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Economic
Research Service

January 1988

## 64th Annual Agricultural Outlook Conference

 <br> \section*{Outlook '88 Charts} <br> \section*{Outlook '88 Charts}
## Outlook '88 Charts

## 64th Annual Agricultural Outlook Conference

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The black and white reproducible charts and tables included here were originally presented as color slides before the Outlook Conference. This publication does not include all visuals used at the Conference, because not all speakers used slides or provided material for this compilation.

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## World Economic Growth Rates Percent



## Exports as a Share of Total U.S. Crop Use

$$
\begin{array}{clll}
1970 / 71 & \text { 1979/80 } 1985 / 86 \quad 1987 / 88 \\
& \text { Percent of Total Use }
\end{array}
$$

| Cotton | 32 | 59 | 23 | 48 |
| :--- | :--- | :--- | :--- | :--- |
| Soybeans | 50 | 58 | 53 | 51 |
| Rice | 53 | 60 | 47 | 51 |
| Wheat | 49 | 64 | 47 | 53 |
| Feed Grains | 12 | 31 | 18 | 22 |

## World Wheat Trade



World Feed Grain Trade


## World Soybean Trade



## World Cotton Trade

Million Bales
Percent


## U.S. Per Capita Meat Consumption



## Total U.S. Wheat Production, Use and Stocks-to-Use Ratio

Billion Bushels
Percent


## Total U.S. Corn Production, Use and Stocks-to-Use Ratio

Billion Bushels
Percent


## Total U.S. Soybean Production, Use and Stocks-to-Use Ratio



## Total U.S. Cotton Production, Use and Stocks-to-Use Ratio



## Beef Production, Prices and Returns

Billion Pounds
Dollars per CWT


## Pork Production, Prices and Returns



## Broiler Production, Prices and Returns

Billion Pounds
Cents per Pound


## Net Farm Income

Billion Dollars


## Changes in Consumer Price Indexes Percent



## Annual Changes in Crop Production and Demand Abroad



## Grain Import Growth Rates Aboard Wheat and Feed Grains



# Developing Countries: Wheat and Coarse Grain Imports 

 Million Metric Tons

Economic Growth Rates, Developing Countries Percent


Corn: Average Farm Price and Loan Rate
\$ per bushel


Corn Carryover Stocks
Billion bushels


Farm Prices, Loan Rate, and Loan Placements \% of eligible crop put under loan


Feed and Residuai Use of Corn and GCAU's*
Billion bushels
Million units
(

Foreign Coarse Grain Production
Million metric tons


Foreign Coarse Grain Use
Million metric tons


## Program Participation

Participation rate (percent)

U.S. Corn Exports

Billion bushels

U.S. Food, Seed, and Industrlal Use of Corn

Million bushels


## U.S. Barley Supply

Million bushels


## U.S. Corn Supply

Billion bushels


## U.S. Feed Grain Supply

## Million metric tons



## U.S. Oats Supply

Million bushels


## U.S. Sorghum Supply

Million bushels


## Argentine Planted Area -Grains and Oilseeds-



Argentina: Production, domestic consumption and exports of Corn and Grain Sorghum (Three - Year averages)


- Estimated

Source: Argentine Agriculture, Livestock, and Fishing Secretariat; National Grain Board and private estimates

Argentina: Grains and Oilseeds Production


## Value of Argentine Exports



PRODUCTION AND MARKETING COSTS OF CORN IN VARIOUS COUNTRIES U.S.DOLLARS PER METRIC TON.
(MID-1986 PRICE LEVELS AND EXCHANGE RATES)

|  | ARGENTINA | BRAZIL | S.AFRICA | THAILAND | U.S.A. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| TOTAL VARIABLE COST | 45.60 | 73.28 | 61.12 | 43.98 | 58.70 |
| TOTAL FIXED COST | 39.62 | 75.10 | 47.02 | 35.18 | 60.52 |
| TOTAL PRODUCTION COST | 85.22 | 148.38 | 108.14 | 79.16 | 119.22 |
| MARKETING COST | 30.46 | 37.37 | 35.60 | 33.92 | 25.10 |
| TOTAL COST | 115.68 | 185.75 | 143.74 | 113.08 | 144.32 |



