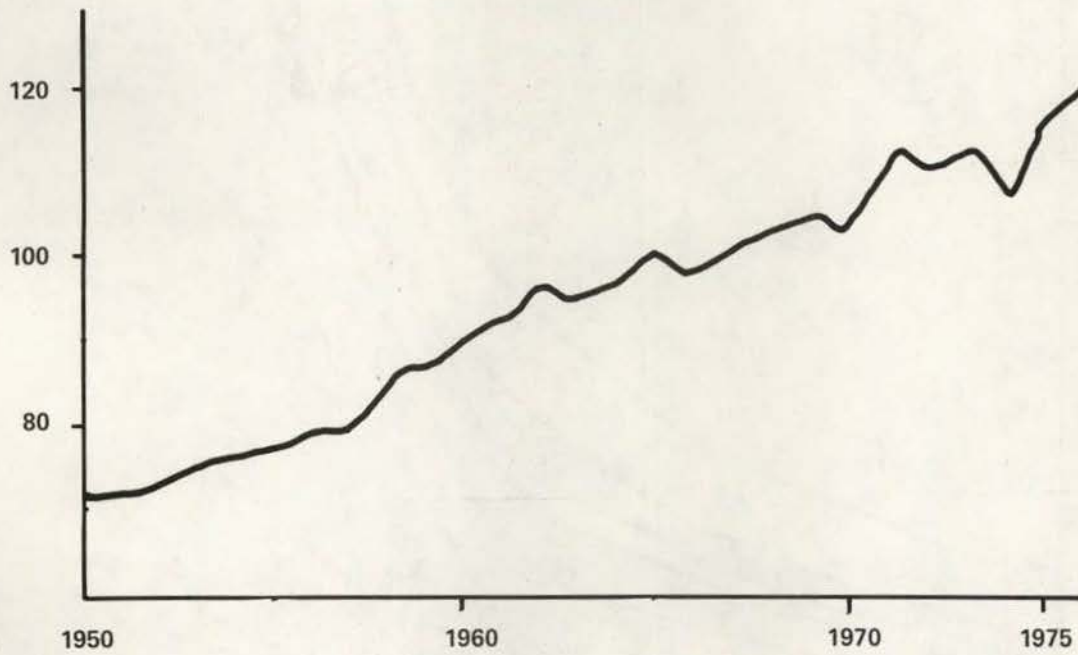


Fig. 12. Farm output per unit input, United States, 1950 - 1977. (Source: *Economic Report of the President, 1978.*)