Receipts less cash expenses

Returns to U.S. Cow-Calf Producers
Dollars per cow


[^0]
## U.S. Cattle and Calf Inventory

Million head


Beef Consumption and Prices

| Year | Per capita <br> consumption | ERS retail price |
| :--- | :---: | :---: |
|  | Pounds | Dollars per pound |
| 1979 | 78.0 | 2.26 |
| 1980 | 76.5 | 2.38 |
| 1981 | 77.2 | 2.39 |
| 1982 | 77.1 | 2.42 |
| 1983 | 78.7 | 2.38 |
|  |  |  |
| 1984 | 78.6 | 2.40 |
| 1985 | 79.1 | 2.33 |
| 1986 | 79.8 | 2.31 |
| 1987 | 76.4 | 2.42 |
| 1988 | 73.1 | 2.44 |
| $\%$ change, | -4 |  |
| $1987-1988$ |  | +1 |

## Feeder Cattle Supply, October 1

|  | 1984 | 1985 | 1986 | 1987 | \% change |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Calves less than |  | 1,000 head |  |  |  |
| 500 lb.: |  |  |  |  |  |
| On farms July 1 | 35,500 | 33,600 | 32,200 | 00,000 | 00.0 |
| Slaughter July-Sept. | 856 | 872 | 859 | 000 | 00.0 |
| On feed Oct. 1 | 495 | 287 | 310 | 000 | 00.0 |
| Subtotal | 34,149 | 32,439 | 31,031 | 00,000 | 00.0 |
|  |  |  |  |  |  |
| Steers and heifers |  |  |  |  |  |
| 500 lb. and 0ver: |  |  |  |  |  |
| On farms July 1 | 24,450 | 24,200 | 23,300 | 00,000 | 00.0 |
| Slaughter July-Sept. | 7,174 | 7,465 | 7,521 | 0,000 | 00.0 |
| On feed Oct. 1 | 9,999 | 8,924 | 9,314 | 0,000 | 00.0 |
| Subtotal | 7,277 | 7,771 | 6,465 | 0,000 | 00.0 |
| Total supply | 41,426 | 40,210 | 37,496 | 00,000 | 00.0 |

## Beef Imports

Million pounds


Beef Exports
Million pounds


## Per Capita Red Meat and Poultry Consumption

Pounds


Medium 11 Feeder Steer Prices, Kansas City
\$ per cwt


## Choice Steer Prices, Omaha



Cattie: Average Commerciai Dressed Weight
Pounds


## Commercial Beef Production

Billion pounds


Commercial Cattle Slaughter by Class
Million head


Share of Cow Herd Slaughtered


## U.S. Sheep Inventory

Million head


## Commercial Pork Production

Billion pounds


Retail Pork Prices
Cents per pounds


Imports of Pork Products
Billion pounds


[^1]
## U.S. Pork Exports

Million pounds


Pork in Cold Storage
Million pounds


## Farrow to Finish Costs of Production

## \$ per cwt



Sows Farrowed and Litter Rate, June-August
Million sows
Number of pigs


10 major producing States.

Hogs and Pigs Inventory, December 1
Million head


Live Hogs Imported from Canada
Million head


## Feeder Pig Production Costs



Barrow and Gilt Prices, Seven Markets
Dollars per cwt


## All-Milk Price

Dollars per cwt


Delivered to plants and dealers.

## Commercial Use of All Dairy Products

Million pounds per day


Milkfat basis. Three-month moving average, centered.

## Dairy Product Stocks

Billion pounds


First of month, milkfat basis.

## Milk Cows on Farms, 21 States

Million head


## U.S. Milk Production

Billion pounds


Estimated from data for 21 States beginning April 1986.

## Milk Production per Cow, 21 States

Thousand pounds


Retail Price Indexes


1987 estimated.

## USDA Dairy Product Purchases

Billion pounds


Net removals, milkfat basis.

Milk Marketings and Commercial Use
Billion pounds

U.S. Cotton Mill Consumption and Textile Trade Balance

Million bales


Cotton and Manmade Fiber Textile Imports and Exports Million pounds ${ }^{*}$


- Raw fiber equivalent.


## World Cotton Prices

Cents per pound


## Mill Inventory-to-Use Ratio

Days


## U.S. Cotton Prices

Cents per pound


## U.S. Cotton Production, Consumption, and Stocks

 Million bales

World Cotton Prices and Stocks-to-Use Ratio
"A" Index (Cents per pound)


Cotton's Share of Fibers on Cotton System Percent


## U.S. Mill Consumption

Million bales


## World Imports and U.S. Exports of Raw Cotton

Million bales


World Cotton Trade and Export Shares


World Cotton Production, Consumption, and Stocks
Million bales


World Cotton Production, Consumption, and Stocks
Million bales


## U.S. Spot Prices

Cents per pound


- Adjusted by trade weighted exchange rate index (April 1971=100).