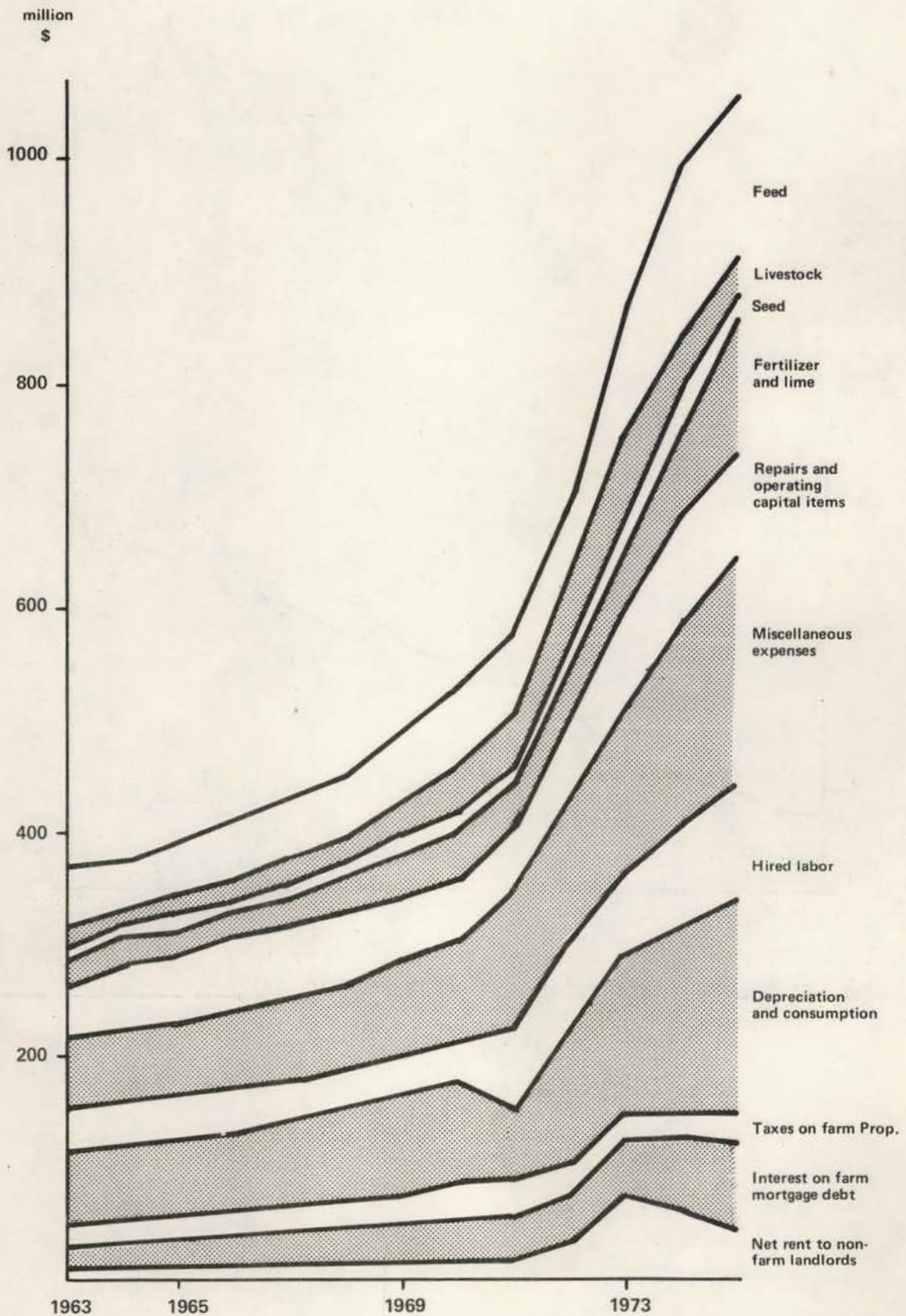


Fig. 13. Trends in farm production expenses, Idaho, 1963 - 1975. (Source: Idaho Agricultural Statistics, USDA-SRS.)



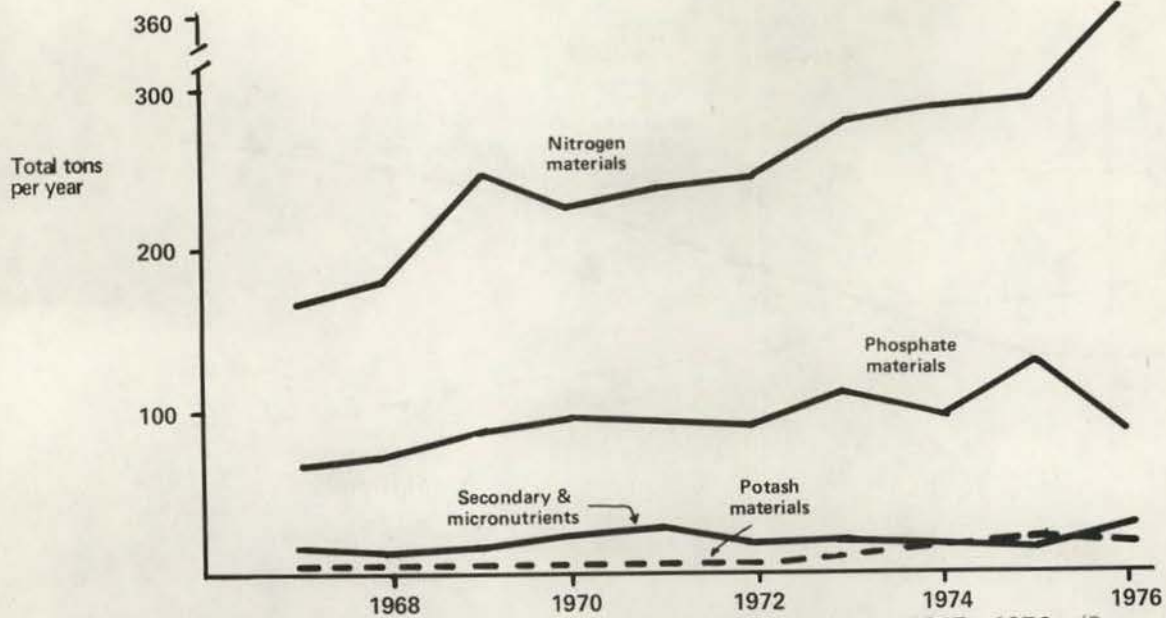


Fig. 14. Consumption of commercial fertilized materials, Idaho, 1967 - 1976. (Source: Idaho Agricultural Statistics, USDA-SRS.)

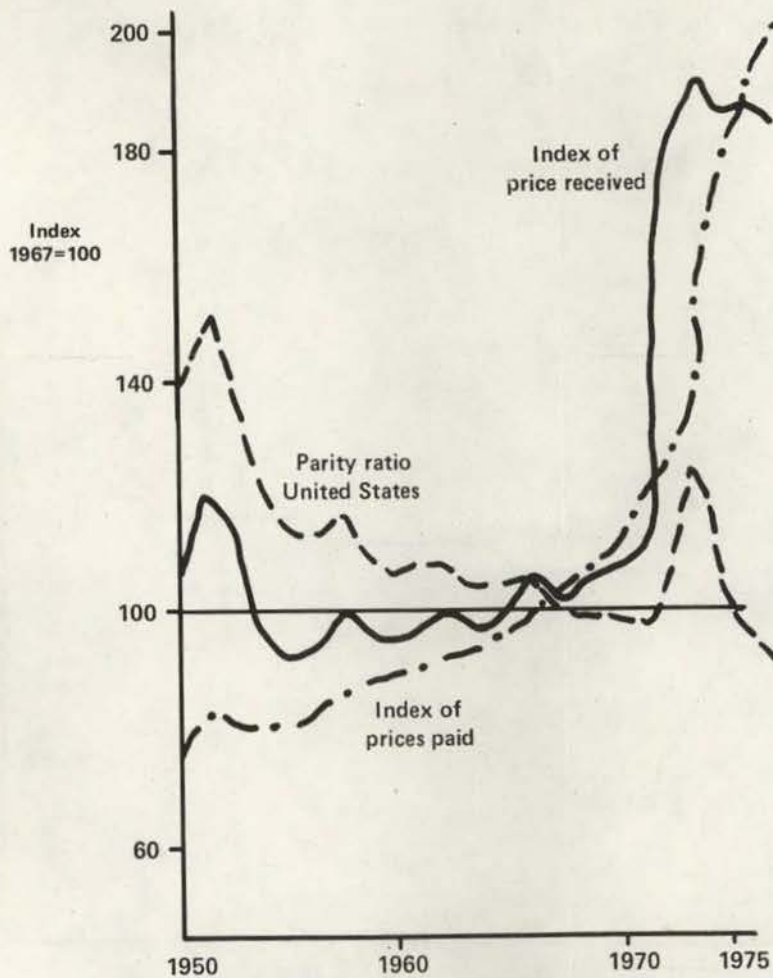


Fig. 15. Parity ratio index of prices received and paid, United States farmers, 1950 - 1977. (Source: Economic Report of the President, USDA-SRS, 1978.)