## U.S. Cotton Exports to Selected Countries

| Country | 1980-84 <br> average |  | 1986/87 |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Thousand <br> bales | Market <br> sharel(\%) | Thousand <br> bales | Market <br> share(\%) |
| Japan | 1,442 | 44 | 1,723 | 48 |
| Korea | 1,319 | 85 | 1,330 | 70 |
| Taiwan | 513 | 46 | 907 | 40 |
| Hong Kong | 207 | 26 | 52 | 4 |
| Italy | 169 | 16 | 263 | 18 |
| France | 91 | 11 | 114 | 9 |
| Germany | 99 | 11 | 263 | 20 |
| Portugal | 62 | 10 | 76 | 10 |
| Indonesia | 286 | 55 | 324 | 41 |
| Thailand | 202 | 47 | 239 | 19 |
| Other | 1,704 | -- | 1,395 | -- |
| World | 6,140 | 31 | 6,684 | 26 |

## World Sugar: Production and Consumption

Million metric tons, raw value


## World Raw Sugar Prices

Cents per pound


## U.S. Sugar: Area, Yield, and Production

|  | Area | Yield | Production |
| :--- | :---: | :---: | :---: |
| Beet | 1.000 acres | Short tons per acre <br> (Sugarbeets or sugarcane) | 1,000 short tons <br> (Sugar) |
| $1982-85$ | 1,070 | 2.65 | 2,835 |
| 1986 | 1,191 | 2.87 | 3,414 |
| 1987 | 1,248 | 3.08 | 3,850 |
|  |  |  |  |
| Cane | 714 | 4.21 | 3,008 |
| $1982-85$ | 751 | 4.37 | 3,281 |
| 1986 | 783 | 4.25 | 3,325 |
| 1987 |  |  |  |

## U.S. Sugar Production

Million tons, raw value


## Returns to Management and Risk

|  | 1984 crop | 1985 crop | 1986 crop |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Dollars an acre |
| Barley | -26 | -43 | -49 |  |  |
| Corn | -16 | -24 | -75 |  |  |
| Cotton | -35 | -38 | -75 |  |  |
| Soybeans | -10 | -7 | -10 |  |  |
| Sugarbeets | 92 | 107 | 176 |  |  |
| Sugarcane | -90 | -96 | -18 |  |  |
| Wheat | -17 | -28 | -40 |  |  |

Sugar and Corn Sweetener Deliveries

|  | Peak year | 1980 | 1985 | 1987 | 1988 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sugar | 11.1 <br> $(1977)$ | 10.2 | 8.1 | 8.0 | 8.0 |
| HFCS | 5.9 <br> $(1988)$ | 2.2 | 5.4 | 5.8 | 5.9 |
| Allion tons <br> All <br> swern | 8.5 <br> $(1988)$ | 4.6 | 8.0 | 8.4 | 8.5 |

## U.S. Sugar and Corn Sweetener Deliveries

Million tons


## U.S. Sweetener Consumption

Pounds per capita


## U.S. Imports of Raw Sugar

| Fiscal year | 1,000 tons, raw value |
| :---: | :---: |
| 1980 | 4,874 |
| 1982 | 3,603 |
| 1984 | 3,490 |
| 1986 | 2,378 |
| 1987 | 1,884 |

Note: Sugar quota started May 1982.

## U.S. Sugar Imports

Million tons, raw value


## U.S. Prices for Raw Sugar (New York)

| Fiscal year | High | Low | Average | MSP |
| :---: | :---: | :---: | :---: | :---: |
| 1982 | 22.45 | 15.66 | 18.84 | 19.88 |
| 1983 | 22.59 | 20.44 | 21.76 | 20.78 |
| 1984 | 22.06 | 21.47 | 21.84 | 21.17 |
| 1985 | 21.56 | 19.51 | 20.89 | 21.57 |
| 1986 | 21.01 | 18.68 | 20.46 | 21.50 |
| 1987 | 22.07 | 21.08 | 21.68 | 21.78 |

U.S. Average Retail Price for Sugar

| Fiscal year | Cents a pound |
| :---: | :---: |
| 1982 | 33.7 |
| 1983 | 35.8 |
| 1984 | 36.4 |
| 1985 | 35.7 |
| 1986 | 35.1 |
| 1987 | 35.0 |

## Net Corn Costs

\$ per bu.


[^2]
## U.S. Sugar Supply and Use

|  | $1986 / 87$ | $1987 / 88$ |
| :--- | :---: | :---: |
| Beginning stocks | 1,000 short tons, raw value |  |
| Production | 1,652 | 1,514 |
| Imports total | 6,886 | 7,175 |
| Quota | 1,884 | --- |
| Other | 1,237 | --- |
| Total Supply | 647 | 510 |
|  | 10,422 | --- |
| Exports | 597 | 405 |
| CCC disposal | 177 | 0 |
| Domestic deliveries | 7,998 | 8,100 |
| Other | 136 | 50 |
| Total Use | 8,908 | 8,555 |
| Ending stocks | 1,514 | --- |

[^3]
## Annual Change in Oilseed and Soybean Production

Million metric tons


Argentine Soybean Production
Million metric tons


## Brazilian Soybean Production

Million metric tons


## EC-12 Oilseed Production



## Harvested Soybean Acreage

Million acres


## Soybean Meal Prices

\$ per metric ton


## World Soybean Meal Consumption

Million metric tons


Protein Units Index


## U.S. Feed Profitability Ratio



1964/65-1984/85 average $=1.4$.

## Ending Stocks

Million metric tons


## U.S. Soybean Prices and Loan Rate

\$ per bushel


## U.S. Soybean Ending Stocks

Million bushels


As of September 1.

## Vegetable Oil Prices



Soybean oil in U.S., Brazil, Rotterdam. Palm oil in Malaysia.

## Changes in World Cropland Area

Million hectares


Total changes since 1972.

## U.S. Citrus Fruit Production

Million tons


## U.S. Production of Selected Noncitrus Fruit

|  |  |  |  | Chang | from |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { 1981-85 } \\ \text { average } \end{gathered}$ | 1986 | 1987 | $\begin{aligned} & 81-85 \\ & \text { average } \end{aligned}$ | 1986 |
|  |  | 1,000 tons |  | Perc |  |
| Apples | 4,050 | 3,946 | 4,807 | 19 | 22 |
| Apricots | 112 | 55 | 116 | 4 | 11 |
| Cherries | 138 | 250 | 372 | 170 | 49 |
| Grapes | 5,464 | 5,226 | 5,096 | -7 | -2 |
| Nectarines | 188 | 172 | 190 | 1 | 10 |
| Peaches | 1,172 | 1,163 | 1,243 | 6 | 7 |
| Pears | 786 | 766 | 862 | 10 | 12 |
| Prunes/Plums | 225 | 490 | 909 | 284 | 86 |
| Strawberries | 453 | 510 | 540 | 19 | 6 |
| Total | 12,588 | 12,578 | 14,135 | 12 | 12 |

## Consumer Price Index for Fresh Fruit

| Quarter | 1984 | 1985 | 1986 | 1987 | $1988^{1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | $1967=100$ |  |  |  |
| 1 st | 295 | 356 | 352 | 400 | 405 |
| 2 nd | 321 | 377 | 375 | 429 | 435 |
| 3 rd | 355 | 372 | 386 | 412 | 420 |
| 4 th | 343 | 344 | 364 | $379^{1}$ | 395 |
|  |  | 329 | 362 | 369 | $405^{1}$ |
| Annual | 329 | 414 |  |  |  |

1/ Estimated.

## Grower Prices for Fresh and Processing Fruit

| Quarter | 1984 | 1985 | 1986 | 1987 | $1988^{1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | $1977=100$ |  |  |  |  |
| 1st | 142 | 180 | 150 | 168 | 162 |
| 2 nd | 170 | 178 | 159 | 178 | 172 |
| 3 rd | 255 | 184 | 178 | 175 | 174 |
| 4 th | 239 | 180 | 180 | $173^{1}$ | 166 |
|  |  | 181 | 167 | 174 | 168 |

1/ Estimated.

## Projected Florida Citrus Production



## U.S. Trade in Fresh Fruit



Bearing Acreage of U.S. Fruit and Tree Nuts
Thousand acres


Per Capita Fruit Consumption
Pounds


Fresh-weight equivalent. 1987 estimated. Canned and frozen include fruit and juice.

Florida Supply and Movement of FCOJ
Million gallons


1986/87 imports and movement estimated. $1987 / 88$ estimated.