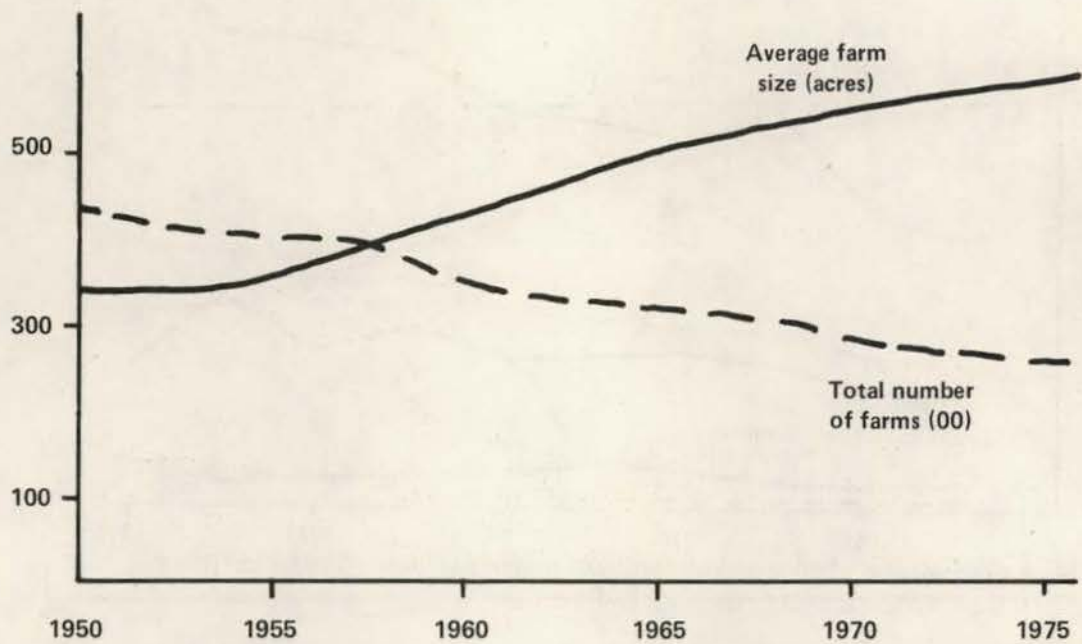


Fig. 16. Trends in farm size and farm numbers, Idaho, 1950 - 1976. (Source: Idaho Agricultural Statistics, USDA-SRS.)

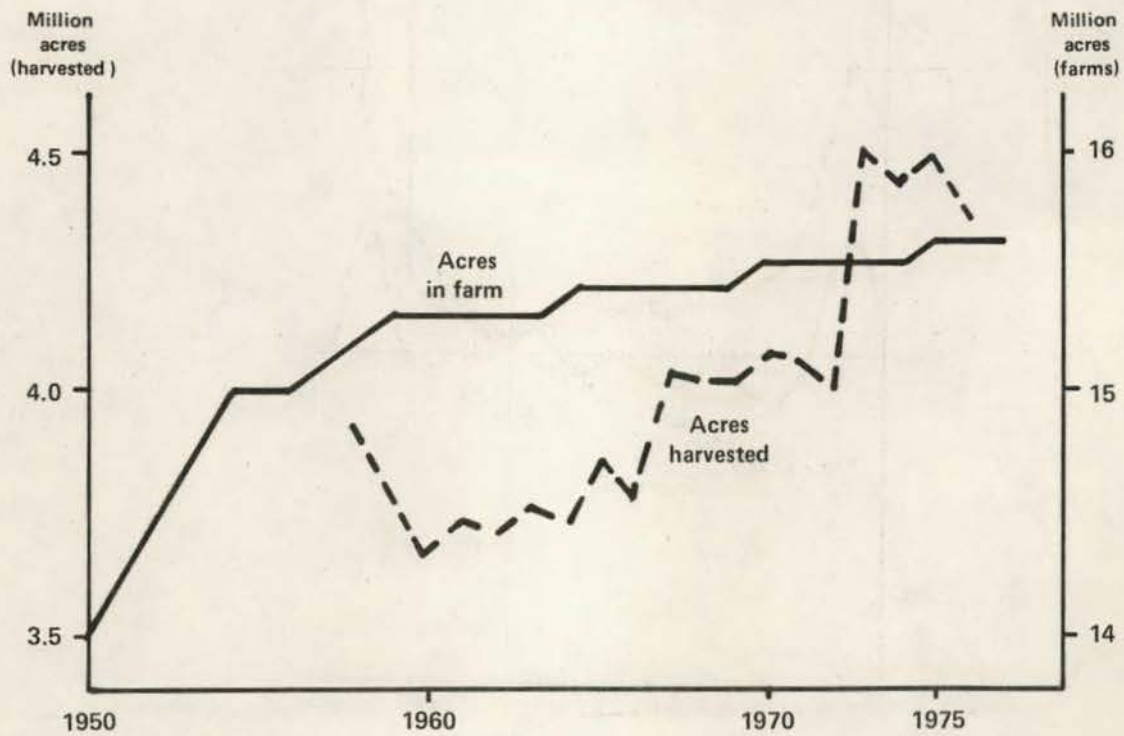


Fig. 17. Idaho acreage of harvested cropland (excludes fruit tree acreage) and acres of farms, 1950 - 1977. (Source: Annual Crop Summary and 1978 Idaho Agricultural Statistics, ESCS.)

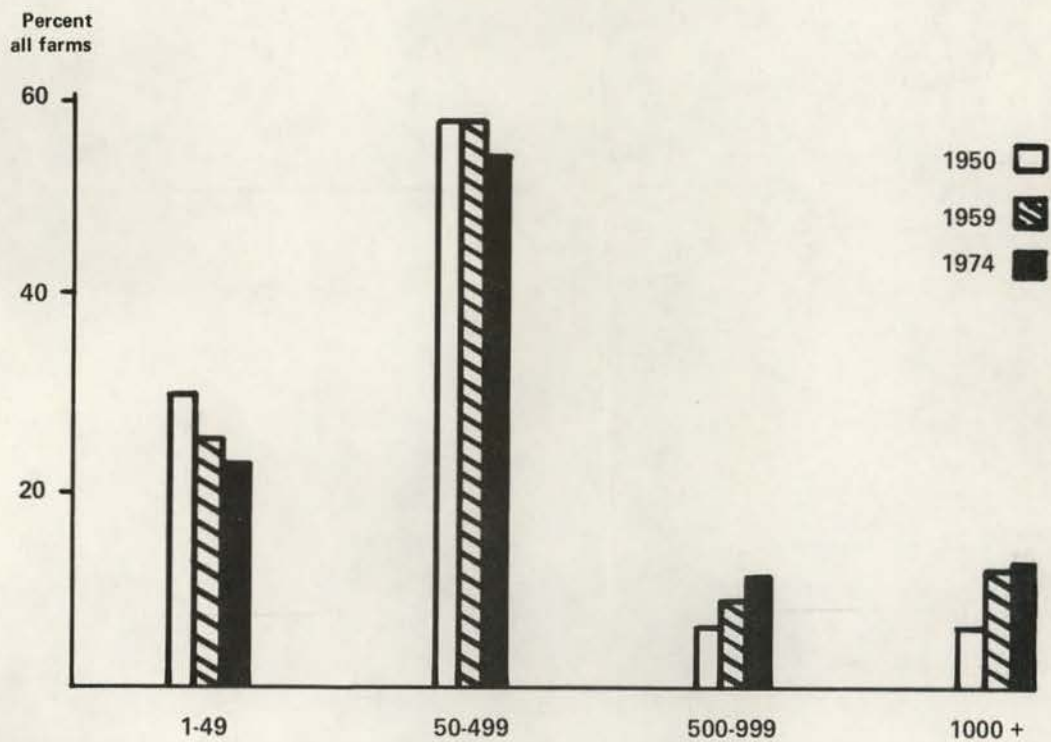
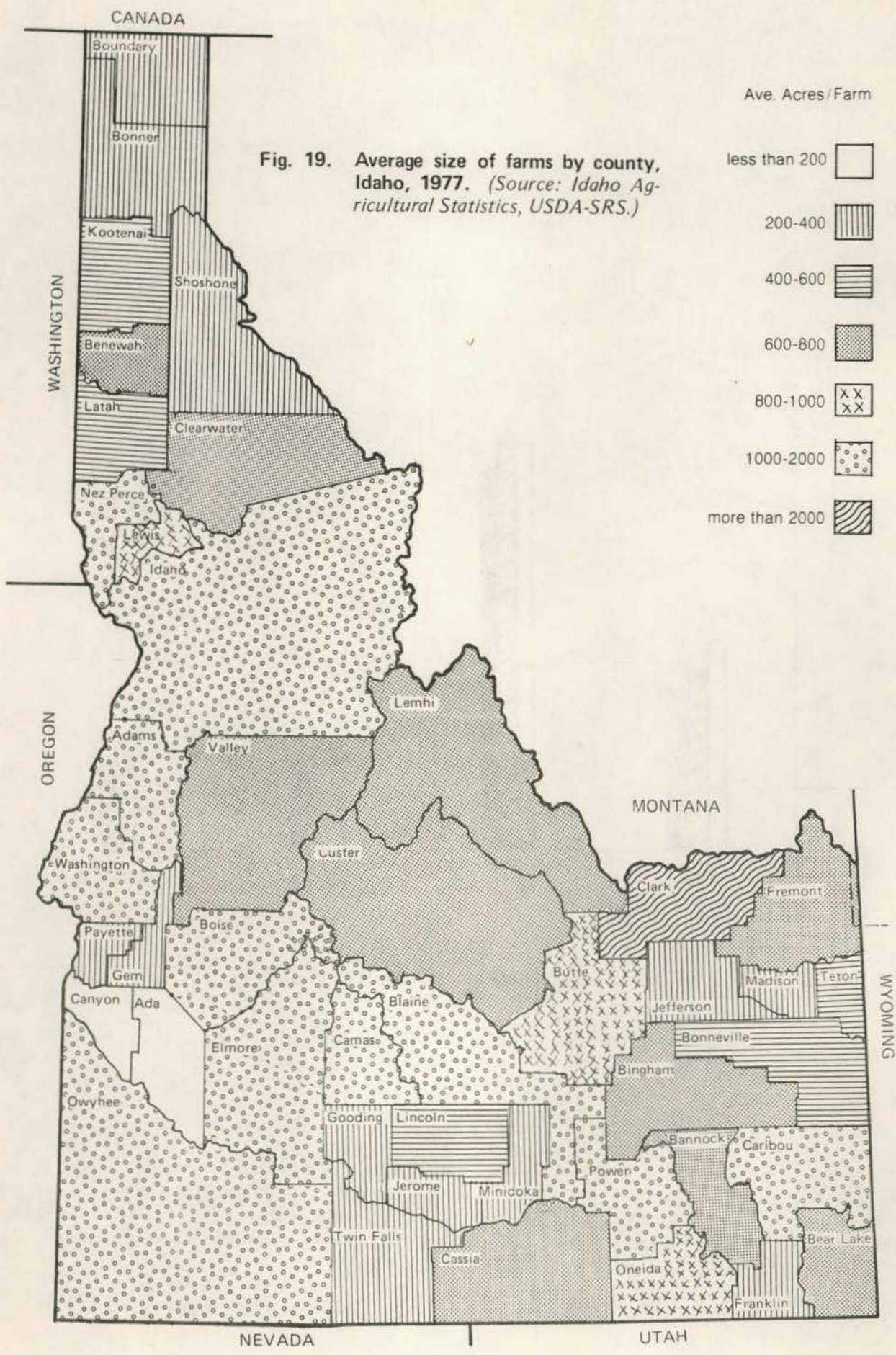