Brazilian Orange Production and FCOJ Supply

U.S. Supply, Movement, and Producer Price of Canned Fruit Million pounds Price-\% of 1967


## U.S. Supply and Movement of Tree Nuts

Million pounds


## U.S. Vegetable Industry at a Glance

|  | 1986 | 1987 <br> forecast | Percent <br> change |
| :---: | :---: | :---: | :---: |
| Production |  | Million pounds |  |
| Fresh | 21,527 | 21,494 | --- |
| Processing | 21,954 | 22,918 | 4 |
| Imports |  |  |  |
| Fresh | 3,124 | 3,280 | 5 |
| Processed | 907 | 653 | -28 |
| Exports |  |  |  |
| Fresh | 1,251 | 1,201 | -4 |
| Processed | 585 | 667 | 14 |
| Grower prices |  | $1977=100$ |  |
| Fresh | 123 | 134 | 9 |
| Commercial | 130 | 137 | 5 |

Vegetable Price Indexes


U.S. Vegetable and Total Agricultural Exports
\% change from previous year


## Destination of U.S. Fresh Vegetable Exports

\$ million


Destination of U.S. Processed Vegetable Exports


Canadian Imports of U.S. Vegetables


## Share of Processed Vegetable Imports, 1986



## Burley Tobacco Supply

Billion pounds


Trade stocks include manufacturers' and dealers'. 1987 marketings preliminary.

## Flue-Cured Tobacco Supply



Trade stocks include manufacturers' and dealers'. 1987 marketings preliminary.

## Burley Use

Billion pounds


Crop year beginning October 1.

Flue-Cured Use
Billion pounds


Crop year beginning July 1.

Cigarettes Produced and Tobacco Used
Billion cigarettes
Billion pounds


Per Capita Consumption of Tobacco Products


1987 preliminary. Per male 18 and over, except snuff per person 18 and over.

Consumer Price Index and Tobacco Prices


BLS Data. Beginning 1978 for all urban consumers.
Weighted average of all tobacco product prices. Latest year estimated.

## Per Capita Cigarette Consumption

Thousand cigarettes


1987 projected. Persons 18 and over.

Cigarettes: Low-Tar Market Share ${ }^{*}$


- 15 mg . 'tar' or less. Latest year estimated.

Tobacco Acreage, Yield, and Production


Latest year subject to revision.

## Tobacco Use in Cigarettes



## Burley Price and Support Levels

Cents per pound


Latest year's price estimated.

Flue-Cured Price and Support Levels
Cents per pound


Latest year's price estimated.

Unsold Burley Loan Stocks
Million pounds


Stocks at end of August.

## Unsold Flue-Cured Loan Stocks

Million pounds


Stocks at end of August.

Food Price Prospects
Ralph L. Parlett, Jr.

## Market Basket Statistics

|  | 1985 | 1986 | 1987 | 1988 |
| :--- | :---: | :---: | :---: | :---: |
| Farm value | -6.8 | -1.9 | 3.0 | -2 to 0 |
| Farm to retail price spread | 5.2 | 3.1 | 5.2 | 3 to 5 |
| Retail cost | 1.1 | 1.5 | 4.5 | 2 to 4 |

Beef Consumption and Prices through 1987
\% of first quarter 1983


Beef Consumption and Prices through 1988
\% of first quarter 1983


Pork Consumption and Prices through 1987


Pork Consumption and Prices through 1988
\% of first quarter 1983


Poultry Consumption and Prices through 1987
\% of first quarter 1983


Poultry Consumption and Prices through 1988
\% of first quarter 1983


## Price Changes for Major Food Marketing Inputs

| Category | 1985 | 1986 | 1987P | 1988 F |
| :---: | :---: | :---: | :---: | :---: |
|  | Average change from previous year |  |  |  |
| Food Marketing Costs | 1 | -1 | 2 | 2 to 4 |
| Labor | 0 | -1 | 2 | 1 to 3 |
| Packaging | 0 | 2 | 4 | 3 to 5 |
| Transportation | 1 | 0 | -2 | 1 to 3 |
| Energy | -2 | -16 | -3 | 2 to 4 |

## Selected Food Price Indicators

| CPI | 1985 | 1986 | 1987 | 1988 |
| :--- | :---: | :---: | :---: | :---: |
| Food | 2.3 | 3.2 | 4.1 | 2 to 4 |
| Food at home | 1.4 | 2.9 | 4.1 | 2 to 4 |
| Food away from home change |  |  |  |  |