Fig. 18. Farms classified by acreage, Idaho, 1950 - 1974. (Source: *Census of Agriculture, 1974.*)



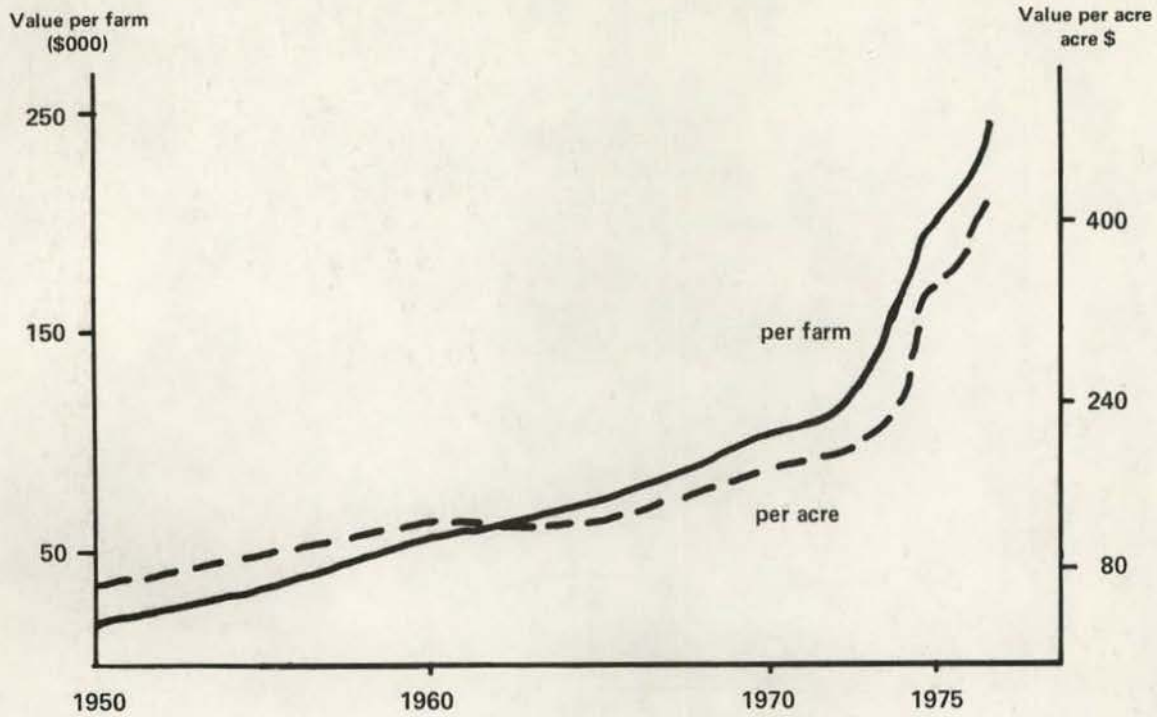


Fig. 20. Value of farmland and buildings, Idaho, 1950 - 1977. (Source: USDA-ERS and SRS.)