Farm Production Expenses

| Item | 1985 | 1986 | 1987 F | 1988 F |
| :--- | ---: | :---: | :---: | :---: |
|  | Percent change from a year earlier |  |  |  |
| Farm origin items | -7.4 | -5.2 | 3 | 3 |
| Manufactured inputs | -3.2 | -18.2 | -8 | 4 |
| Interest charges | -11.5 | -9.5 | -14 | -5 |
| Repairs, labor, machine hire | .2 | -1.4 | 3 | 3 |
| Other items ${ }^{1}$ | -7.0 | -9.3 | -5 | -1 |
| Total expenses | -6.3 | -8.7 | -4 | 1 |
| Cash expenses | -5.8 | -8.7 | -3 | 2 |

F = Forecast. $\quad 1 /$ Includes depreciation, taxes, net rent, and others.

Cash Receipts

|  | $1985 / 86$ <br> average | 1987 F | 1988 F |
| :--- | ---: | ---: | ---: |
| Crops $^{1}$ | 63.6 | 58 | 62 |
| Food grains | 5.9 | 5 | 6 |
| Feed grains \& hay | 17.8 | 11 | 13 |
| Oil crops | 10.8 | 10 | 11 |
| Fruit \& vegetables | 15.6 | 17 | 16 |
| Other crops | 13.7 | 15 | 16 |
|  |  |  |  |
| Livestock | 71.5 | 74 | 71 |
| Meat animals | 39.1 | 43 | 41 |
| Poultry \& eggs | 12.7 | 12 | 11 |
| Dairy products | 17.8 | 18 | 17 |
| Other livestock | 1.9 | 2 | 2 |
| Total | 135 | 132 | $130-134$ |

F=Forecast. 1/ Includes net CCC loans. Totals may not add due to rounding.

Farm Sector Debt and Assets


F = Forecast. Excludes operator households.

Trends in Interest and Direct Government Payments Percent


[^4]
## Balance Sheet of the Farming Sector ${ }^{1}$

|  | Current dollars |  |  | Deflated income $(\$ 1982)^{2}$ |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Assets | Liabilities | Assets | Liabilities | Equity |  |
| Billon dollars |  |  |  |  | Billion dollars |  |
| $1975-79$ | 691.8 | 116.8 | 1005.0 | 169.7 | 835.3 |  |
| $1980-84$ | 959.7 | 192.8 | 973.1 | 195.5 | 777.6 |  |
| $1985-86$ | 720.7 | 165.1 | 638.9 | 146.4 | 492.6 |  |
| 1987 F | 712 | 141 | 607 | 120 | 487 |  |
| 1988 F | 715 | 130 | 593 | 108 | 485 |  |
| 1988 F | $705-720$ | $125-135$ | $585-600$ | $100-115$ | $480-495$ |  |

F=Forecast. 1/ Excludes operator households. $2 /$ Deflated by the GNP implicit price deflator, 1982.

## Returns to Assets and Equity

| Year | Returns to assets |  |  | Returns to equity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income | Real capital gains | Total | Income | Real capital gains | Total |
|  | Percent |  |  | Percent |  |  |
| 1974-79 | 2.7 | 7.7 | 10.4 | 1.5 | 9.3 | 10.7 |
| 1980-84 | 2.0 | -5.2 | -3.2 | -. 1 | -5.1 | -5.2 |
| 1985-86 | 4.8 | -5.9 | -1.1 | 3.4 | -5.9 | -2.5 |
| 1987F | 5.4 | 0.0 | 5.5 | 4.4 | 0.0 | 4.4 |
| 1988 F | 4.9 | -3.0 | 1.9 | 3.6 | -3.0 | . 6 |

[^5]Farm Sector Income

| Year | Current income |  |  | Deflated income (\$1982) ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net cash | Net farm | Off-farm | Net cash | Net farm | Off-farm |
|  | Billion dollars |  |  | Billion dollars |  |  |
| 1975-79 | 30.8 | 23.6 | 28.0 | 45.4 | 34.9 | 41.2 |
| 1980-84 | 36.2 | 22.2 | 36.4 | 36.9 | 22.6 | 37.6 |
| 1985-86 | -- | -- | -- | -- | -- | -- |
| 1987F | 57 | 45 | 47 | 49 | 39 | 40 |
| 1988F | 50-55 | 40-45 | 48-50 | 41-45 | 34-38 | 41-44 |

F=Forecast. 1/ Deflated by the GNP implicit price deflator, $1982=100$.