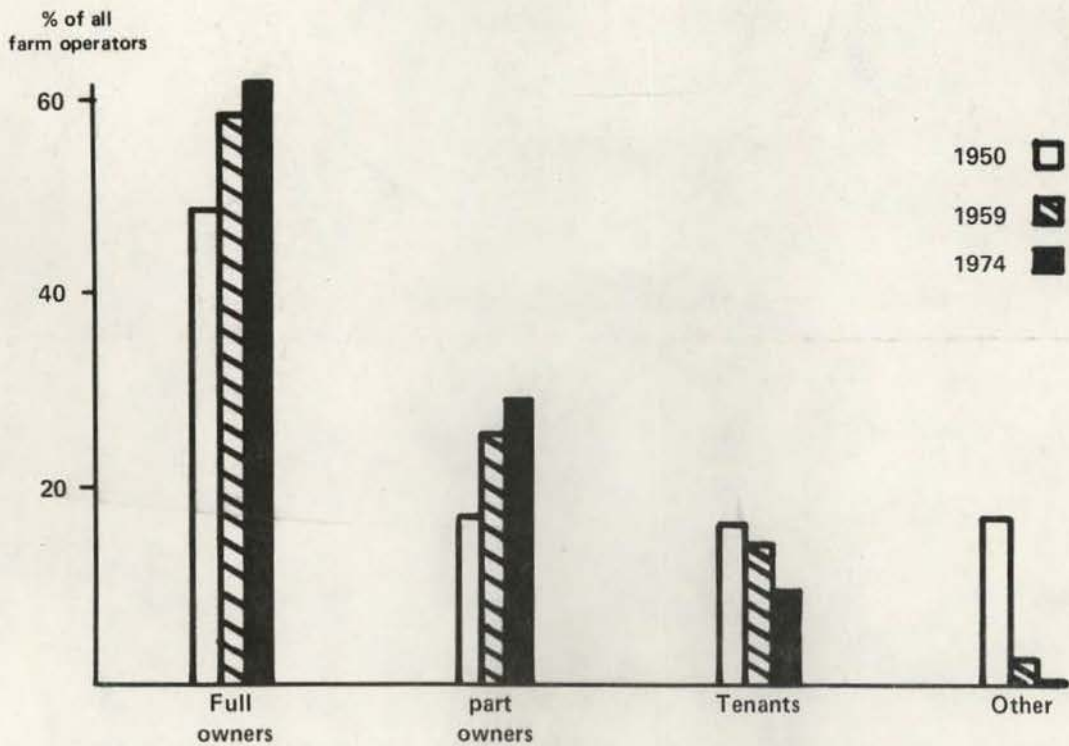


Fig. 21. Farms by tenure of operation, Idaho, 1950 - 1974. (Source: Idaho Agricultural Statistics and Farm Income.)