## Current and Constant Dollar Commodity Prices

| Price / Years | Corn (bu.) | Wheat (bu.) | Soybeans (bu.) | Cotton (lb.) | Cattle (b.) | Hogs (b.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current: | Dollars per unit |  |  |  |  |  |
| Avg. price, 1973-76 | 2.57 | 3.55 | 6.01 | . 51 | . 36 | . 41 |
| Avg. price, 1983-86 | 2.57 | 3.20 | 6.01 | . 58 | . 55 | . 48 |
| Estimated price, $1987{ }^{1}$ | 1.55 | 2.50 | 4.89 | . 60 | . 61 | . 52 |
| Ratio of average prices ${ }^{2}$ : | Ratio |  |  |  |  |  |
| $\begin{aligned} & \text { 1983-86/1973-76 } \\ & \text { Constant } \end{aligned}$ | . 52 | . 47 | . 52 | . 59 | . 79 | . 61 |
| $\begin{aligned} & 1987 / 1973-76 \\ & \text { Constant } \end{aligned}$ | . 34 | . 39 | . 46 | . 67 | . 94 | . 72 |

1/ 11 month average (Jan. - Nov.). $2 /$ Not official USDA estimates.

Federal Reserve Bank Surveys of Land Values

|  | 1986 |  |  | 1987 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd <br> quarter | 4th <br> quarter | 1st <br> quarter | 2nd <br> quarter | 3rd <br> quarter |  |
| Chicago | -4.0 | -1.4 | .4 | 1.8 | 3.3 |  |
| Dallas ${ }^{1}$ | -4.5 | -2.1 | -1.9 | -1.0 | -2.3 |  |
| Kansas City | -2.9 | -4.1 |  | .5 | 2.2 |  |

1/ Values generally represent non-irrigated cropland.
Three-quarter moving average.

## Potential Loan Losses for Selected State Groups

|  | Farms with <br> potential loan losses |  |  | Incidence of stress |
| :--- | ---: | ---: | ---: | ---: |
|  | 1985 | 1987 | 1985 |  |
| Improvement |  |  |  |  |
| Mountain States | 7,800 | 5,900 | 16 | 14 |
| CA, OR, WA | 6,000 | 4,200 | 16 | 10 |
| NJ, NY, PA | 4,600 | 2,900 | 11 | 8 |
| KS, NE, ND, SD | 21,100 | 15,400 | 19 | 16 |
| IL, IN, MI, OH | 17,400 | 12,500 | 16 | 13 |
| Stabilization |  |  |  |  |
| IA, MN, WI, MO | 37,000 | 36,000 | 21 | 22 |
| Deterioration |  |  |  |  |
| AR, LA, OK, TX | 12,600 | 14,400 | 16 | 22 |
| AL, GA, MS, NC | 8,800 | 7,600 | 18 | 21 |
|  | 108,200 | 93,600 | 18.4 | 17 |
| Above regions | 122,500 | 104,100 | 17.0 | 16 |
| United States |  |  |  |  |

[^6]
## Estimated and Potential Loan Losses

\$ billion


Share of Commercial Farms and Commercial Farm Debt That Is Financially Stressed**

| Approach | Commercial farms |  |  | Commercial farm debt |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1985 | 1986 | 1984 | 1985 | 1986 |
|  | Percent |  |  |  |  |  |
| Net cash household income/Solvency | 19 | 17 | 16 | 42 | 37 | 35 |
| Net cash farm income/Solvency | 11 | 10 | 9 | 27 | 23 | 20 |
| Net farm income/Solvency | -- | -- | 13 | -- | -- | 30 |
| Returns, equity, and solvency | 17 | 14 | 12 | 33 | 26 | 21 |
| Debt service and solvency | 17 | 16 | 16 | 39 | 35 | 33 |

- Identified by alternative approaches.


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[^0]:    Receipts less cash expenses.

[^1]:    Carcass weight

[^2]:    1/ No. 2 yellow corn, central Illinois.
    2/ Sales of corn oil and corn gluten feed and meal.

[^3]:    Fiscal years.

[^4]:    $F=$ Forecast .

[^5]:    F=Forecast. Excludes operator households. Totals may not add due to rounding.

[^6]:    - Share of farms with potential loan losses.