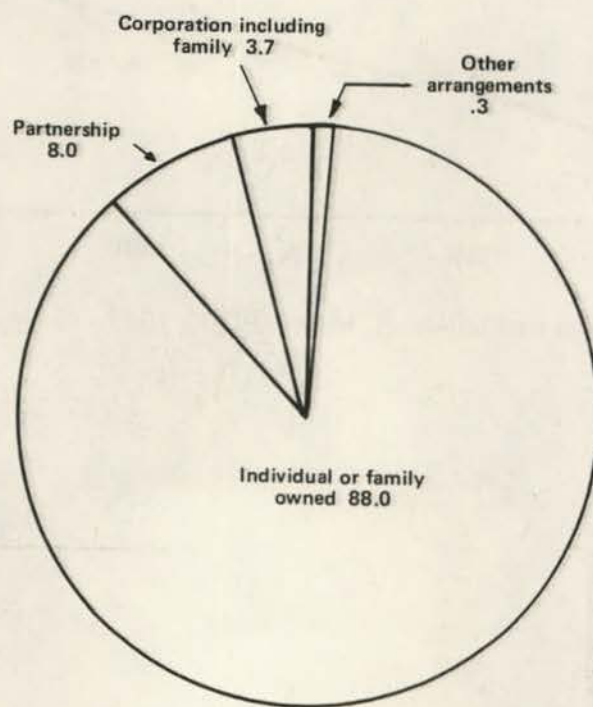
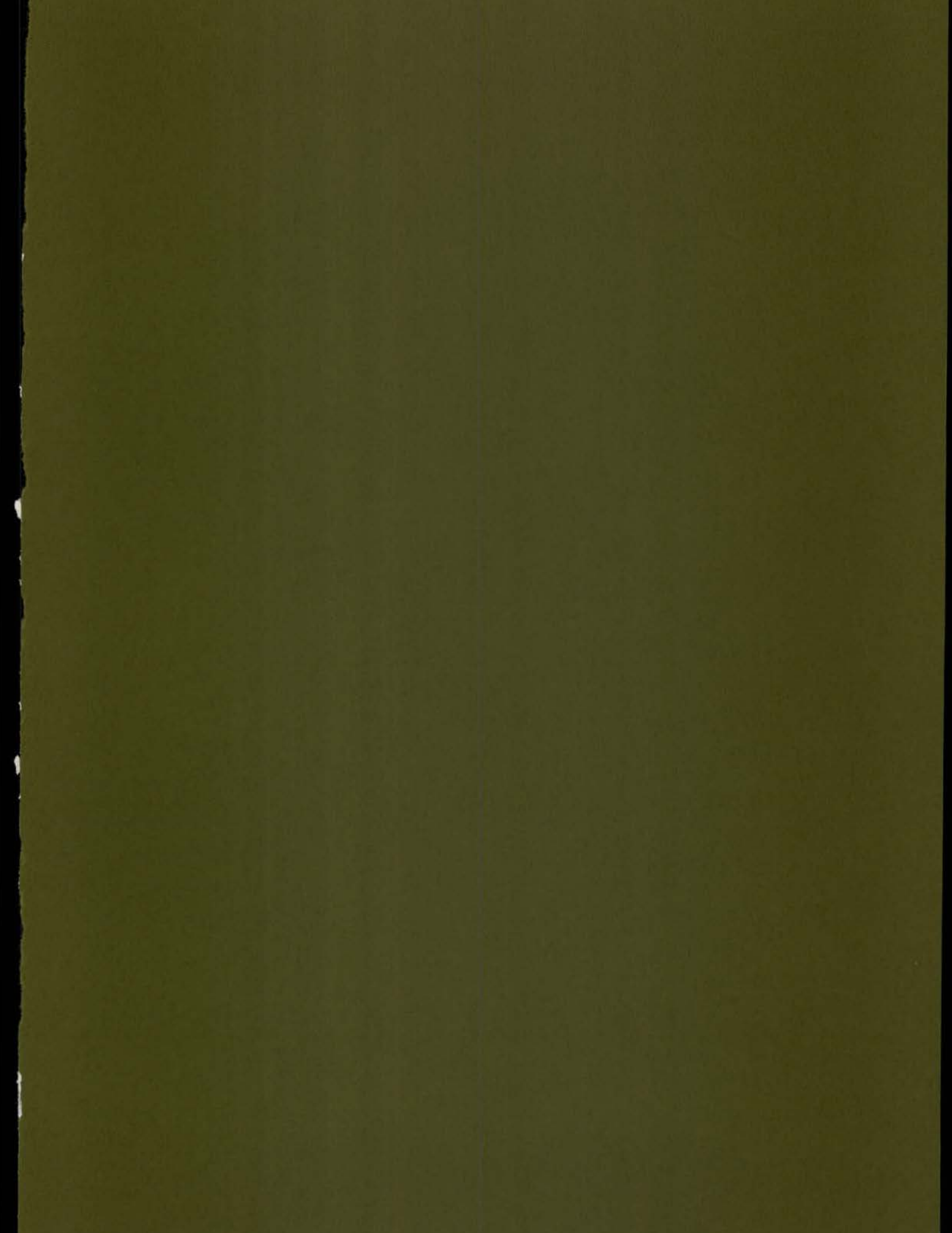
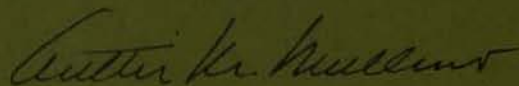


Fig. 22. Farms with sale of \$2500 or more by type of organization, Idaho. (Source: *Census of Agriculture, 1974.*)



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Auttis M. Mullins  
Dean, College of Agriculture  
University of Idaho



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